Visual Literacy Instruction in Cambodian ELT:

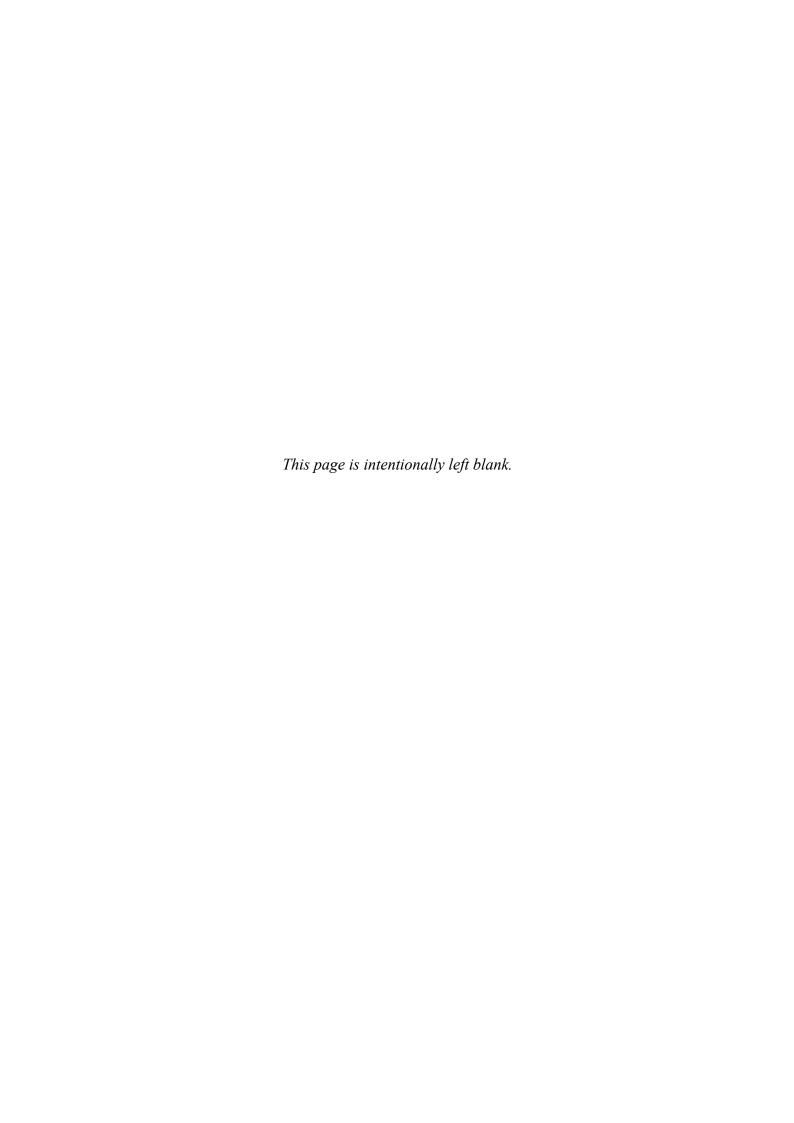
An Action Research Study and a New Pedagogical Framework

Bophan Khan

Department of Linguistics
Faculty of Human Sciences
Macquarie University
Sydney

Submitted for the degree of PhD in Linguistics

February 2017



Thesis Structure

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Abstract

Visual literacy complements verbal literacy (Braden, 2001; Dwyer, 1988; Stokes, 2002), and the synergy between the two enable language learners to effectively utilise visual resources that saturate their learning spaces. However, visual literacy along with multimodality is an underresearched area in ELT and TESOL (Early, Kendrick, & Potts, 2015; Kress, 2000).

Guided by the social semiotics (Kress & van Leeuwen, 2006), multiliteracies pedagogy (Cope & Kalantzis, 2015), and socio-cultural theory of learning (Vygotsky, 1978), this thesis set out to address this gap through a qualitative study in two parts, conducted at a leading public university in Cambodia. Part One was a case study of visual teaching and learning practices among six EFL lecturers and four groups of learners, using classroom observations, document analyses, interviews, and a survey. Part Two probed the issue further by implementing action research in a class at the same research site, using the four instruments in Part One plus student focus groups and diaries. The action research entailed two cycles of interventions. The first cycle implicitly taught questions the students could use to approach a visual resource more critically. The second cycle explicitly taught visual literacy metalanguage and provided visual analysis practices through an adapted model of the Teaching and Learning Cycle (da Silva Joyce, 2014). Part One suggested that the lecturer and student participants had varying degrees of visual literacy, were better at interpreting than creating visual resources, and generally agreed on the facilitative potential of visual literacy instruction for language learning. Part Two revealed that the visual teaching interventions in both cycles ameliorated learning attitudes, engagement, motivation, memory, vocabulary and grammar learning, and critical thinking.

A pedagogical framework and two visual literacy instructional approaches have been proposed for ELT researchers and practitioners who believe in the educational value of visual-multimodal resources and seek practical ways to use visual literacy to help achieve language learning, educational, and professional goals.

Statement of Candidature

I attest that no part of this thesis titled "Visual Literacy Instruction in Cambodian ELT:

An Action Research Study and a New Pedagogical Framework" has been previously

submitted for a higher degree at any other university or institution.

I also attest that this thesis is an original piece of research, and it has been written by

me. Any assistance and support that I have received in preparation of this thesis has been

appropriately acknowledged. All the information sources and literature used in this thesis

are properly documented.

Part One's research presented in this thesis was approved by Macquarie University's

Ethics Review Committee on 12th December 2013 (5201300875). Part Two's research was

approved by Macquarie University's Ethics Review Committee on 10th December 2015

(5201500912).

Bophan Khan (42716365)

February 2017

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Acknowledgements

I would like to acknowledge the following individuals and institutions whose support has contributed to the completion of this thesis in substantial ways.

First and foremost, I owe my deepest and most sincere gratitude to my supervisor, Associate Professor Stephen H Moore, for his supervision and guidance throughout the whole process of my thesis writing. His patience and hard work in reading and providing useful feedback on my writing and the drafts of this thesis are unparalleled. His mentorship, work ethics, motivation, and reassurance have inspired me and my writing in tremendous ways.

I would like to thank Dr John Knox for having co-supervised my thesis and provided important insights at key stages of my thesis. His inputs have significantly shaped the trajectory of this thesis.

I would also like to thank the examiners who have agreed to examine this thesis.

I am indebted to the Australian Government, the Australia Awards program and the team, staff members at Macquarie University's Coursework Scholarships and Prizes Unit, and Australian people for providing financial and spiritual support instrumental for completion of this thesis on schedule.

I thank the Ministry of Education, Youth, and Sport of Cambodia and the university where I was teaching in Cambodia for granting me study leave to complete this PhD.

I am also grateful for the lecturer and student participants in both parts of this thesis. Their significant contributions through elaborate and honest inputs have made this thesis interesting and worthwhile. This thesis may never have been completed without their kind assistance, cooperation, and contributions.

Next, I thank the Head of the Department of English at the Royal University of Phnom Penh. His kind permission and facilitation enabled me to conduct the research in both parts of the thesis at the department with great success. I am also thankful for a lecturer who helped with data collection for Part One of my thesis. My special thank also goes to Dr Chan Narith KEUK who helped verify my Part One's data analyses and whose PhD thesis inspires mine.

I also thank professors, lecturers, staff, and other PhD students at Linguistics Department at Macquarie University for their continuous support, friendship, and companionship throughout my PhD candidature.

Lastly, I would like to thank my dearest wife, son, mum, mums-in-law, and the rest of my family for their constant care, unconditional trust, and undying encouragement. A visualisation of their reassuring smiles and warm embraces was enough for me to keep working even harder every time I doubted my ability to complete this thesis. This thesis belongs to them as much as it does to me if I can put it this way.

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List of Abbreviations

ACRL Association of College and Research Libraries

CoP Community of Practice

CoPs Communities of Practice

DoE Department of English

EFL English as a Foreign Language

ELT English Language Teaching

ESL English as a Second Language

IFL Institute of Foreign Languages

MOEYS Ministry of Education Youth and Sport (of Cambodia)

RUPP Royal University of Phnom Penh

PSE Program for Systemic Evaluation

TESOL Teaching English to Speakers of Other Languages

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Visual literacy is well-researched in many social science disciplines, such as cognitive psychology, media and communication, cultural studies, and art history, but there has been a very limited number of such studies in Applied Linguistics and TESOL (Early et al., 2015). This thesis seeks to make a meaningful contribution to understanding visual literacy in the fields of second language (L2) teaching and L2 teacher education. It is comprised of two parts. Part One is a case study of visual literacy practices in a BEd (TEFL) degree program at a leading public university in Cambodia, serving as a platform for Part Two of the thesis, which is an action research study undertaken to investigate further the impact of visual literacy instruction on English language learning among a group of students at the same research site.

This introductory chapter explains the thesis background, presents some of the key issues surrounding the history and development of visual literacy as a discipline, and explores the research and pedagogical aspects which inspire this thesis. The chapter also discusses the aims and significance of the thesis, and outlines its contents as they are presented in the chapters which follow.

1.2 Background and rationale for the study

I bought my first book when I was in Grade Three of primary school in Cambodia, a small country in Southeast Asia. It was a children's book written in Khmer, my native language, with the plot revolving around a character visually based on Buratino, the main character of *The Golden Key* or *The Adventures of Buratino* by Aleksey Nikolayevich Tolstoy, the famous Russian novelist. I remember being so attracted by the image of the

main character of the story, his long nose, and the attractive, colourful drawings in the book that I decided to use all my savings at that time to purchase the book. After all, it was one of the few full-colour books I had ever seen, and I was hooked. To this day, I still retain a faint memory of the plot but have a vivid recollection of the illustrations of the protagonist and his friends' physical features.

Subsequently, as I entered my lower secondary education, I began to study French as at that time the language was a compulsory subject in Cambodian high schools. My late father spoke French and had a collection of French books stored on his study desk, and I decided to check some of the books for additional practice of my French. Browsing through a dusty pile of books, I became engrossed in the cover of a particular book which, to me at the time, stood out from the rest with its highly visual cover in full colour. I quickly flipped through the pages, and would stop only at those with colourful drawings. I became more and more enthralled by the visual content of the book as I turned the pages. Cambodia is a tropical country with no winter season, and nothing in the book, at that time, caught my eyes better than a drawing of a ski holiday in a snowfield. Thanks to that drawing, I would spend years fantasizing about skiing on a snowy mountain, wearing winter clothing, a red and green scarf, and a colourful beanie.

Since those days, I went on to select books by first examining their visual content. I developed a passion for pictures and drawings, which led me to dabble in a bit of drawing myself, but I never managed to become very skilful partly because the higher I progressed through my school years the further detached I became from drawing and other visual meaning-making resources. Classes in my secondary school deemphasised such visual skills in favour of numeracy, linguistic abilities and content knowledge of other disciplines.

I became attached to visual communication skills once again when I began my career as an English lecturer at a leading university in Cambodia. In the teacher training course I

took prior to my teaching job, I was taught a number of picture interpreting techniques that could be utilised to stir learners' interest in my lessons and build background knowledge in the topics being discussed. I was content with these abilities and constantly used them in my teaching. Three years later, I went for professional development training in Singapore. In one of the courses there, the course participants were asked to summarise the readings we had collected the previous week. While I used the bullet point approach, listing my summary contents on two pages, my Singaporean friend produced a visual concept map on half a page, and managed to delineate relationships of her points in a way I had not even known existed. It was the first time I had heard of a visual concept map, and I was both perplexed and dumbstruck, and began to ponder how much I had missed out on over the years not further developing the visual communication skills I was keen on acquiring early on in my life and education.

In language education in contemporary Phnom Penh, the capital and largest city in Cambodia, a less developed country, one finds that high-tech visual materials and devices populate learning spaces. It is not uncommon to see students use their smart phones¹ extensively to help them with their language learning activities. Proliferation of such smart devices and their rampant use in learning gives rise to the constant and increasing presence of 'visuality' in English learning materials and approaches. Visual imagery such as photographs and videos sample reality and bring it into a classroom almost seamlessly. Virtual reality is only ever a few clicks away. This universal accessibility and rapidly increasing use of advanced and new technologies in language education broaden learning horizons, creating platforms for language learning in unprecedented ways. These new learning opportunities, however, also bring along new challenges for many language teachers in Cambodia, especially those whose professional teacher training is confined to

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¹ Virtually, all students at tertiary level in Phnom Penh, Cambodia own smart phones.

the page-bound, mono-modal, text-based teaching, and teacher-based approach. My experience working as an English lecturer and teacher trainer in a leading higher education institution in Cambodia further confirms this observation.

Along with the increased visuality of information and communication in daily life, commercial coursesbooks are designed as a multimodal pack, frequently with the visual components occupying much space on most, if not all, pages of the books. In the context of English language learning in Cambodian secondary schools, the compulsory coursebooks produced by the Ministry of Education, Youth, and Sport (MoEYS) also underwent a major transformation over the past two decades, as illustrated in Figures 1.1 and 1.2.

The extract displayed in Figure 1.1 is a page taken from English for Cambodia Book 2 previously used for teaching English to 8th graders in a Cambodian secondary public school. The book was published by MoEYS in 1998, and features a heavy proportion of linguistic text with some drawings and visual design, all in black and white. The extract in Figure 1.2, on the other hand, is taken from English is Fun Book 4 to be used for teaching English in a state school at the same year level. English is Fun Book 4 is the fourth book in a six-book series, also published by MoEYS in 2011, used to teach English at a lower secondary public school in Cambodia. This extract shows more visually appealing learning materials with drawings, icons, symbols, and even linguistic text in multiple shades and colours. However, whereas the extract in Figure 1.1 instructs students to talk about the people in the drawing, there is no such an instruction in the extract taken from the new colourful coursebook, leaving the task of how to use the visual resources included on the page up to the teachers and students themselves. To what extent can a group of Cambodian lecturers and learners use such a drawing to help them teach and learn the target English language lessons? What are the affordances and constraints? In what ways can they achieve the task? These are some of the questions this thesis will try to answer.

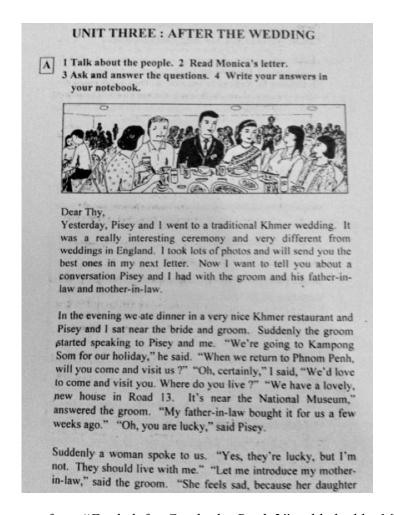


Figure 1.1. An extract from "English for Cambodia Book 2" published by MoEYS in 1998



Figure 1.2. An extract from "English is Fun Book 4" published by MoEYS in 2011

1.3 Statement of the problem

One major issue faced by a visual literacy researcher is the eclectic past and development of visual literacy as both a concept and a discipline. Visual literacy is researched in a plethora of disciplines, ranging from art history, to media and communication studies, to cultural studies. Absent is a universally accepted definition of the term/concept "visual literacy" itself, and the use of varied theoretical frameworks in visual literacy research further impede scholastic works such as the current project. The second issue is particularly relevant to this thesis and involves a very limited number of visual literacy research studies within the TESOL and applied linguistics fields. Therefore, the problem this thesis seeks to address is to attempt to examine the components of visual literacy and investigate the teaching of visual literacy in a relatively young but fast-growing English language teaching (ELT) context in a leading public university in Cambodia.

The roles visual elements play in communication have grown in importance in line with visual pervasiveness in the modern world. In this era of "visual culture" (Avgerinou, 2009; Howells & Negreiros, 2012; Mitchell, 1994) it would be an understatement to claim the world has 'gone visual' given that omnipresent visual content delivered through the mass media continues to inundate our everyday life. Roles of visual representations have been extended beyond entertaining and decorative use in today's image-laden space. The Association of College and Research Libraries in the USA contends that "visual imagery is no longer supplemental to other forms of information." It is certainly not an appendage to language. To be an efficient, well-informed communicator, one needs to develop more than verbal literacy. Visual along with other types of literacy, including scientific, technological, environmental, media, and health, are of paramount importance. Kress (2003) posits that multiple modes of representation, visual included, should actually replace language as the sole core of any understanding of literacy. Scholars like Burmark (2002) have gone further

to develop an ability to process both words and pictures. However, in this thesis, my argument will be consistent that visual literacy is not superior to verbal literacy, or viceversa. Visual literacy does not and will not replace verbal literacy, for the two are not in a dichotomous relationship but are in an interactive, co-present, and complementary relationship. Chapter 2 further discusses this relationship and whether visual representations of a text facilitate or hinder learners' visualisation and understanding of the text itself. The discussion, however, does not focus on mental imaging per se but to compare the impact of text-only instruction with text-visual instruction on language learning.

This sentiment was recognized by key figures in art history such as Barbara Stafford and James Elkins, among others, who propose that, "we [in the 21st century] have entered a new cultural era where visual technologies, as much as the technology of visualization itself, have reached deep into our everyday lives, as they have into the sciences, architecture and engineering, the media, the arts and entertainment industries, the professions in general, and most of the social spaces we inhabit" (Dallow, 2007, p. 91). Even two decades ago, Mitchell (1994) observes in English and art history that the new "pictoral turn" in communication terminated the dominance of textual discourse enjoyed earlier, while Seels (1994, p. 97), from the instructional design and educational technology perspectives, contends that the concept of visual literacy was brought to the centre of attention in education in the 1950s and 1960s alongside the rise of television and its impact on "behaviour and knowledge."

John Debes, with Clarence Williams, Colin Murray, and other colleagues, is credited in the literature for coining the term "visual literacy" through an Eastman Kodak Company effort which resulted in the establishment of the International Visual Literacy Association and the "Rochester School" movement to promote the theoretical development of visual literacy as an independent discipline (Hortin, 1994, p. 4).

However, visual literacy is in fact prehistoric, existing much earlier than the concept of verbal literacy. Creating and interpreting visual representation began at least 30,000 years ago, as proven by the discovery of rock art found in Europe (Pettersson, 2013). Velders (1999, p. 10), in a similar vein, postulates that "the history of visual communication goes back to the cave paintings 30,000 years ago." The oldest Australian Indigenous art was discovered to date back to more than 30,000 years (Clarity Communications Australia, 2015).

John Debes also pioneered the scholastic quest for a definition of visual literacy. In the first visual literacy conference in 1969, Debes offered a rather rudimentary definition of the term, hypothesizing that "visual literacy refers to a group of vision-competences a human being can develop by seeing and at the same time having and integrating other sensory experiences" (Debes, 1969, p. 27). Numerous attempts have since been made to conceptualize the construct of visual literacy, such as those by Heinich, Molenda, and Russell (1982), Avgerinou (2001), Bleed (2005), and Felten (2008). Pettersson (2013) observes that visual literacy definitions develop "from very narrow to very broad... and from practical to theoretical". The variation of explanations of visual literacy, as an umbrella term, can be attributed to the concept's eclectic disciplinary backgrounds, ranging from aesthetics, to linguistics, to cultural anthropology, and to semiotics (Avgerinou & Pettersson, 2011). Pettersson (2015) compiled a long list of areas with which visual literacy concepts are associated. Earlier, Hortin (1994) postulates that visual literacy has developed out of four theoretical foundations: linguistics, psychology, art, and philosophy.

The multi-disciplinary contribution to the term's conceptual derivation makes visual literacy multi-dimensional, inter- and multi-disciplinary (Avgerinou & Pettersson, 2011), multi-faceted, and, at times, contradictory. The divergences impede both theoretical development and practical applications of visual literacy as scholars working within the

visual literacy framework have not forged a unified theory whose concepts can be applied appropriately to the different disciplinary areas promoting visual literacy. Despite the divergences, visual literacy scholars and researchers' works converge in a melange of aspects which enrich visual literacy studies and insights from those studies.

The instructional role of visual materials in supporting learning has long been upheld. On the pedagogical front, visual imagery has gained more significant prominence (P. J. Benson, 1997; Kleinman & Dwyer, 1999; Tang, 1991), with visual components appearing in different forms and types of learning resources, ranging from textbooks, to audio-visual materials, and to online dynamic hypertexts. Several prominent scholars have tapped into this research tradition. For example, in 1965, Francis M. Dwyer – one of the most prolific figures in visual learning research – pioneered a program called Program for Systemic Evaluation (PSE) researching the ways visual materials could be used to facilitate learners' comprehension and information retrieval (David Mike Moore, 2003). This large-scale research program, having involved over 100,000 participants in more than 130 experimental studies by 2007, went on to suggest the significant impact of systematic visual instruction on information acquisition, retention, and retrieval. Having used treatment targeting issues participants had with verbal/audio instruction and achievement tests piloted with item analyses, the program addressed the design flaws in various visual learning research, among which three are most relevant to the current study – that is, failure to describe: (1) specific learning objectives, (2) the type of visual materials and how they are used in the study, and (3) how visual materials are integrated in the instruction (Dwyer, 2007). However, the qualitative nature of the current project ensures the project observes the impact of visualised instruction on learning from a different angle, not discussed in PSE.

Willows and Houghton (1987) observed a spike in empirical studies and reviews of research beginning in the early 1970s on the facilitative roles of graphics and illustrations in reading comprehension and text information retention. Up to that point, the reviews suggest a general consensus that graphics facilitate learning (Evans, Watson, & Willows, 1987; Peeck, 1987), but there is a gap in the literature concerning the ways visual materials are employed in language learning as evidenced by the few studies with this focus. Shifrin (2007) documents a number of American primary and secondary school programs which, over the time span of a decade, have implemented visual literacy initiatives as "an explicit priority" (p. 113).

In a similar manner, attention to, provision and use of visual resources in a language class as sensory stimuli are not new. As early as 1966, applied linguists such as Pit Corder suggested useful and engaging learning activities to harness the potential of visual imagery to support language learning. Other notable works of a similar nature include Lonergan's (1984) book on the use of video in language teaching and Wright's (1989) book on the use of pictures in language learning. However, in many such instances, visual affordances are still treated with relatively insufficient importance and are reduced to supplementary support items to verbal texts by playing such roles as to decorate, conjure interest, and/or enhance memory. Visual resources have potential to achieve much more than that – potential which many learners and educators have yet to learn to harness.

Visual literacy studies within the English language learning context, however, are largely subsumed under the umbrella of multimodality. Exceptions are several notable studies which investigate the facility of visual literacy for language learning. Stenglin and ledema (2001) examine three visual analysis tools which they argue to be important and necessary for English language teachers themselves and their students. Royce (2002) investigates the relationships between visual and verbal texts in an environmental science

textbook, and suggests ways TESOL educators can streamline their teaching to promote multimodal communicative competence such that they can fully benefit from the visual-verbal synergy. Earlier, as an attempt to fill the void in visual literacy studies in English Language Teaching (ELT), Tang's (1991) ethnographic study on the roles of graphic representation of knowledge structures among two groups of multicultural English as a Second Language (ESL) seventh graders in Vancouver revealed that a large quantity of graphics and visual resources were used in the observed pedagogic setting. This self-proclaimed ground-breaking study, being one of the first of its kind, employed Brody's (1984) naturalistic approach in directly observing how and when learners and teachers use visual materials. The target group of participants were found to develop a "negative" attitude toward graphics accompanying texts as the participants gave minimal importance to graphics, reducing the role of graphics to being "decorative", while instructional guidance on how learners could make use of graphics to facilitate their learning was found to be almost non-existent.

With a similar observation of a need to contribute empirical findings to the inadequate literature which posits that picture books assist learners in their English as a Second Language acquisition, Astorga (1999), drawing on a Systemic Functional Linguistics analysis framework and Kress and van Leeuwen's (1990) early social semiotics work, examines the generic structures of the stories, writers' linguistic choices, and visual representations accompanying the stories in two picture books for children. The study design is built on Barthe's (1977) approach to text-image relationships, i.e. elaboration and relay, and Kress and van Leeuwen's (1990) categorization of images, i.e. conceptual and presentational. The clause-by-clause analysis of the ideational functions of the stories in comparison to those of the visuals reveals that the more material processes a story contains, the more likely the image will contribute to the meanings of the story. By contrast, the more

verbal and mental processes a story contains, the less likely the image will realize the ideational meanings of the narrative text. Based on the findings, Astorga proposes a text-based approach to teaching which promotes learners' explicit awareness of macro and micro aspects of a narrative text through both the analysis of the linguistic text and accompanying visuals.

The relatively small number of visual literacy studies in TESOL, the marginal focus on multimodality in the TESOL research agenda (Early et al., 2015), and the dire need to help English language learners, trainee teachers, and teachers themselves in Cambodia to keep abreast and take advantage of the omnipresent visual materials in their learning, work, and life warrants a research study such as this thesis to explore how visual teaching and learning is being practiced and what visual instructional approaches could potentially promote visual literacy and help improve English language learning in Cambodia.

1.4 Research questions

The following are the research questions framing the case study in Part One:

- 1. What is the current visual teaching practice at the DoE?
 - 1.1 What visual learning materials are used? How are they used?
 - 1.2 What are the lecturer and student participants' attitudes toward the current visual teaching practice?
- 2. What visual communication skills do the participants claim to have developed?
 - 2.1 What interpretive and creative skills do the lecturer participants possess?
 - 2.2 What interpretive and creative skills do the student participants possess?
- 3. What visual communication skills are considered necessary and should be taught to the student participants?

- 3.1 What visual text interpretive and creative skills need to be taught to the student participants?
- 3.2 What additional training in visual literacy do the participants need?
- 4. What components does a definition of visual literacy for English language learning in Cambodian higher education entail?
- 5. To what extent should visual content be given more importance to in the current curriculum? What ways can be used to effectively promote visual literacy among Cambodian university students?

With the exploratory case study in Part One establishing a foundation for visual literacy practices at the research site, Part Two delves further into the issue by implementing an action research project to answer the following research questions:

- 6. To what extent does the implicit teaching of visual literacy promote English language learning?
- 7. To what extent does the explicit teaching of visual literacy promote English language learning?
- 8. In the scenario that English language learning is facilitated by both approaches of visual literacy instruction, what pedagogical framework can be used to promote visual literacy among Cambodian English language learners and teachers on the long run?

1.5 Aims and significance of the study

1.5.1 Aims of the study

Despite the indispensability for one to develop a functional level of visual communication skills, visual literacy has been treated as a peripheral component of

contemporary curriculum agenda (Brumberger, 2011; Elkins, 2008; Pauwels, 2008). Moreover, the issues surrounding the theorization, implementation, and research of visual literacy as an emerging discipline are far from being resolved. In light of these shortcomings in the existing literature, the current project has been designed to achieve three main aims: (1) to explore the current teaching and learning practice in relation to visual literacy in a higher education EFL context in Cambodia; (2) to introduce the concept of visual literacy instruction within the ELT parameters to a group of Cambodian lecturer and learners, implement two visual teaching approaches, and then assess their impact on English language learning outcomes; and (3) to propose a pedagogical framework and two practical approaches to teaching visual literacy in Cambodian English language learning contexts and those in the geographic region which share similar traits and features.

1.5.2 Significance of the thesis

This thesis will be the first of its kind to examine in depth the visual teaching and learning practices in Cambodia. The thesis will also offer insights into English language learning in Cambodia from the perspectives of a Cambodian language teacher researcher.

The investigation into the impact visual teaching has on English language learning outcomes, and the pedagogical implications based on the assessed impact will also be of significant benefit for learners, teachers, trainee teachers, teacher trainers, curriculum designers, policy makers, and researchers who believe in the merit of visual resources in support of language learning, use the resources in their learning and professional practices, and wish to obtain better understanding and practical knowledge of how to further develop visual literacy and apply visual literacy to achieve their learning and professional goals.

The thesis will also serve as a cornerstone and stepping stone to promote visual literacy instruction in Cambodian TESOL communities beyond the classroom context as the thesis proposes a visual literacy community of practice model which could potentially

involve language learners, educators, administrators, and other stakeholders at different institutions and at different levels of participation.

Significance of the thesis also lies in its potential to open platforms for future research into visual as well as other semiotic meaning-making resources and their contribution to improving English language learning in Cambodia. Almost two thirds of Cambodia's population is under 30 years of age (United Nations Population Fund Cambodia, 2016) – the demographic group which is most active on social media for both personal consumption and learning purposes. A face-to-face survey with 2597 Cambodians aged between 15-24 across the country reveals that 92% had access to TV, 70% of whom watched TV every day, while 65% of the participants in urban areas used the Internet regularly, with 73% of them using it to access news and 63% of them using it for social networks (BBC media action research and learning, 2014). Another study on the use of mobile phones and Internet among 2064 Cambodians aged between 15 and 65, selected through multi-stage sampling using the Probability Proportional to Size method in accordance with the census data issued by the National Institute of Statistics in Cambodia, reported a near universal access to a mobile phone (Phong & Solá, 2015). In the same study, close to 40% of the participants reported having owned at least one smart phone, while one in three had access to the Internet and had a Facebook account. The figure released by the Ministry of Posts and Telecommunications indicates that over 7 million users (Ministry of Posts and Telecommunications, 2016) among the country's population of 15.8 million (United Nations Department of Economic and Social Affairs, 2015) accessed the Internet through a mobile phone. The high penetration rate of Internet and social media such as Facebook among the Cambodian population suggests that everyday life of a good proportion of Cambodians, language learners included, may be saturated with multimodal and highly visual sources of knowledge and information. A study such as the current one serves to initiate a research area

among the budding Cambodian research community to investigate how educational resources, learning activities, pedagogy, and curricula can be coordinated and utilised to help learners consume and produce visual media more effectively, responsibly, and ethically.

1.6 Delimitation of the study

In different sections of the thesis, I use the terms "visual cues", "visual representations", and "visual imagery" interchangeably, and they encompass all types of visual resources including: (1) two-dimensional visual resources such as drawings, pictures and photographs, predominantly found in the ELT coursebooks; (2) moving pictures such as videos; (3) dynamic, interactive visual text such as PowerPoint and wall posters created by the students in the class.

This thesis aligns with the "multiliteracies" or "literacies" tradition (Kalantzis & Cope, 2008; Kress et al., 2005; New London Group, 1996) which believes that linguistic resources are only one among others with meaning-making potential. The other components include spatial, gestural, audio, and visual design (Kalantzis, Cope, Chan, & Dalley-Trim, 2016).

The thesis consists of two parts, with Part One being a university-based case study to explore and discover the conception of visual literacy among four groups of participants, their visual learning and teaching practice, and their involvement with visual media and technologies outside of their learning. Part Two zooms in on the issue of visual literacy instruction and investigates the impact of two visual literacy instructional approaches in an action research study with a group of participants. The research findings from Part One contribute to those in Part Two, and together both parts enabled me to understand the intricate issue and sub-issues of visual literacy instruction in the research setting and observe

the ways a group of English as a Foreign Language (EFL) student participants benefited from two cycles of visual teaching interventions.

It is also worth noting that this thesis examines the impact of the study's teaching interventions on the student participants' language learning outcomes by focusing on a limited number of learning factors such as learning attitudes, engagement, motivation, vocabulary learning, grammar learning, and critical thinking.

1.7 The thesis overview

This thesis was written in eight chapters, as displayed in a visual representation in Figure 1.3, with Chapters 2, 3, and 4 mainly presenting the case study in Part One of the thesis and Chapter 5 and 6 mainly discussing the action research in Part Two of the thesis.

Specifically, Chapter 1 introduces the relevant research issues by first noting and discussing the societal shift from text to visual communication in today's world. Then, it identifies the key research problems, argues for the significance of the study, and offers a chapter-by-chapter summary of the contents to be presented in the rest of the thesis.

Following the introductory chapter, Chapter 2 provides a critical review of related literature for Part One of the thesis by discussing the divergence and convergence of studies on visual literacy in education across the curriculum in both western and Asian countries. It reviews studies which attempt to define visual literacy both as a concept and a discipline, to apply visual literacy in language learning, and to evaluate the impact of visual literacy instruction in today's diverse educational contexts. The review synthesises the issues related to visual literacy teaching in TESOL and Applied Linguistics and explains the theoretical and conceptual frameworks for the thesis, which apply both to Parts One and Two of the thesis. Following this critical review, a number of research questions guiding the study in Part One are presented to close out the chapter.

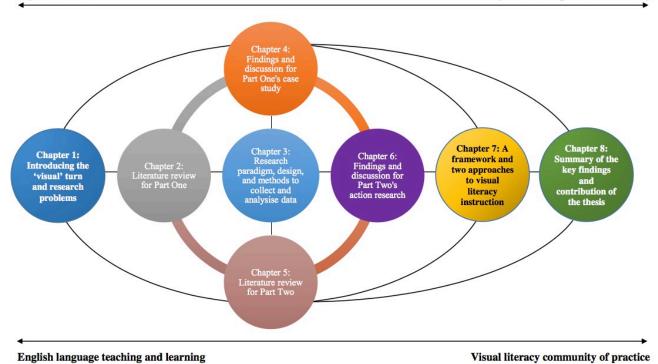


Figure 1.3. A visual representation of the thesis organisation

Chapter 3 explains further the study context of the thesis and discusses the research paradigm and design, elucidating the participants, the methods used to collect data for the thesis and provides justification for the data collection methods and procedures, and the data analysis procedures. In this chapter, I also discuss the rationale for my selection of action research as the research methodology for Part Two of the thesis and its significant role in achieving the thesis purposes.

Chapter 4 presents the findings of Part One as a result of recursive analyses of data corroborated from the five methods used and discusses the findings by comparing them to those suggested by previous related studies. There is also a section of the chapter where I provide commentary based on my knowledge and experience as a lecturer researcher who had been teaching in the research context for 12 years, to help explain some of the notable findings. The chapter also justifies a plan to implement an action research study in Part Two.

It also explains the research context for Part Two of the thesis and spells out the aims and significance of the study in Part Two.

Chapter 5 presents a synthesised review of visual literacy research in the last 25 years (1991-2016) in relation to the contexts of language teaching and learning. The review also scrutinises the niches in Cambodian ELT and teachers' professional development needs which provide a rationale for the selected research agenda and the research questions presented at the end of the chapter.

Chapter 6 investigates the action research findings and discusses them against the relevant literature in order to show evidence in support of visual literacy instruction. To achieve this purpose, the impact of the two cycles of the study, which introduced two separate instructional approaches to teaching visual literacy (i.e., implicit and explicit), is discussed in relation to the research questions posed in Chapter 5.

Chapter 7 discusses the implications of both parts of the thesis, highlighting the study's contribution and benefits for the immediate stakeholders in ELT, i.e., teachers, learners, and syllabus and curriculum developers, as well as those who are less directly involved in driving ELT through administrative, managerial, leadership, and other supportive roles. I also discuss the study's contribution to a broader community through a model based on Wenger, McDermott, and Snyder's (2002) concept of Community of Practice for English language learning situations throughout Cambodia and its region.

Chapter 8 concludes the thesis. It provides an overall summary of the thesis and connects findings of the two parts to the research questions posed earlier in the thesis as well as the gaps and issues specified in the literature reviews in Chapters 2 and 5. The rest of the chapter elaborates on the theoretical, pedagogical, and methodological contribution to advancing the visual literacy research as a practical effort to bring visual literacy to the core of English learning syllabuses, curricula, and programs such that the teachers and learners

at the target research site will present minimum resistance and even embrace the proposed framework as well as the pedagogical approaches to visual literacy instruction explained in Chapter 7. Limitations of the current study are identified, and the chapter ends with recommendations for additional research to extend the studies to new learning contexts and opens opportunities for relevant studies to advance the quest to promote and teach visual literacy as a fundamental literacy along with other compulsory literacies in response to the needs and demands of 21st century learners.

1.8 Conclusion

The connectivity between language and other meaning-making resources, including visual ones, has never been stronger and more intimate, making any language class which continues to uphold the primacy of verbal language literacy at the exclusion of other literacies out of touch with the 21st century learning goals. In light of this development, a page-bound, mono-modal, text-based teaching, teacher-based approach has, more often than not, been supplanted with dynamic, interactive, multimodal, learning-oriented approaches in both first language and second/foreign language classrooms. However, as suggested earlier, a very limited number of studies have been conducted to examine the extent to which visual communication skills can potentially help English language learners and teachers achieve their learning and teaching objectives.

This chapter has introduced readers to the study background, identified some key issues and gaps in the visual literacy literature, highlighted the thesis aims and significance for different groups of readers and professionals, and outlined what is to come in the rest of the thesis. The next chapter deals with a critical review of relevant visual literacy literature, discusses the thesis's theoretical and conceptual frameworks, and raises research questions for the study for Part One of the thesis.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Following the argument put forward in the Introductory chapter that visual literacy in the English Language Teaching context is under-researched, this chapter reviews some key literature on visual literacy research in education in general as well in language education in order to identify important gaps and issues in the literature which beg to be addressed now and in the near future. More studies on visual literacy instruction, especially those in ESL/EFL contexts, are further reviewed in Chapter 6 to formulate a backdrop for the action research in Part Two of the thesis.

Although the chapter aims to encapsulate the history and development of visual literacy since its inception in research and other academic endeavours, this literature review is not an exhaustive body of work partly because of the diversity of visual literacy research studies and the plurality of disciplines they serve. The research studies reviewed in this chapter span the period of 25 years from 1991 to 2016.

In this chapter, first I present an argument in support of visual-multimodal literacies as complementary to the conventional linguistic (print) literacy. Then, I explore the development of visual literacy as a concept and discipline and its research agenda before reviewing the roles of visual representations in various language teaching methods and approaches, facilitative values of visual materials in education, and, importantly, visual literacy across the curriculum especially in higher education. This chapter also explains the thesis's theoretical and conceptual frameworks and presents the research questions for Part One of the thesis.

2.2 Beyond linguistic (print) literacy

Texts produced and distributed in today's technological age are visually oriented, with visual resources being used to convey communicative messages as much as words and sentences do (Kalantzis and Cope, 2001a, 2004, 2005, as cited in, Kalantzis & Cope, 2008). To be literate calls not only for knowledge of linguistic conventions but also abilities to navigate multimodal modes of communication in varied social settings. Kalantzis and Cope (2008, p. 203) suggest that contemporary literacy should also include an ability to produce text which is multimodal, using "word processing, desktop publishing and image manipulation". Linguistic text – both spoken and written – is just one mode among many with meaning-making potential, each contributing its share to make up the total meaning communicated in text.

Burn and Nixon (2005, p. 1) in their editorial for a special issue of *English Teaching: Practice and Critique*, devoted to exploring the connections between English and the visual observe a close relationship between the two across platforms and channels of communication artefacts and educational materials, such as in the cases of "illuminated manuscripts of mediaeval romance, the woodcuts of 17C chapbooks and 18C broadsheet ballads ... the art of modern picture-book ..." Visual communication, even in its earlier form as cave paintings, has supplemented verbal communication, "increasing human capacity for complex mental processing" in a way which verbal text alone cannot do (Brill, Kim, & Branch, 2007, p. 51). Burn and Nixon also emphasise the proliferation of visual content in communication and learning contexts as "the dawn of a new era," which they refer to as "a visual age".

Before the 20th century, visual representation study was the main concern of art and art history with a focus on the artists' intentions and viewers' perceptions. And up until the

last decade or so, visual resources have received little attention, within research and pedagogic communities, with images relegated to mere illustration (Jewitt, 2008). A growing interest and a substantial body of work on the role of visuals in young children's learning was observed, especially those studying young children's rendering of visual resources in their learning (Kress, 1997, 2003; Walsh, 2003, Jewitt, 2002, Bearne, 2003, Unsworth, 2001) (See Kress, 1997, and Jewitt, 2008, for a comprehensive summary of the research on visual cues and their facilitative roles for children's learning). These studies support the assertion that visual representations assist children's reading and interpretation of stories, and their re-telling. At the same time, as Jewitt (2008) summarises, there appeared to be a broadening research interest in visual representation to include everyday images such as the seminal studies of image in film (Metz, 1990), the use of photographs (Sontag, 1979), advertising (Goffman, 1979), and learning (Kress, 1996). However, much less is known about visual imagery and older language learners, especially those in higher education (Bleed, 2005).

The 21st century is a historical moment when technology aids the production and circulation of images at an "unimagined level" (Jay, 2002, p. 88, as cited in Jewitt, 2008). Visual and digital technologies "collapse, remake, and blur the boundaries between consumption, production, and dissemination" (Jewitt, 2008, p. 108). Reading and writing now, even on paper involving just the basic use of words, are arguably multimodal (Jewitt, 2005, 2008). Kenner (2004) further explains that spatial organisation, framing, directionality, shape, size, and angle of a script on a page create multimodality out of these two literacy activities (as cited in Jewitt, 2008). Yet, different cognitive processing applies to reading images than reading verbal prints. The latter relies on class structures and sequencing (time and sequence), while the former foregrounds the arrangement and display of elements (Kress & van Leeuwen, 2006).

Literacy and numeracy, conventionally referred to as 3Rs, is as significant as before, or even more important now than ever (Kalantzis & Cope, 2008). However, skills are needed by learners to navigate through ever-evolving technology-driven communication channels, predominantly screen-based, not just as passive receivers of messages but active contributors who drive the communication exchanges. They need skills which would equip them with capabilities to evolve with and drive the development trends in response to the latest technologies of production, dissemination, and consumption of learning content.

2.3 Development of visual literacy: The concept, the discipline, and the research agenda

Visual literacy studies date back to the 1960s, but has a long-standing connection with development of human civilizations. Visual literacy as a concept existed before verbal literacy as the earliest forms of visual communication were discovered in the pre-historic rock art over 30,000 years ago (Pettersson, 2013; Velders, 1999). The development trajectory of writing systems, starting with symbols representing real world entities, e.g., in pictorial languages like Chinese, further enhances this claim.

Despite its long history and development, however, visual literacy as both a concept and a discipline, Braden (1994) observes, had been plagued by an identity crisis since its inception. Cassidy and Knowlton (1983), D. M. Moore and Dwyer (1994), Braden (2001), Brill et al. (2007), and Avgerinou and Pettersson (2011) have all attempted to untangle the complex issues of defining visual literacy and consolidating the theoretical foundations of this eclectic research area with limited success. Brill et al. (2007), for example, use a Delphi technique to survey by way of an email or a website 15 top experts in visual literacy nominated by 229 leading scholars working and researching on visual literacy. The study was framed by three main aims: (1) the degree of consensus for a visual literacy definition;

(2) components of a visual literacy definition; and (3) whether it is necessary to develop a unified definition for visual literacy. Although the study produced a definition² generally accepted by the participants, the study design which used an electronic survey to generate participants' responses and the limited number of visual literacy scholars surveyed prevent the authors from conclusively claiming it to be a consensus definition.

At this point, although some agreement has been reached toward a comprehensive definition of visual literacy to include the abilities to interpret, use, and create visual resources for the intended communication purposes, a uniform theoretical framework for visual literacy has not been forged, and the definitional controversy of the term continues to be an issue worthy of further research. A lack of consensus for a visual literacy definition applicable across disciplines is a major impediment to visual literacy research (Braden, 1994). The current research aims to address this very issue of visual literacy definition through the framework of visual literacy for higher education, as explained in detail in Section 2.6.2.

Facility of visual resources and other modes of representation in promoting language learning is under-researched and is much less known than that of linguistic resources, which has been consistently investigated for decades (Early et al., 2015; Jewitt, 2008). As Kress and van Leeuwen (2006, p. 3) note, "Not being 'visually literate' will begin to attract social sanctions. Visual literacy will begin to be a matter of survival, especially in the workplace."

² Brill et al. (2007)'s definition for visual literacy: A group of competencies for interpreting and composing visual messages. A visually literate person is able to: (a) discriminate, and make sense of a visible object as part of a visual acuity, (2) create static and dynamic visible objects effectively in a defined space, (c) comprehend and appreciate visual testaments of others, and (d) conjure objects in the mind's eye.

2.4 Visual representations in various language teaching methods and approaches

The extended presence of visual resources has been well established in English language teaching methods and approaches, some of which have risen and waned, while others have been enjoying prominent pedagogical favour, even in today's language classes. Visual resources generally appear under the umbrella term "visual aids" and can encompass all forms of static and moving, dynamic resources which facilitate learning (Tomlinson, 2003).

2.4.1 Direct approach

As early as in the late 1860s, a movement to reach a principled approach to language teaching began with the establishment of a language school in in Boston by L. Savuveur and his use of a teaching method known as the Natural Method (Richards & Rodgers, 2014). Within this language teaching practice, analysis of grammatical rules and structures was avoided as grammar was taught inductively, and language learning was to occur naturally in context, much like a child learning his or her first language. The teacher would be the main source of input in the beginning stage of language learning, and "direct and spontaneous" use of the target language was encouraged and practiced (Richards & Rodgers, 2014). Vocabulary and basic sentences were taught with mime, demonstration, and pictures.

Following the same foundational principles of the Natural Method, the Direct Method came into existence in more language teaching settings outside of the United States such as France and Germany at the beginning of 20th century. One of the principles was to teach concrete vocabulary through demonstration, objects, and pictures, and abstract vocabulary through association of ideas.

2.4.2 The Oral-Situational Approach

Initiated by British linguists in the 1920s and 1930s (e.g., Harold Palmer, A. S. Hornby, etc.), the Oral Approach was recognised as the English language teaching approach

in Britain in the 1950s (Richards & Rodgers, 2014). The Oral Approach was centred around the systematic principles of *selection* for vocabulary and grammar to teach, *gradation* to organise and sequence lesson contents, and *presentation* to introduce and practice vocabulary and grammar points selected (Richards & Rodgers, 2014). Elsewhere in Australia, New Guinea, and the Pacific territories, George Pittman, a prominent proponent of the Oral Approach, and his colleagues developed a set of situationally based teaching materials, which would go on to become the foundations of the Situational Approach (Pittman, 1967). One of the core principles of the Situational Approach is that new language points are to be presented and practiced in situations (Pittman, 1967). With this principle accepted worldwide, even by Hornby, one of the founders of the Oral Approach himself, the Situational Approach was increasingly used in place of the Oral Approach (Richards & Rodgers, 2014).

With the Situational Approach, new sentence patterns are introduced in situation-based practices through controlled drills. Pittman described situation as visual components which could consist of concrete objects, pictures, realia, actions and gestures which can be combined to demonstrate meanings of the language points being taught. Davies, Roberts, and Rossner (1975) further observe that "the meaning of new words and sentence patterns is not conveyed through translation. It is made clear visually (with objects, pictures, action, and mime)…" (p. 3). Central to the Situational Approach were textbooks and visual aids either produced by the teachers or extracted from commercialised textbooks.

2.4.3 The Audiolingual Method

In the USA in the same period, dissenters of the Direct Method proposed and developed what came to be known as the Audiolingual Method. Structural linguistic theory, contrastive analysis, aural-oral approach, and behaviourism established the underlying theories of the method, which saw an excessive number of contextualised drills and

dialogues followed by the target grammar patterns in order to promote memorisation and error-free adoption of oral language use by the learners. Much like its predecessors, the Audiolingual Method relied principally on the teachers and the use of tape recorders and audiovisual equipment.

Following its heyday in the 1960s, the Audiolingual Method was challenged by language teachers and researchers who had observed low achievements among classes following the approach. The rejection of the approach also came from cognitive theorists led by Noam Chomsky, who advocated that language learning does not occur through habit formations promoted in a typical Audiolingual Method language lesson but through the learners' universal grammar which was argued to be innate.

2.4.4 Total Physical Response

The decline of the Audiolingual Method was not immediately supplanted by another mainstream language teaching method or approach until the 1980s, leaving the 1970s and early 1980s as the "lull" which saw language classrooms adopting alternative methods or approaches springing out of non-language theory and non-applied linguistics research. Among the short-lived alternatives to the Audiolingual Method was Total Physical Response (TPR), developed by James Asher based on principles of developmental psychology, learning theory, and humanistic pedagogy. Although in the beginning lessons, the teacher was not required to use any teaching materials as students would listen to the teacher's imperatives and respond with physical activities, TPR lessons in the later stages would make use of realia, classroom equipment, pictures, posters, slides, word charts, and other learning props (Asher, 1977).

2.4.5 The Silent Way

The Silent Way, in a similar timeframe, was initiated by Caleb Gattegno, a Mathematics and Reading education programme designer, who introduced a paradigm shift

by placing importance on the learners' roles in learning over teachers' roles in teaching. The teacher would heavily use a wide range of visual materials, including coloured rods, colour-coded pronunciation and vocabulary word charts as well as gestures and other manipulatives to model and teach beginning-level vocabulary and grammar structures before directing the responsibility to the learners to act and practice the target language points with as minimal interference from the teacher as possible (See Gattegno, 1972, for further explanation of the method).

2.4.6 Communicative Language Teaching

The Communicative Language Teaching (CLT) approach gave rise to the use of teaching materials as the primary source of inputs for learners. The materials could be text-based, task-based, and realia (Richards & Rodgers, 2014). Authentic and real-life materials which are prominently used in a CLT classroom range from signs to print media to visual resources such as maps, pictures, graphs, charts as well as real objects which can be brought into classrooms for communicative activities. Never had the importance of audio-visual materials been emphasized as much as in the case of CLT as these resources contextualise, create purposes, and bring real-world simulation of actual contexts into language learning.

2.4.7 The Natural Approach

Developed by Stephen Krashen and Tracy Terrell, the Natural Approach makes extensive use of authentic pictures and other visual aids such as brochures, advertisements, maps, and books as these resources play an essential role in promoting comprehension and communication in real life contexts that no other resources can generate.

2.4.8 Content-Based Instruction and Task-Based Language Teaching

As offsprings of CLT, both Content-Based Instruction and Task-Based Language Teaching also promote authentic materials and realia used in the subject matter of the course content as well as heavy use of instructional media such as video and audio clips.

As this brief survey of teaching methods in ELT since the 19th century has shown, visual literacy has featured to a varying extent but has not been exploited to its full potential. As visual resources continue to have a prominent presence in language classes across communities and cultures, a closer examination is warranted of the favourable roles of visual materials in helping learners overcome various challenges in education and language learning and achieve the desired competencies in the target language.

2.5 Facilitative benefits of instructional visual materials

Findings from the previous research have positively advocated the use and teaching of visual resources in language learning as they provide facilitative impacts on students' learning in a range of domains, including memory and recall, text comprehension enhancement, and learner engagement. This section will explore these benefits further. A common practice from the 1970s to 1980s, research on pedagogical benefits of visual aspects of learning materials compared the impacts of text-only with text-plus-visual instructional materials on learners' achievements (Bender & Levin, 1978; Bransford & Johnson, 1972; Levie & Lentz, 1982, etc.).

Bender and Levin (1978) administered a 20-sentence story listening activity to 96 students with mental retardation aged between 10 and 16 into four groups. The students were randomly divided into four groups. The picture group saw the illustrations of the story, the mental imagery group was asked to visualise the story on their own, the repetition control group listened to each of the 20 sentences twice, and the control group just listened once. The picture group outperformed the other groups in story recall, as revealed through their answers to the researchers' questions recorded on the tape. The participants were trained before the experiments and were clearly instructed before and during the experiments, and scoring of the participants' responses was done by two raters

not informed of the experimental conditions. The subjectivity of the scoring, putting students in a room with the researchers during the experiments, and not measuring students' ability levels could have influenced the participants' performance scores. Also adopting an experimental design, Bransford and Johnson (1972) earlier measured the impact of background knowledge on participants' comprehension and recall of textual information they listened to through four experiments each consisting of two stages: (1) acquisition of textual information through listening; and (2) comprehension rating and recall. Among the four, the first experiment made use of a picture to provide background knowledge and prepare students for the listening, and comprehension and recall tasks. Fifty high school students volunteered to participate in the experiment and were divided into five groups of ten: (1) No picture group who listened to the passage once; (2) No picture group who listened to the passage twice; (3) Picture group who saw the picture before listening; (4) Picture group who saw the altered picture with objects in the picture rearranged; and (5) Picture group who saw the picture after listening. Two raters with an inter-rater reliability co-efficient of over .90 judged the participants' responses, and mean performances of each group were subject to Dunnett's test to compare differences in performances of the five groups. The picture group who saw the picture before listening produced much higher performances than the rest while the group who saw no picture and listened to the passage once scored the lowest. The study had the same design issues as those in Bender and Levin (1978).

Levie and Lentz (1982) reviewed 55 experiments to compare learning from illustrated written text with learning from written text alone. Mental imagery created by the learners themselves was not included in the review; the illustrations were provided by the researchers. The authors acknowledged the diversity of the experiments, but, overall, the experiments favoured learning from illustrated text, with 39 of them confirming that, if

illustrations explained textual information, this approach had a "statistically significant advantage" over learning from text alone. However, in the case that illustrations did not explain textual information there was no statistical difference in learning from the two approaches as confirmed by nine comparisons out of the 55 experiments.

As for learning with textbooks, Tang (1994) conducted a two-part comparative analysis of illustrations included in intermediate social studies textbooks used in secondary curricula in Hong Kong, Japan, Mexico, and Canada. The criteria used to select the textbooks were "accessibility, grade level, subject area, and wide adoption", which could have influenced the quantity and form of illustrations analysed. To classify and compare the illustrations, Tang used Levie and Lentz's (1982) representational/non-representational picture classification, Mohan's (1986) knowledge framework, and Hunter et al.'s (1987) roles of visual displays. The two-way Chi-square tests of the illustrations revealed that social studies textbooks contained heavy visual illustrations, and mostly the illustrations were representational. (See Levie and Lentz, 1982, for an explanation on representational pictures). Tang further asserts that textbook developers across languages and cultures followed similar design conventions and even used the same graphic forms. Tang, based on this finding, suggested that graphics in textbooks could be exploited to help ESL students better understand content knowledge in their learning.

Carney and Levin (2002) conducted an extensive review of research studies throughout three decades, 1970s-1990s, on the impact of visual illustrations on learning. Studies on mental imagery created by learners themselves were excluded from the review. Carney and Levin conclude that the empirical evidence generally points to positive impact of carefully developed text illustrations in enhancing learners' comprehension and performance on a variety of text-dependent cognitive activities. Much research conducted within this tradition examines the roles of text illustrations based on Levin's (1981) five

functions of text-accompanying pictures: decorational, representational, organizational, interpretational, and transformational.

Decorational pictures embellish pages and have no facilitative value other than making texts appear attractive to learners. Representational pictures, being the most prevalently used in educational materials, illustrate part or all of the text content, for example, a picture depicting a scene narrated in the text. The third function of pictures – organizational – pack text content into a structural framework, for example, a flow chart depicting the process of car production described in the text. Interpretational pictures, on the other hand, clarify and simplify difficult texts, especially those found in science instructional materials, for example, pictures of a machine with labels for each part of the machine and each step of its operation. The last function – transformational – of pictures is to enhance learners' memory and recall of text information with their mnemonic values, for example, in the case of a picture of Santa Claus attached to a text discussing the influence of celebration of Christian traditions like Christmas in non-Christian countries. All the five functions of still images suggested by Levin (1981) also assist language learning to some extent and will be further explored in the subsequent sub-sections.

As displayed in Figure 2.1, Clark and Lyons (2011), within broader training and educational spectrums, similarly present seven functions of graphics. Trainers and educators would be able to tap into the enormous potential of these resources in achieving the desired learning outcomes provided that they are pedagogically and systematically designed (See Clark and Lyons (2011) for the detailed set of learning graphic design criteria).

Visual resources in language learning, however, do not enjoy support without drawbacks and controversies. Weidenmann (1989), for example, asserts that "good pictures fail" because they may be considered easy and only examined superficially by the students (as cited in Carney & Levin, 2002). Other researchers also call into question the benefits of

Function	A Graphic Used to	Examples
Decorative	Add aesthetic appeal or humor	Art on the cover of a book Visual of a general in a military lesson on ammunition
Representational	Depict an object in a realistic fashion	A screen capture of a soft- ware screen A photograph of equipment
Mnemonic	Provide retrieval cues for factual information	A picture of a stamped letter in a shopping cart to recall the meaning of the Spanish word, Carta (letter)
Organizational	Show qualitative relationships among content	A two-dimensional course map A concept tree
Relational	Show quantitative relationships among two or more variables	A line graph A pie chart
Transformational	Show changes in objects over time or space	An animation of the weather cycle A video showing how to operate equipment
Interpretive	Illustrate a theory, prin- ciple, or cause-and-effect relationships	A schematic diagram of equipment An animation of molecular movement

Figure 2.1. Communication functions of graphics from Clark and Lyons (2011) visual learning materials (Canning-Wilson, 2000; Levie & Lentz, 1982; Mayer, 1997, 2009). There is also a concern about visual literacy's detrimental impact on print literacy and "dumbing down" of culture and civilisation as social members become less literate in numeracy and the 3 Rs. For these scholars, the extent to which such materials facilitate

learning largely depends on the discussion of the strategies and techniques applied to the visuals.

2.6 Visual literacy and visual representations across the curriculum

2.6.1 Visual literacy research over the years

Three cornerstone papers have attempted to consolidate visual literacy research over the decades. Braden's (1994) paper on visual literacy research from 1969 to 1994 tackles the theoretical divergence and definitional issues of visual literacy. Braden provided a comprehensive review of visual literacy scholastic works, tracing as far back as Paul Wendt's (1962) work on the language of pictures, the body of work which had significant influence on John Debes's (1969) seminal work on visual literacy, and reviewing many delphi studies such as Baca's (1990) extensive collection of areas visual literacy researchers agreed on and Dwyer's (1972) Program of Systematic Review. Braden's contribution to visual literacy research lies in the trendsetting classification of conceptual and research interests in visual literacy into such categories as theoretical foundations and research agenda for visual literacy, visual vocabulary, visual teaching and learning, visual thinking, visual-verbal relationship, and visuality of typography. Stokes (2002) provides a historical perspective of visual literacy as a discipline and attempts to account for a visual literacy definition, learner differences, and visual instructional technology by reviewing visual literacy research up to 2002 investigating impact of visual instruction on learning. Stokes' focus on research on the use of graphic/visual organisers and other visual resources such as multimedia and text-illustrations in learning and thinking is directly related to the current study. More recently, Jewitt (2008) comprehensively reviews the literature on the use of visual resources in learning and creativity, targeting multimodality, visual literacy, and visual landscape mainly in primary and general education, especially that in the UK. The

three papers did not clearly specify the criteria used to select the literature under review although there were clear themes grouping various studies into sections and sub-sections.

Visual literacy has been attributed as a core component of a broader spectrum of literacy which is argued to be critical for learners in contemporary highly interactive cultures. Ipri (2010) stipulates that the 21st century literacy needs to cover skills "across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and films, to digital social networks" (p. 532). Mackey and Jacobson (2011), on the other hand, propose "metaliteracy" an umbrella term which has been reframed from information literacy to encompass multiple literacies, including information literacy, visual literacy, digital literacy, media literacy, and ICT literacy as a response to the emergence of new media platforms and environments in both communication and learning and thus new literacy frameworks as explained below.

Impetus in visual literacy research has also been strengthened by the shifting landscape in literacy research itself, which gives rise to the need for multiple literacies, instead of the traditional 3-R's literacy alone (Kalantzis et al., 2016; New London Group, 1996). One of the most notable directions with this tradition sprang out of the collaborative effort of the New London Group to determine new directions for literacy pedagogy in response to the educational challenges posed by globalisation, new learning technology, and socio-cultural diversification. The discussion resulted in the influential multiliteracies framework which aims to address changing realities in what the group term as public lives, personal lives, and working lives (Kalantzis & Cope, 2008). A number of research and practice implications were recommended in relation to the "what" and "how" of literacy teaching, with the former referring to what students need to learn and the latter pedagogical approaches to literacy. Drawing upon Fairclough's (1995) theory of discourse, the framework argues that semiotic activities are a creative application and combination of

available resources of meaning that, in the process of meaning making, transforms at the same time as it reproduces these resources. Students need to be equipped with abilities to manipulate multiple meaning-making resources, including linguistic, visual, audio, gestural, spatial, and multimodal, in order to be become fully competent social beings in "public, community, and personal lives" (New London Group, 1996, p. 60). As for the approach to literacy pedagogy, the group proposes four non-linear interrelated components – situated practice, overt instruction, critical framing, and transformed practice.

Kalantzis and Cope (2016) has further extended the work of the New London Group by emphasizing that literacy goes beyond traditional reading and writing abilities and numeracy. New information and communication media are being used to create, store, and share messages, resulting in the meaning-making process being "increasingly multimodal" (p. 2). Written-linguistic mode of meaning, which continues to play an important role in communication, has become just one of the available modes, which also include oral, visual, audio, gestural, tactile, and spatial. Literacy and language learning pedagogies, therefore, need to be extended beyond teaching of the conventional 3 Rs. Kalantzis and Cope propose a multiliteracies approach which addresses two major aspects of the contemporary communications environment – social diversity and multimodality.

2.6.2 Visual literacy in higher education

The proliferation of visual communication heralds a need for educational institutions to adapt their curricula to teach a wide range of visual communication skills in both consumption and production of static as well as dynamic, animated visual cues. In fact, the practice is being embraced in disciplines across the higher education curriculum. How to interpret and integrate visual elements with text is a common core component for many writing courses, and students are increasingly encouraged to work with animated and

interactive media resources in academic programs in humanities, sciences, mathematics, technology, and arts (EDUCAUSE Learning Initiative, 2015).

In higher education, a number of attempts have been established to both define and set learning standards for visual literacy. New Media Consortium's report of the 21st century literacy summit acknowledges the essence of multimodal literacies, especially visual communication skills among K-12 as well as higher education students.

Bleed (2005), for example, argues that three factors emphasize the increasing importance of visual literacy – the younger generation's gravitation towards multimodal-visual communication, emergence of new learning technologies used to support the 21st-century skill sets, and the development of right-brain abilities through the proliferated use and consumption of highly visual technology. Incorporating visual literacy in curricula ensures that higher education reflects today's reality. However, challenges with assessment will arise and will need to be addressed in two main areas – classroom-based assessment of students' visual competencies and institutional assessment of student performance, which could generate evidence to influence curriculum evaluation and reform in favour of visual literacy. Bleed observes that visual literacy, often treated as "trivial, transitory, or even non-academic", plays a peripheral role in literacy curricula. In order to ensure that higher education keeps up with students' demand in the development of visual literacy as a response to workplace requirements, a visual literacy course should be first developed and implemented, followed by the introduction of a program of visual literacy across the curriculum and a teacher training program.

The Association of College and Research Libraries (ACRL) (2011), on the other hand, has proposed a rich definition of visual literacy for higher education, which elaborates what a visually literate individual is able to do:

Visual literacy is a set of abilities that enables an individual to effectively find, interpret, evaluate, use, and create images and visual media. Visual literacy skills

equip a learner to understand and analyse the contextual, cultural, ethical, aesthetic, intellectual, and technical components involved in the production and use of visual materials. A visually literate individual is both a critical consumer of visual media and a competent contributor to a body of shared knowledge and culture.

Figure 2.2 (Hattwig, Bussert, Medaille, & Burgess, 2013) visually displays the components of visual literacy for higher education. This definition of visual literacy will be used as the framework guiding this thesis's attempt to develop a modified definition of visual literacy for the English language learning context in Cambodian higher education. The adoption of this definition for the study can be attributed to its wide-range coverage of skills and abilities encompassed in visual literacy and its suitability for higher education – the context where the current project is situated.

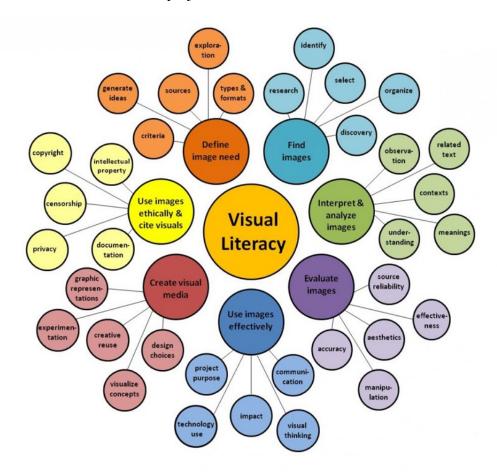


Figure 2.2. Visual literacy array based on ACRL's visual literacy standards (Association of College and Research Libraries, 2011)

Drawing upon the ACRL's definition of visual literacy, Hattwig et al. (2013) review recent research studies on visual literacy, use of visual materials among students, and contemporary learning standards before discussing the seven visual literacy standards proposed by the ACRL and presenting approaches research libraries in higher education could adopt in realising the seven standards. Hattwig et al.'s (2013) article encapsulates some of the most essential reviews of visual literacy research and visual literacy standards in higher education. However, the article's main focus on exploration of pedagogical and research opportunities for libraries to support and teach students to develop visual communication skills leaves much room for further studies and reviews that tap into visual literacy research in the other areas of learning.

Also focusing on visual literacy in higher education, Christodoulou and Damaskinidis's (2014) study on visual literacy instruction and its impact on student teachers in a post-graduate program closely relates to both parts of this thesis and will be reviewed with much detail below.

With the concept of multiliteracies pedagogies as the guiding framework, Christodoulou and Damaskinidis (2014) piloted a course titled "Visual Literacy in Language Teaching and Learning" among a group of postgraduate students specialising in Applied Linguistics at the Aristotle University of Thessaloniki in Greece. The aims of the course were two-fold: To refine and validate the definition of visual literacy and to teach visual literacy to the course participants. The course ran for 12 weeks of three academic hours each. The time constraints and richness of visual literacy as a new field of study for the participants requires a sharp delimitation of focus to just decoding and evaluation of a video. The participants were first assessed in terms of visual literacy skills by participating in a semi-structured questionnaire and focus group discussion after they were shown a documentary-

like video about "Stinger", a shoulder-launched, missile air-defence system. During this stage, the participants were also taught to edit video and audio clips in the Windows Movie Maker program. The participants then were introduced to the systemic functional (SF) approach and multimodal discourse analysis (MDA) model in three lessons which taught the basic principles of visual literacy, and metafunctions identified in the visual analysis following the SF-MDA model. Lack of background knowledge about the SF-MDA approach and unfamiliarity with the technical terms used in an SF-MDA analysis limited the success of the training. The participants, however, demonstrated positive attitudes toward the training and were willing to follow the course until its end. In the third phase of the course, the participants were asked to prepare, as a written assignment, a short literature review from the Greek bibliography of studies which investigate the three metafunctions of SF-MDA in analyses of visual content and to apply the SF-MDA principles in a holistic analysis of "Stinger", the video they had watched earlier. The course reached its eighth week, and the participants were given three weeks to apply the SF-MDA model in analysing a video of their choice. In the final stage of the course, the participants repeated the assessment procedures conducted at the beginning of the course, which revealed an increase in the participants' abilities to elaborate on their video analyses, which at the same time lacked indepth criticality. Christodoulou and Damaskinidis concluded that the restricted nature of the course was not conducive to their original purpose of refining the definition of visual literacy and that the SF-MDA model, albeit providing "an effective tool for teaching visual literacy skills", requires background theoretical knowledge of visual literacy, systemic functional linguistics, and principles of visual-verbal associations (Christodoulou & Damaskinidis, p. 204). Based on these findings, the authors voiced an inclination to modify the course to suit the undergraduate level of study so as to establish the prerequisite knowledge and experience

required to succeed in working with the SF-MDA model in its subsequent implementation in the future curricula.

As with the previous works cited above, given the eclectic nature of visual literacy, the current project also contributes its discussion and research findings to the validation and refining of a visual literacy definition. These reviews have become the cornerstones of subsequent visual literacy research.

Development of visual communication skills when attended to in the classroom could enhance students' development of verbal skills and develop critical awareness of how messages work through the pervasive visual content which inundate their everyday lives. They need to develop systemic means to understand, interpret, and discuss the visuals and their accompanying messages. Against the widely accepted assumption, students born in the digital age are far from being "digital natives" (Brumberger, 2011; Felten, 2008). Visual literacy should be taught not because teachers and educators are equipped with fully mastered skills and abilities in visual literacy, but the teaching, with its practical insights, will inspire a scholastic quest to "propel the field of visual literacy one step forward" (Christodoulou & Damaskinidis, 2014).

2.7 Theoretical framework of the thesis

The following section describes three educational theories which contribute to the theoretical framework of the thesis, as displayed in Figure 2.3: (1) Kress and van Leeuwen's (2006) social semiotic approach for reading visual imagery (still and moving as well as rigid and fluid), which is partially influenced by Halliday's Systemic Functional Linguistics; (2) Multiliteracies pedagogic approach (Kalantzis & Cope, 2008; New London Group, 1996);

and (3) Socio-cultural theory of learning, which is based on the Russian psychologist Lev Vygotsky's social constructivism (Vygotsky, 1978).

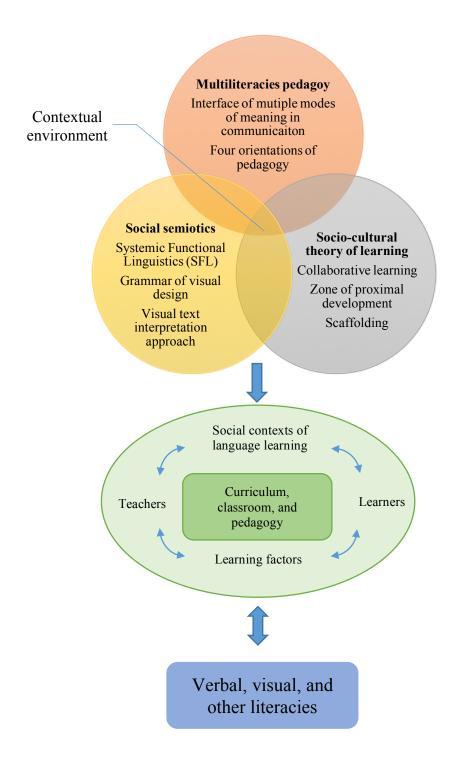


Figure 2.3. Thesis's theoretical framework – the three theoretical underpinnings

The first theoretical underpinning which guides the ways visual texts and media are approached in this PhD project is Kress and van Leeuwen's (2006) visual representation approach situated in the theoretical framework of social semiotics. Commonly known as "grammar of visual design", Kress and van Leewen's social semiotic approach to the visual mode of meaning-making was developed for "contemporary visual design in Western cultures", encompassing "an account of both implicit and explicit knowledge and practices around a visual mode meaning-making" (p. 8). Visual grammar, Kress and van Leewen argue, is not universal but culture-specific. However, visual design in other parts of the world is reportedly largely influenced by that in the West through the widespread consumption and distribution of Western media. The fact that many of the learning materials used at the research site were developed by Western authors makes the application of this social semiotic framework to the analyses suitable and justifiable.

This social semiotic approach to visual design was influenced by the Critical Linguistics at the University of East Anglia in the 1970s and the Hallidayan systemic-functional linguistics in the 1980s (Kress & van Leeuwen, 2006). This body of work contends that linguistic as well as other modes of meaning-making are socio-culturally mediated and are used to achieve three simultaneous functions in communication: Ideational (representational), interpersonal (interactional), and textual (compositional).

The second theoretical underpinning of this thesis is Socio-cultural theory of learning (Vygotsky, 1978), based on the Russian psychologist Lev Vygotsky's social constructivism. Vygotsky's sociocultural theory of human learning describes learning as a social process and believes human intelligence originates in society or culture, and not simply biologically. The major theme of Vygotsky's theoretical framework is that social interaction plays a fundamental role in the development of cognition.

Two main principles underlie socio-cultural theory. First, the social environment and social interactions are central to cognitive development, and learning, therefore, is a social process, occurring on two levels, first, through the interaction with others and then through internalisation of newly learned knowledge into one's mental structures. The second principle is related to the Zone of Proximal Development, which Vygotsky (1978) defines as "the distance between actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).

Vygotsky's theory fits in visual literacy research such as the current study in the following ways. Use of visual imagery and technologies, and the visual practices learners are engaged with inadvertently lead to different competences and levels of visual literacy. The teacher and more experienced/competent peers will act as the More Knowledgeable Ones as adults (Wertsch, 1985) and even peers, creating zones of proximal development and offering "scaffolding" (Bruner, 1978; Wood, Bruner, & Ross, 1976), collaborative learning, modelling, and joint construction to help learners bridge their current ability to the next level of which they are cognitively capable but require guidance and support from more experienced/competent people like teachers and peers.

The third theoretical underpinning in this thesis is the pedagogy of multiliteracies (Cope & Kalantzis, 2009, 2015; Kalantzis & Cope, 2008; Kalantzis et al., 2016; New London Group, 1996). Multiliteracies was the term coined to encapsulate the outcomes of a meeting among ten leading educator-researchers in literacy pedagogy from Australia, the USA, and the UK. The meeting culminated in a state of the art paper (New London Group, 1996) discussing the future of literacy teaching in response to the constantly growing cultural and linguistic diversity in our personal life, work spaces, communities, fuelled by the

globalisation of citizenship, labour markets, economy, and new information and communications technologies giving rise to the increasing production, distribution, and consumption of meaning-making resources other than the linguistic ones, i.e., spatial, visual, audio, and gestural.

The transformative pedagogy of multiliteracies teaches literacies, rather than a singular literacy, taking into consideration the fact that communication messages are beyond written-linguistic and are multimodal as a result of an intricate interaction between linguistic, visual, audio, spatial, and gestural meaning-making resources. Kalantzis and Cope (2008) and Cope and Kalantzis (2009) originally talk of four angles or four non-sequential orientations within this pedagogical framework, which appears to complement the existing education theories and approaches. The first angle is situated practice, which is simulated and based on learners' real life communication needs and supported with necessary scaffolded assistance. The second angle is overt instruction (explicit teaching of metalanguage, enabling learners to both describe and analyse the structural components of varied meaning-making resources). The third angle is critical framing, requiring learners and teachers to step back and consider the social and cultural contexts of communication. The last angle is transformed practice, which results in learners' ability to apply the learned concepts/contents into new contexts or other modes of meaning. The four angles/orientations were later reframed to be experiencing, conceptualizing, analysing and applying (Kalantzis & Cope, 2005) through a weaving process which sees learning progress back and forth across these stages.

The convergence among the three theoretical underpinnings is the principle to account for social factors and processes and their interaction with language learning.

Another commonality is the assumption that knowledge is socio-culturally situated and is

co-constructed out of social members' interaction. These features are fundamental to the design of this thesis which is set out in the next section.

2.8 Conceptual framework of the thesis

In light of the above literature review, the identified gaps and issues, and the theoretical framework explained in the previous section, a conceptual framework, as seen in Figure 2.4, has been developed as a blueprint to guide the implementation of the project plan for the thesis.

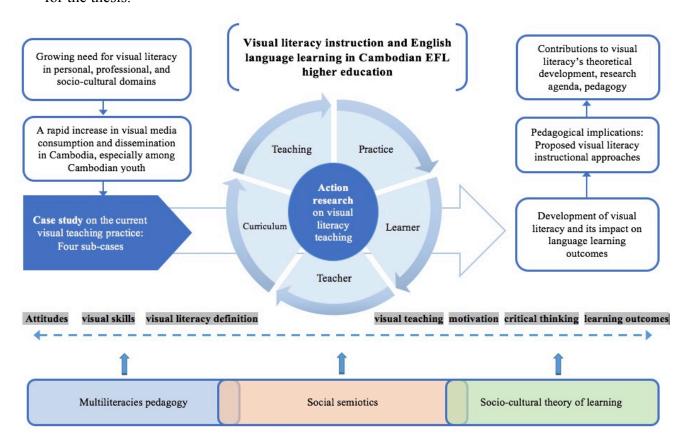


Figure 2.4. Thesis's conceptual framework, encapsulating both parts of the thesis

2.9 Research questions for Part One

This section presents the research questions to guide the case study in Part One. The questions were formulated in accordance with the overarching purpose of the thesis, the

issues and gaps identified in the literature review in this chapter, and the three theoretical underpinnings. Research questions for Part Two are set out in Chapter 5.

- 1. What is the current visual teaching practice at the DoE?
 - 1.1 What visual learning materials are used? How are they taught?
 - 1.2 What are the lecturer and student participants' attitudes toward the current visual teaching practice?
- 2. What visual communication skills do the participants claim to have developed?
 - 2.1 What interpretive and creative skills do the lecturer participants possess?
 - 2.2 What interpretive and creative skills do the student participants possess?
- 3. What visual communication skills are considered necessary and should be taught to the student participants?
 - 3.1 What visual text interpretive and creative skills need to be taught to the student participants?
 - 3.2 What additional training in visual literacy do the participants need?
- 4. What components does a definition of visual literacy for English language learning in Cambodian higher education entail?
- 5. To what extent should visual content be given more importance to in the current curriculum? What ways can be used to effectively promote visual literacy among Cambodian university students?

2.10 Conclusion

New technologies are designed with linguistic, visual, and symbolic codes that need to be decoded by users. The new technologies also make the transition smoother from our role as receivers, sometimes passive ones, to active users of the multimodal communication. The literature review in this chapter has indicated that, with this fluidity of communication jumping from one mode to another, the three Rs no longer suffice on their own. Visual

literacy complements verbal literacy, and the synergy between the two will enable social members to participate in social activities more fully and learners to take more effective advantage of the visual-multimodal resources densely populating their learning spaces.

This chapter has reviewed the key literature pertaining to definitional controversies of visual literacy as a discipline and justified that research in this topic is even more essential than it was 25 years ago. The review also points to an under-representation of visual literacy research in the context of English language learning. The review further explicates the significance of this thesis. Deriving from the literature review, the chapter has also explained the three theoretical underpinnings which together form the theoretical framework of the thesis. It also presents the thesis's conceptual framework and research questions for Part One of the thesis. The next chapter discusses the methodology used to collect and analyse data for the case study in Part One.

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CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter describes the methodology used in this study to address the research questions in two sequential components which I refer to as Part One and Part Two. It sets out the epistemological and ontological foundations of the thesis, discusses the research paradigm and design adopted, and then justifies its methodology in alignment with the nature and context of the thesis. The chapter also explains the research context, sampling, data collection, and data analysis. It concludes by summarizing the thesis's research methodology and links it to the Results chapter for Part One of the thesis, which follows this chapter.

3.2 Research paradigm and design

The research in this thesis follows the interpretive paradigm (K. Richards, 2003) in which complex human activity is investigated through multiple methods to enable an informed and well-reasoned interpretation of the research findings (Dörnyei, 2007; Stake, 2010; Yin, 2011). The issue under focus is visual literacy instruction in an EFL undergraduate program at a higher education institute in Cambodia – a research topic which has not been explored in an empirical study on this scale before, and is of high complexity because of the sophisticated nature of the topic and the number of sub-issues to be investigated. To untangle the issue most logically entails an extended collection of opinions, attitudes, and beliefs, and first-hand data through multiple methods triangulated among various groups of direct practitioners, i.e., students and lecturers, themselves as they practice visual literacy in their natural learning environments.

In the interpretivist epistemology, reality and meaning making are socially

constructed, and people make sense of reality based on their social interaction with other social members and entities (Tuli, 2010). Meanings derived from the participants' experience, and the interpretation of these meanings is mediated by the researcher's background, perception, and experience (Merriam, 1998).

Both visual teaching and Cambodian EFL at the tertiary level are under-researched; not enough is understood about these two phenomena in language education research. Adopting an interpretive paradigm enables the researcher to investigate the two phenomena from the social and educational perspectives of the participants based on the researcher's professional experience as a lecturer in the target research context for over ten years.

The research design is social constructivist (Creswell, 2013, 2014; Vygotsky, 1978), emphasizing the participants' collaborative interaction as the core source of learning and development of linguistic as well as other multimodal competences. This thesis contends that knowledge is co-constructed among social members and constrained within the frameworks of language and culture they are socialised in. Language learning is a social phenomenon situated in a social context, and the visual cues learners are exposed to both in their learning and actual communication outside of educational spheres embody hidden, subliminal messages which they need to be aware and critical of. Helping learners develop a level of visual literacy appropriate for their needs will contribute significantly to the success they can achieve in their learning, personal life, and future professional endeavours.

The thesis design seeks to thoroughly explore, discover, and understand the ways in which visual literacy learning is constructed and practiced among the participants in the target research setting. To yield elaborate, in-depth findings and recommendations on the visual literacy issues investigated, the thesis was designed to encompass two sequential components, as illustrated in Figure 3.1.

Adopting the ontological stance that there are multiple realities which could be

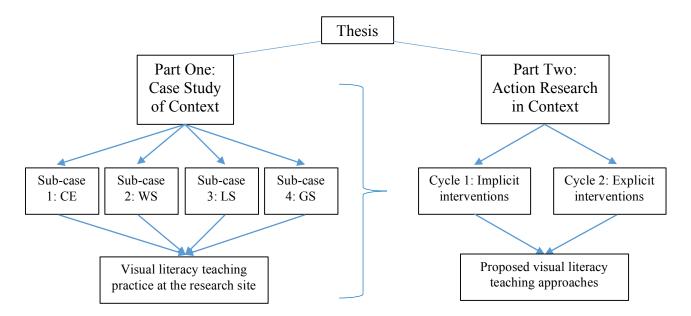


Figure 3.1. The thesis and its two parts: Part One's case study with four sub-cases³ and Part Two's action research with two cycles of teaching interventions

Investigated through different "forms of evidence" reflected in different individuals' perspectives and experiences (Creswell, 2013), Part One encompasses an overarching qualitative case study with four embedded sub-cases (Yin, 2009, 2012) and multiple methods to collate data from multiple sources, aiming to provide a rich, in-depth description and interpretation of the target context pertinent to the issue of visual teaching in Cambodian ELT.

The case study approach fits well with Part One's research objectives and its methodological plurality, and enables the researcher and participants to generate a rich plethora of data to inform a better understanding of the reality of visual literacy pedagogy present or absent in the target study context. Part Two was informed by the findings in Part One, which served as the point of departure for an action research project – also qualitative in nature – to investigate the potential impact of two visual literacy teaching approaches on students' English language learning outcomes in a Year 2 Core English class over a period of three months.

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³ Each sub-case represents one of the core units (subjects) of study at the DoE: CE for Core English, WS for Writing Skills, LS for Literature Studies, and GS for Global Studies

No single research methodology, however, is completely infallible, nor does it fit perfectly to a research context (Creswell, 2014; Schulze, 2003). Human experience is too intricate to be encapsulated in its full complexity by a single approach (Tuli, 2010). Thus, a quantitative method (i.e., survey) was also used in this study to complement the various qualitative methods used (i.e., interviews, classroom observations, and document analysis).

3.3 The research context of the thesis

Within the constructivist paradigm, meanings and interpretation of meanings are derived from individuals' interaction with contextual situations in the world they are born and live in (Creswell, 2014, p. 8; Crotty, 1998). Selecting a study setting with appropriate parameters of space and time (Creswell, 2013) potentially has a significant impact on the study's procedures and outcomes.

The case to be investigated is a bachelor's program offered in the Department of English (DoE) at the Royal University of Phnom Penh (RUPP) in Cambodia. The program was selected for its significant roles as the oldest program for English teacher training and, more generally, the development of English proficiency for workforces across professions and workplaces in Cambodia (S. Clayton, 2008; T. Clayton, 2006). The department, currently with over 2000 full-time students enrolled each year, is one of the largest and most recognized in the country. Four degree programs are currently run by the department: Bachelor of Education (TEFL), Bachelor of Arts (English for Work skills), Bachelor of Arts in English, and Master in TESOL. To enter the undergraduate programs, students must take a selection exam administered by the department, which results in a relatively high rate of application rejection with only one out of four applicants being admitted to study in the department every year. Students begin their first-year study in the programs with an English proficiency ranging from Pre-Intermediate to Higher Intermediate level and, subsequently,

are trained intensively in the first three years of the four-year study program in general and academic skills mainly through four subjects: Core English (CE), Writing Skills (WS), Literature Studies (LS), and Global Studies (GS). In the fourth year of study, students select their area of specialization and train intensively in it. The most commonly selected specialisation is Teaching English as a Foreign Language (TEFL).

With the aim to investigate visual literacy teaching practices in the target higher education setting, the research generated learning- and teaching-driven data in all four courses taught in the Year 2 of the program: CE, WS, LS, and GS. CE (Core English) focuses on the development of students' fundamental English lexico-grammatical skills and discourse competence mainly in Speaking, Listening, and Reading. WS (Writing Skills) aims to build students' academic writing abilities, ranging from sentence skills to paragraph writing to such extended discourse as an argumentative essay and a small-scale survey report. LS (Literature Studies) teaches students creative language use and critical thinking through such classics as Romeo and Juliet and Animal Farm as well as more contemporary novels, such as Cry Freedom and Village by the Sea. A more content-based subject, GS (Global Studies), on the other hand, brings into lessons discussion on such key world issues as education, environment, human rights, and economics, aiming to develop students' general knowledge and critical thinking as well as cross-cultural awareness and other soft skills such as emotional intelligence quotient and communication skills. Based on the 2013-2014 syllabuses, two 90-minute sessions per week were run for WS, S, and GS, whereas CE was taught in four 90-minute sessions.

Data collection for the thesis was carried out in two stages. Part One data were collected in the first half of 2014, while Part Two data were collected in late 2015 and early 2016. In the sections that follow, details are provided of the data collection for each of these two parts of the thesis.

3.4 Part One: Case Study

3.4.1 Part One data collection

As displayed in Figure 3.2, the data were collected from late January to July 2014, spanning the 2nd semester of the 2013-2014 academic year at the DoE plus one month before that period. The semester ran for 21 weeks, beginning on 24 February and ended on 19 July 2014. The seventh and eighth weeks were a mid-semester break, and the penultimate week was a study break for students to prepare for the exams to be administered in the final week. In total, there were eighteen weeks of class meetings, which also included public holidays.

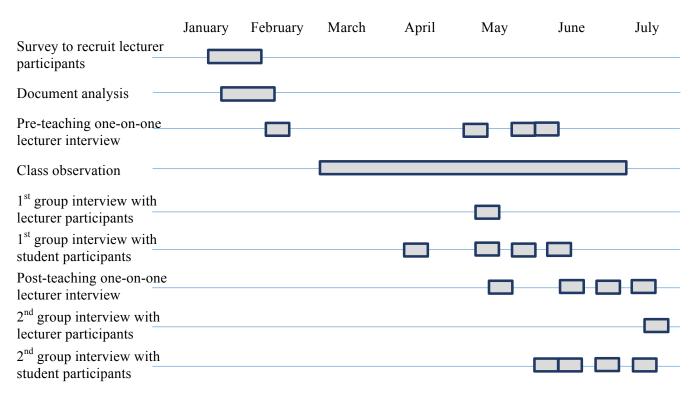


Figure 3.2. The timeline showing the data collection trajectory for Part One

Following ethical guidelines, the gatekeepers (Creswell, 2013; Marshall & Rossman, 2010) (in this case, Head of the English Department and coordinators of the four subjects to be investigated) were contacted early on by email, and comprehensive information about the project was disclosed to them in order to obtain access to the study site and consent from these gatekeepers respectively. The researcher's role as a faculty member at the target department and his existing rapport with many of the target lecturer participants together

with the project's goal to contribute to the long-term development of the department's academic programs helped generate a positive response to the researcher's request for permission to access the field site.

The researcher, upon receiving an ethics approval (Appendix 3.1) from Macquarie University's Human Research Ethics Committee, began approaching the gatekeepers in December 2013. This allowed the researcher to gather ample knowledge of the study context and establish rapport with the target participants, both of which are indispensable to the success of a qualitative case study like such as the current project.

3.4.2 Part One participants

Selected through the maximum variation sampling technique (Patton, 2001), one lecturer and a class taught by the lecturer were selected to represent each of the four subjects. The key participants, therefore, comprised two groups: (1) Lecturers who met the study requirements and voluntarily agreed to participate in the study; (2) students in the classes taught by the lecturer participants.

To recruit the lecturer participants, 25 of the 33 lecturers teaching the four subjects in the second year level at the target department were invited to complete a paper-based survey questionnaire. The other eight lecturers were either not available or not interested in the project. With assistance from one of the researcher's colleagues, physical copies of the questionnaire were distributed by means of group administration (Fowler, 2009) to the lecturers who responded positively to the invitation (See Appendix 3.3). Physical copies of the questionnaire, instead of online forms, were used because not every lecturer would know how to handle online forms with efficiency, and maximum participation was highly desirable.

Year 2 lecturers and students were selected as the study participants for two main reasons, the first of which was the curriculum arrangement. Starting in 2005 (R. Sam et al.,

2013), higher education curricula in Cambodia, as required by the Accreditation Committee of Cambodia (ACC) and Ministry of Education, Youth, and Sport (MoEYS), must include one full year of foundation studies in four disciplines – Arts and Humanities, Mathematics, Natural and Computer Science, and Social Science. Constrained by this guideline, Year 1 students at the English Department were required to take several Foundation Year courses in Khmer language despite the fact that they were enrolled in an English language degree program. English language lessons, as a result, were significantly reduced to accommodate the compulsory Khmer subjects, and any focus on visual components in English language learning was correspondingly limited and would not be substantial enough for the aims of the current study. Year 3 in the study program by contrast is rather densely laden with verbally-oriented lessons as students are intensively trained in more technical English language in preparation for the specialization of their choice in Year 4. The Year 4 program itself had fewer in-class sessions in order for students to accumulate an extended period of out-of-class work experience through projects, teaching practice or internship, depending on the program in which they specialize. Thus, Year 2, without these drawbacks, was the most appropriate year for this research project to focus on.

The second reason for targeting the Year 2 group was the syllabus content of the subjects of study in the Year 2 curriculum. For example, "Graph interpretation", out of an aim to develop skills and abilities for students to write a formal paragraph interpreting different forms of graphs, was taught as one of the key components of the Writing Skills syllabus. Furthermore, learning materials for Literature Studies, Global Studies, and Core English were also observed to carry a high degree of visual imagery.

The survey recruited six lecturer participants who expressed a keen interest in the project and visual literacy in general. Four of the six lecturers also granted permission for the researcher to observe a number of their lessons and agreed to take part in the one-on-one

interviews with the researcher and a group interview with the other lecturer participants. Each of the four lecturers represented one of the four subjects and, therefore, one of the four cases. The other two lecturers only participated in the group interview. As for the student participants, each group of students taught by each of the four lecturers was observed while they were learning in a series of sessions, and six students in each group were recruited for group interview.

3.5 Part Two: Action research

Having established the current context of visual literacy teaching and learning at the Department of English in Part One of the thesis, Part Two probes this context more dynamically through action research.

3.5.1 Epistemological foundations of action research

The roots and origins of action research can generally be traced back to the work of one of the founding fathers of social psychology Kurt Lewin who coined the term in 1944 to denote a form of research which advances theory and brings social changes (Kemmis & McTaggart, 1982). Adelman (1993), having based on Marrow (1969), contended that Lewin's s idea of action research "was set out in about 1934" (p. 8). In his now classic works, Lewin (1947, 1948) integrated action-taking into experimental social science research and presented action research as a three-step spiral process of (1) planning, (2) taking actions, and (3) fact-finding about the results of the action to solve problems and improve situations contextualised within organizations and communities (Calhoun, 1994; Coghlan & Brannick, 2005).

Action research was brought into the field of education by Lewin himself through his works with teachers and teacher trainers (Kemmis & McTaggart, 1982). Elsewhere, action research was incorporated into education projects involving curriculum development,

teaching practice and supervision in the Institute of Teachers' College at the Columbia University in the United States of America, as collaborative research with teachers, schools, and school districts (Kemmis & McTaggart, 1982). Stephen M. Corey in the early 1950s played a central role in linking action research to a classroom, having established that (1) action research was for teachers and those interested in collaborating with the teachers, and (2) action research can be used for improvement of school and curriculum (Calhoun, 1994; Kemmis & McTaggart, 1982). Shumsky (1956, pp. 183-184) comments that, "a cornerstone of the action research movement is its criticism of traditional research for trying to initiate change through the dissemination of research results, rather than through the people in the process of research."

Several models of action research have been put out throughout the years. Kemmis and McTaggart's (1998) model, arguably the best known model of action research (Burns, 2010), was based on Lewin's conception of action research, while Calhoun's (1994) action research cycle includes selecting an area or problem of collective interest, collecting data, organising data, analysing and interpreting data, and taking action. Gordon Wells (1994) provide an idealised model of AR, including observing, interpreting, planning change, acting, and "the practitioner's personal theory" (p. 27), which informs and is informed by the action research cycle. A synthesis of action research models proposed by major action research scholars, from Kurt Lewin himself, to Kemmis and McTaggart (1988), and to Calhoun (1994) can be found in Mertler (2009) and Craig (2009) who both provide a discussion as well as visual representations of prominent action research models.

All the models appear to share core elements or phases which consist of a reconnaissance to identify a research focus, then planning and implementing, observing or monitoring practice, synthesising data collected, and some form of action that spirals the researcher back into a repeated process. As Burns (2010) rightly explains, "the first cycle

may become a continuing, or *iterative*, spiral of cycles which recur until the action researcher has achieved a satisfactory outcome and feels it is time to stop" (p. 7).

In the context of English language teaching, applied linguists such as Burns (1999, 2010, 2013) and Edge (2001) have been the prominent proponents of action research as an approach to improvement of language teaching practices and professional development. In second language education, action research has generally been employed to investigate classroom-based learning issues, rather than "addressing the social problems associating with language teaching" (T. S. C. Farrell, 2007).

The action research tradition fits well with this thesis's interpretive paradigm (K. Richards, 2003) in which a complex human activity like visual literacy instruction is investigated through a triangulation of multiple methods. The project's social constructivist paradigm (Creswell, 2013, 2014) seeks a thorough understanding of the way visual literacy is practiced in the target educational setting through the participants' varied views and experiences as they are exposed to visual literacy. The action research methodology also matches the purpose of the study, and its design is compatible with the study's methodological plurality. It suggests that a rich plethora of data could be garnered from different angles to help distil the reality of visual literacy pedagogy in the target study context. Action research can have "specific and immediate outcomes which can be directly related to practice in the teacher's own context" and is "an extension of the normal reflective practice of many teachers, but it is slightly more rigorous and might conceivably lead to more effective outcomes" (Wallace, 1991, pp. 56-57). In action research, the teacher is a reflective practitioner who drives the search for improvement to current practices. In so doing, the teacher becomes a researcher and a participant in cyclical processes of planning, acting, observing, and reflecting on the teaching issues or problems in focus (Burns, 2010, 2013).

3.5.2 Background of Part Two

In August 2015, a colleague of the researcher at the DoE, who had learned of the case study in Part One, approached the researcher, expressing an interest in collaborating on a research study to investigate his teaching practices in order that new teaching ideas and methods could be developed to help improve his students' English language learning. This encounter coincided with the researcher's plan to conduct an action research study to assess the impacts of a series of visual lessons which have been developed based on the findings from Part One of the study and specifically tailored for the English learning context at the department. Having been briefed about the lessons, the lecturer decided that the lessons would fit his teaching scenario and potentially bear a positive impact on his teaching productivity and effectiveness. Following this initial interaction, the researcher and the lecturer proceeded to devise a collaborative plan to implement those lessons in one of his classes and agreed to exchange emails regularly over the plan for the next three months. The action research plan would fit almost seamlessly with the lecturer's considerable teaching workload and very tight weekly schedule. Over the course of the study, we would continually seek and provide insights and observations in mini-reflective and discussion meetings in between the teaching sessions. No formal research setting for these discussions was needed as the sessions were casually arranged, and were often spontaneous in a café, study areas on campus, library, photocopy room, and online. Indeed, these key research activities would not have been possible had another less flexible research design been adopted.

The lecturer proposed that we conduct the action research with a class of Year 2 Core English (CE) students taught by the lecturer himself. As explained earlier, CE is one among the four core subjects taught in Year 2 of the BEd program, and which was investigated in Part One. The subject features learning materials and activities with a high visual density,

and the four-session-per-week meeting frequency makes CE a suitable subject to investigate with regard to visual literacy instruction in this action research project.

3.5.3 Part Two data collection

In this section, I provide a detailed account of the various activities undertaken chronologically in order to provide a clearer understanding of what this action research project entailed.

The researcher, upon receiving ethics approval from Macquarie University's Human Research Ethics Committee, began approaching the gatekeepers (Creswell, 2013; Marshall & Rossman, 2010) in early December 2015 (in this case, Head of the English Department, and the lecturer as well as the CE coordinator) (See Appendix 3.2). This initial contact built the study momentum and allowed the researcher to gather ample knowledge of the study context and provide in-depth delineation of the study objectives, study plan, its potential impact on the study setting. As displayed in Figure 3.3, the data were collected over a period of 12 weeks, from the 21 December 2015 to 11 March 2016.

In the first week, the researcher visited the field site and had the first one-on-one meeting with the lecturer to arrange for a one-week observation of the classroom settings, and to discuss the nature of the lessons, learning resources, learners' apparent behavioural and psychological learning traits, the lecturer's and learners' apparent underlying beliefs and values, usual learning activities, and teaching aspects which could be improved. It was also during this week that the student participants were recruited.

After the benchmark-setting observation week, a reflective meeting was organised to discuss the lessons observed, the visual and textual resources used and the rationales behind them, the visual and textual learning resources the CE lecturer had access to, the kind of visuals in the coursebook he would emphasise or skip, the proposed study timeframe, and the roles played by both of us – the lecturer played the dual role as a lecturer participant and

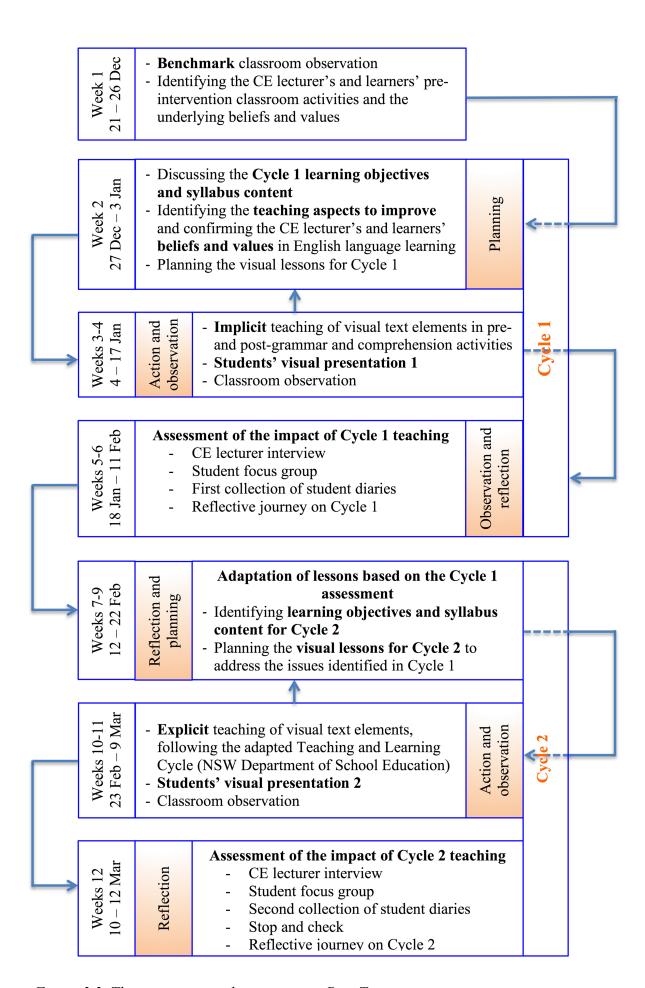


Figure 3.3. The action research trajectory in Part Two

a research collaborator but will be identified simply as the lecturer in this report. For my part, I was a researcher and a non-participant observer of all classroom activities. The meeting finished with a task for both the researcher and lecturer to co-develop the interventional lessons for Cycle One of a proposed two-cycle action research project. It was Week 14 of the 19-week semester, and Cycle One of the interventions would be implemented in weeks 16 and 17. The class was running behind the pre-designed course syllabus, which was also followed by the other lecturers teaching the same subject and would later on be used as a basis to design the semester exam; there were two make-up classes the lecturer had yet to offer to replace those falling on national holidays earlier; the students' individual presentations were running for another two sessions; and the second progress test was yet to be administered. The researcher and the lecturer were thus in a situation that would require much fast-paced planning and action. Following the reflective meeting, four days later, the researcher and the CE lecturer met again in a one-on-one interview to discuss the issues the CE lecturer believed were of immediate concern and should be addressed and improved through the study, which turned out to be the lecturer's beliefs and values, the learning objectives and syllabus content for Cycle One, recruitment of the student participants, preparing for the implementation of the study, the challenges the lecturer might face and the support he might need in implementing the interventions. Two days later, proposed lesson plans, activities, and materials to be used in Cycle One were put together and discussed in another pre-intervention meeting in preparation for the lessons of the next two weeks, the first pair of which would be delivered two days later. Beyond the meetings and interviews, the discussion of the lessons and their technical aspects were further discussed continually through text messages, Facebook messenger chats, and phone calls. Weeks 3 and 4 saw the implementation of the action research project through a series of eight 90-minute lessons, covering the second half of Unit 5 and the first half of Unit 6 in

the New Headway Upper-Intermediate Student's Book (4th edition) by Liz and John Soars.

Audio-recording was employed to obtain a more accurate record of the class interactions and to assist the researcher and lecturer with transcription and analysis of the lessons later on. Three audio recorders were used, one for the lecturer, and two others for the students during their pair or group discussions. Five students were also recruited to keep a diary of the lessons and their learning. The interventions in Cycle One focused on the *implicit* teaching of visual lessons to help students understand, practice and use the target language points in the visually-oriented activities presented in the coursebook and developed by the researcher/lecturer. Graphic organisers such as tables, tree diagrams, and Venn diagrams, were used to explain and summarise grammar lessons, and students were taught to interpret visual materials through a number of question prompts, with the purpose of implicitly helping them develop a habit of questioning the events being shown in the visuals, background details, and elements in the imagery which provide clues for their visual interpretation.

In Cycle One, students' visual presentations were also introduced, aiming to promote learner autonomy and help students expand their knowledge about the lesson contents and personalize them as the students hear and talk more about them. To implement the visual presentations, the lecturer modelled a visual presentation to the students, and eight student volunteers were then recruited and further briefed about the objectives and procedures for the presentation. Each presenter would need to search online for additional information, both visual and textual, about the content areas in focus, prepare a 10-minute talk, and deliver the presentation by using mainly brief notes and visual resources, which included still images and video clips. Four students presented in the fourth session, while the rest did so on a different topic in the eighth session of Cycle One. The researcher was a non-participant observer, sitting at the back of the classroom well behind the students and made every effort

to not interfere with the flow of the lessons and students' learning activities. After the first four lessons were completed, the researcher and lecturer had another face-to-face meeting to discuss our reflections and observations, and to jointly prepare the last four lessons of Cycle One. Moreover, just as in the pre-intervention weeks, the researcher and lecturer constantly discussed the lessons, learning, and learners through various modes of communication.

Figure 3.4 illustrates one of the materials used in implicit visual literacy instruction in Cycle One. The pictures were sent electronically to the students before the class discussion, but the questions were asked during the class. The visual communication skills

Air Asia Chinese Tourists (Pair work)



http://www.centertechnews.com/2014/12/photos-chinese-woman-thrown-hot-water-noodles-at-face-of-flight-attendant-thai-airasia.html

Questions to answer:

- What happened?
- What is happening?
- What do you think will/is going to happen?
- What clues in the pictures make you think so?

Figure 3.4. A handout used to help students learn to interpret pictures implicitly

taught in this particular lesson were framing, backgrounding/foregrounding, focus, colour, and placement, and the students were guided to analyse these visual components of the pictures without mentioning or discussing the terms explicitly. This visual interpretation activity had a thematic connection with a listening comprehension activity in the lesson – "in-flight announcements". The students worked in pairs to answer the questions and later joined the class discussion led by the lecturer participant. The visual interpretation activity in the next lesson saw students working on their own to decode visual messages implicitly.

After the completion of Cycle One, in Weeks 5 and 6 of the study, its impact on the student participants' learning was assessed through a triangulation of procedures which included one-on-one semi-structured lecturer interview, student focus group, and collection of the student diaries. The lecturer interview and student diaries review were completed first, while the student focus group was conducted at the end of Week 6, right after the students had finished their semester exams. By that time, the students were free from the course assessments and would have better concentration on the group discussion and, therefore, could consider better the impact of Cycle One interventions on their learning.

Semester One ended after Week 6 was completed and was followed by a three-week semester break. The CE lecturer had an overwhelming number of assignments to mark and at the same time planned for Cycle Two interventions, while the researcher was aggregating the data, and transcribed the rest of the classroom observations, and also planned for Cycle Two. We had our first meeting to discuss Cycle Two on 12 February. For the next thirteen days, the researcher and CE lecturer would meet on multiple occasions to further reflect on Cycle One and prepare for Cycle Two interventions. Based on the data feedback from Cycle One, the visual approach was modified and materials were prepared for Cycle Two.

The Cycle Two interventions were implemented in Weeks 10 and 11 of the study (See Figure 3.3), one week after the students returned to classes for the second semester of

the 2015-2016 academic year. The interventions involved an *explicit* teaching and practice of visual text tools and techniques and the adapted students' visual presentation, and followed the adapted Teaching and Learning Cycle approach proposed by da Silva Joyce (2014). Audio-recording, student diaries, and the researcher's non-participant classroom observations were carried out in the same manner as those in Cycle One. For the students' visual presentations, a slight variation was introduced as only two student volunteers were recruited as presenters. The researcher and CE lecturer continued to communicate about the lessons and had a mid-cycle meeting to reflect on and discuss the interventions in further preparation for the subsequent lessons. A stop-and-check was administered in the eighth session of Cycle Two to monitor the students' progress in using the target language points.

Figure 3.5 displays a handout used by the lecturer participant, following his explicit teaching of visual analysis skills (See Appendix 7.4), to provide opportunities students to review the terms and concepts in visual literacy they had learned the previous lesson and to practice using those skills in interpreting a picture, "unpacking" communicative messages at both the denotative and connotative levels. The students, working alone first, were required to use the target the target language point "Modal verbs" in writing at least six sentences about the picture. Following the writing, the students were paired up to discuss their sentences and justify their interpretation and application of those visual communication skills.

Immediately after the completion of Cycle Two, a sentence writing quiz, a student survey, a student focus group discussion, and a lecturer interview were conducted, and the students' diaries were collected by the end of the Week 12 of the study.

3.5.4 Part Two participants

The key participants in Part Two comprised the lecturer participant himself and the students in one of the classes taught by the lecturer participant. The lecturer participant was

Practice Handout

Interpreting a visual text: Study the photo below carefully, and then write six sentences for at least five of the following visual features. Each sentence must contain a modal verb, e.g., must, should, could, might, etc. (Note: The visual features will not be given in the stop-and-check)

Visual features:

Overall analysis

- Who is the intended audience of the photo?
- What is the photo intended to do?

How the image represents reality

- What events are being shown?
- What participants are involved?

How the image interacts with the viewer

- Gaze, angle, and shot distance

How the elements in the image are integrated

Salience, placement, and framing



Figure 3.5. A handout used to help students learn to interpret pictures explicitly

male, 25 years of age and had been teaching English for three years at a number of local EFL schools before he was awarded a Master's Degree in TESOL and joined the faculty at the Department of English, Royal University of Phnom Penh, in 2013, and became the researcher's colleague. Earlier, he had been teaching general English at different levels,

including those at the Australian Centre of Education in Phnom Penh. One of the key characteristics of action research is the active contribution from the practitioners themselves, who in this case were the lecturer and his students. The lecturer took on active roles as both a research collaborator and participant, involved in the study right from the outset, with planning, and the design and implementation of the interventions.

To recruit student participants, the researcher was introduced by the lecturer participant to a group of students taught by the lecturer himself. The researcher, then, briefed the students about the study objectives, study procedures and the types of data to be collected from them. The class monitor was then asked to distribute the Expression of Interest (EOI) flyers (See Appendix 3.5) to the students as the researcher and lecturer participant left the room. The students were given ample time and complete freedom to decide whether to participate in the study without any pressure. All the participants signed the EOI flyers, expressing an interest in participating in various data collection procedures. Ten students signed up for the focus group, nine for the student diary, and all 28 students consented to the classroom observations (See Appendix 3.6). The signed EOI flyers were collected by the class monitor, who then sealed the flyers in an envelope which he returned to the researcher. Six students were randomly selected and recruited for the focus group, while five others were selected for the student diary task.

The student participants were aged between 19-22, and had been learning English for at least five years, having achieved at least an intermediate level of English proficiency, as indicated by the year level and English course they were taking at the time of the study. Many of the participants were also doing another degree at another university, resulting in a scenario in which the participants would major in both English and another discipline. The popular subjects in such scenarios are Accounting, Banking and Finance, Computer Science, Medical Science, and Law.

3.6 Instruments for data collection

Document analysis, one-on-one interview, group interview, and non-participant classroom observation were used to collect data for Part One, while document analysis, one-on-one interview, non-participant classroom observation, focus group, and student diary were used to collect data for Part Two (See Figures 3.6 and 3.7). Voice-recording was used to optimize the utility of the key data generated out of group interview, interview, and observation. It also ensured that an accurate record was captured of exactly what was considered. Video recording was avoided as the method could have been too obtrusive and likely caused an undesirable disruptive impact on the lesson delivery processes, learning outcomes, and students' perceptions toward the study. Methodological triangulation in the current study could be justified by the researcher's intention to establish a confluence and corroboration of data generated from multiple sources, thereby increasing "credibility" (Eisner, 1991, p. 110) or robustness (Yin, 2012, p. 13) of the study's findings and reducing potential bias (Patton, 2001; Flick, 2007) arising from the use of a single data collection protocol. Creswell (2013, p. 98) goes further to contend that it does not suffice for a case study to rely on a single source of data should in-depth understanding of the case be sought.

In the sub-sections that follow, I will describe in more detail each of the data collection instruments used in this project, and their contribution to enhancing the overall quality of the research.

3.6.1 Document analysis

Document analysis served to function as a point of departure for the current study's data collection in Part One. Bowen (2009, pp. 29-30) identifies five key facilitative roles of document analysis as a qualitative data collection method, including research contextualization, complementing other research methods, providing supplementary data, tracking change over a course of time, and verifying evidence from other sources.

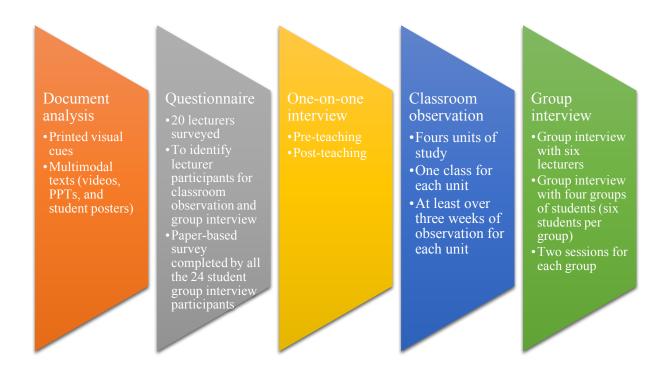


Figure 3.6. The data collection instruments used in Part One

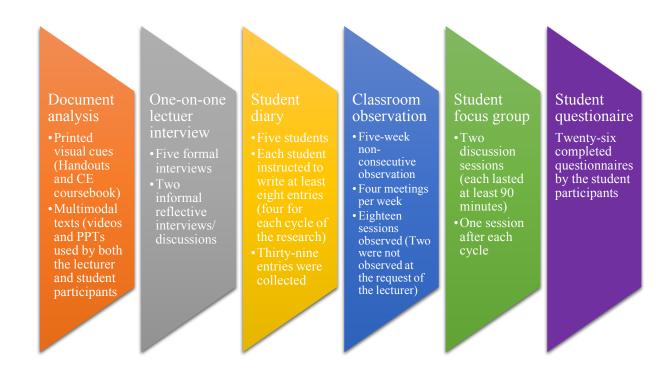


Figure 3.7. The data collection instruments used in Part Two

Coursebooks and extra learning materials, including handouts, worksheets, student posters, student and lecturer PowerPoint files, and videos used by the lecturers, all used in the target teaching contexts for the pre-determined duration were collated for a document analysis to identify the nature and extent of visual resources to which the student participants were exposed in the classroom context. The analysis of these resources informed the questions to be raised in subsequent data collection protocols, namely interviews and group interview. As supporting materials could be shared among lecturing staff and only visual components of the materials were scrutinized for the analysis, the amount of work needed for the analysis was significantly reduced and more effort could be focused on other data collection procedures.

3.6.2 Interview

3.6.2.1 One-on-one interviews

As a follow-up procedure from the document analysis, interviews with four of the six participating lecturers, each representing one of the four subjects of study, were administered in Part One. The main purpose of the interviews was to further accustom the researcher to the study setting and cross-examine what had been found in the document analysis and to prepare the researcher for the group interviews and observation protocols. For the purpose of analysis, permission to audio-record the interview was sought from the interviewees prior to the interview.

Described as the heart of social research (Esterberg, 2002), the interview as a qualitative data collection method enabled the researcher to investigate in sophisticated detail the issues forming the background of the study, which informed the development of observation and group interview protocols. Rubin and Rubin (2005) 's responsive interview model was adopted as the model matches the guiding philosophy of the study and provides

a data collection system which embeds the right level of flexibility and rigidity. This semistructured interview model allowed the researcher to modify the interview without getting lost in the process to accommodate unexpected, emerging themes as the actual interview was undertaken.

3.6.2.1.1 Pre-teaching one-on-one lecturer interview

The one-off interview before the classroom observation of a lecturer participant in Part One was administered with the aim being to collect information about the target learning objectives, the approach they would use to teach graphics and visual imagery, their expectations based on students' background visual knowledge level, and the challenges they would face in teaching it. The interview yielded much facilitative knowledge in preparing the researcher for the classroom observations and group interviews.

3.6.2.1.2 Post-teaching one-on-one lecturer interview

As soon as possible after the classroom observation was completed for each subject, each lecturer participant was invited to a one-on-one interview to reflect on the decisions made by the lecturers during their teaching, challenges they faced in achieving the learning objectives, and students' receptiveness to the lessons. The post-teaching interview complemented other data sources by providing opportunities for the researcher to tap into issues unobservable during the observation (Stake, 2010, p. 95). With an interview, the researcher was also able to inquire about issues the lecturers hesitated to raise during the first group interview. The interview contributed to achieving the study's diversification purpose by adding to the study perspectives held by the lecturers – an angle the other instruments in the study may not capture as efficiently.

3.6.2.2 Group interview

Group interview is not a collection of individual interviews conducted in a group concurrently (Walker, 1985, as cited in Watts and Ebbutt, 1987) but a powerful qualitative research method which generates group interaction based on the group dynamics (Frey & Fontana, 1991), resulting in data made up of views based on perspectives shared by each member of the interview groups. Group interview also produces data sets different from those collected from individual interviews.

In the current study, group interview was used in Part One because the method allowed the researcher to probe and explore the topics of discussion during the group interviews in significant breadth and depth in order to collect data which would be responsive to the research design. All the group interviews conducted were semi-structured. In fact, it has been argued that no interview is completely "non-directive" as the interviewer implicitly or explicitly brings into the interview the research agenda (K. Richards, 2003).

In the current study, the participants were not presented with questions ahead of the interviews. In retrospect, due to the technicality of the topic, the key questions could have been sent to the participants before the interviews so that the participants would have been able to interact and comment more elaborately on each other's responses.

For anonymity reasons, the participants were instructed not to address each other by real names and alias tags identifying Student Participant 1 as SP1, Student Participant 2 as SP2, etc., and M for the moderator were used in all the interviews.

3.6.2.2.1 Lecturer group interview

In Part One, all six lecturer participants were recruited for two group interviews, the first of which took place at the beginning of the classroom observations and the second at the end of the observations. The researcher was the only interviewer/moderator in both

interviews. The participants were colleagues and appeared comfortable and relaxed in each other's presence. Only five lecturers attended the first lecturer group interview as the sixth lecturer was absent due to an unforeseen circumstance. A one-on-one interview was conducted with that lecturer using the same questions used for the group interview. All six lecturers participated in the second group interview. The lecturer participants addressed each other using LP1 for the Lecturer Participant 1, and LP2 for the Lecturer Participant 2, etc.

3.6.2.2.2 Student group interview

To obtain data from the student participants in Part One, group interview, in addition to its feature of creating interpersonal interaction data sets, was selected because of its efficiency in generating rich data with a large number of participants in a relative short period of time. Six students from each class to be observed were recruited for group interviews before, during and after the observation protocols depending on the students' availability. The students in each group were studying in the same class and had built rapport with one another prior to the interviews. Their familiarity with one another had both desirable and undesirable effects on the group dynamics. While the participants were instantly comfortable with one another's presence in the group, several were observed to withhold their opposing views toward those of the other participants until they were elicited by the researcher. Even during probing, some discomfort and hesitation were observed in their responses. Although the participants were given the option to speak either in English or Khmer, they generally chose to speak in English for an overwhelming proportion of the interviews. However, with limited oral abilities in English, a few student participants, at times, had difficulty answering some of the interview questions as well as responding to the other participants' opinions. This situation forced the interviewer to play a more central role than initially planned by having to frequently repeat and paraphrase questions, ask for

clarification, and probe for elaboration. This limitation also significantly reduced interaction among the participants.

3.6.3 Classroom observation

Agreement was sought from the relevant lecturer before each observation of his or her session in Part One. Each session lasted for 90 minutes, and, there were two sessions per week for GS, WS, and LS, one running immediately after the other in the same study shift. CE, being the most important unit, had four sessions or two pairs of sessions per week. For each pair of sessions, there was a 15-minute break between them, and the two sessions could contain different learning objectives and contents.

Following the pre-teaching interview and with permission from the school administration, the interviewed lecturers, and their students, in Part One, the researcher conducted a 4-week non-participant observation in each of the four classes sequentially. Before the formal observation began, the researcher sat in a series of lessons, aiming to develop rapport with the participants, blended into the background, and minimized the undesired *observer effect* (Angrosino, 2007) on students' learning and classroom interactions. The idea was to increase what Angrosino (2007, p. 61) calls *naturalness of observation* as the observer's presence begins to go unnoticed or less noticed over time. Esterberg (2002) maintains that quality of qualitative research, to a large extent, is determined by the trust and closeness level of the researcher-participant relationship. Good rapport between a researcher and participants also opens opportunities for the participants to construe their experience freely, a fundamental condition for credibility and trustworthiness in a robust, systematic qualitative research study (Tuli, 2010).

A series of guidelines informed by the data collected by the pre-teaching interviews guided the observations, and the *observational protocol* (p. 169) proposed by Creswell

(2013) was employed to assist the researcher in implementing the observation, ensuring that key issues of immediate concern and potential long-term use were noted, and the data collected mirrored what exactly happened in each observed lesson. Observation, commonly involving the use of sensory skills of seeing, hearing, and feeling (Stake, 2010), is a superior qualitative research protocol which could yield both breadth and depth of data. The researcher took the role of *complete observer* during the observation, identifying himself as a researcher-observer in the classes and did not participate in the class activities.

During the observation period, there were some disruptions caused by the Summer vacation, which was scheduled to coincide with the celebration of the Khmer New Year, running from 5-20 April 2014, and all classes, as a result, were on a break. There were also public holidays on 1, 13, 14, 15 May, and 18 June.

In Part Two of the thesis, the researcher conducted a non-participant observation for five non-consecutive weeks, one week for the benchmark-setting week, and two weeks each for both cycles of the study.

3.6.4 Focus group

Used as a key data collection procedure in Part Two, focus group methodology has long been a prominent social research instrument, with scholars crediting its early development to the works by Bronislaw Malinowski for his Trobriand Islanders study and William Foote Whyte for his 1943 Boston gang members study (Liamputtong, 2011, p. 9). Neither Malinowski nor Whyte provided an "explicit" written account of focus group as a qualitative research instrument (Madriz, 2003, as cited in Liamputtong, 2011). The now commonly practiced focus group methodology was elaborated in Merton and Kendall's (1946) classic work titled "The focused interview" based on their social sciences study on people's attitudes on the US involvement in World War II (Liamputtong, 2011). The influence of Merton and Kendall's pioneering work on the development of focus groups as

a qualitative instrument was constrained by the dominance of the quantitative research paradigm during their time, resulting in the method not being well-received in general among the academic research community. The commercial world, following its post-World War II boom, however, fully embraced the method, leading to an immense increase in popularity of the method as a market research tool to study consumer behaviours towards commercial products (Krueger and Casey, 2009). Influenced by the practice of focused interviewing in market research, academic researchers in 1980s (Krueger and Casey, 2009; Liamputtong, 2011) developed their version of the instrument for their own specific purposes, which has subsequently become a salient data collection method in qualitative research.

That focus groups are one of the main data collection methods for the current project can be attributed to the fact that the study seeks to uncover different factors influencing the moulding of perspectives held by various participants from the same contextual background with regard to visual literacy. Focus groups allow the participants to interact and challenge one another, resulting in dynamic data no other instruments in the study are able to collect.

Underscoring the role of human interaction in constructing meanings of a phenomenon and one's understanding and interpretation of the phenomenon (Liamputtong, 2011), Symbolic interactionism serves as the guiding theoretical framework for focus group discussion in the current project. Symbolic interactionism strongly emphasizes that meanings and experiences of the world do not exist in isolation but occur when social members discuss and interact with one another (Liamputtong, 2011).

Aiming to generate data informed by the student participants' perspectives, six students were recruited for two separate focus group discussion sessions in Part Two. The recruitment was done based on the learners' consent and the lecturer's recommendation. The

post-learning focus group discussion was conducted twice, the first being right after the Cycle One intervention and the second at the end of the study.

3.6.5 Solicited student diary

Bailey & Ochsner (1983, p. 189) define the use of a diary "in second language learning, acquisition, or teaching is an account of a second language experience as recorded in a first-person journal. The diarist may be a language teacher or a language learner – but the central characteristic of the diary studies is that they are introspective". Nunan (1992) concurs that "diaries, logs, and journals are important introspective tools in language research" (p. 118), while McDonough and McDonough (1997) assert that the use of diaries in educational research involves a collection of data in relation to the "theme of change over time and the sense of writing about a process" (p. 121).

This method fits Part Two's action research design and complements the other research instruments by allowing me to collect information, knowledge, and experience the students share in their own space with no or little pressure from the lecturer participant, the researcher, and other students – data which certain students are not confident in sharing in presence of others and even intentionally conceal from others (Alaszewski, 2006). Diary data are also reflective of the participants' perceptions, learning experience, and other affective factors spanning a period of time, which are unobservable to an external observer (Bailey & Ochsner, 1983, as cited in Bailey, 1991). In this way, diaries are thought to increase participants' engagement, reflection, and empowerment in the research process while generating data which may be hard to collect through the use of other research instruments.

In Part Two's action research, prompts (Appendix 6.4) were given to the participants to help guide them write in their diary about the impact of visual teaching interventions on different aspects of their language learning, and the learners were

encouraged to explore other themes of their choice which they thought were direct and indirect results of having been exposed to the action research interventions.

3.6.6 Questionnaire

A common tool in quantitative research, a questionnaire is increasingly used in a qualitative or mixed-method study (Creswell, 2014; Dörnyei, 2003). Burns (2010) agrees with the use of questionnaires when time is a factor, while Dörnyei (2003) approves of questionnaire as a research instrument to collect factual, behavioural, and attitudinal information from a group of participants whose collective voices cannot be obtained through the other instruments.

Questionnaires were used in both parts of the study with those in Part One (See Appendix 4.4) aiming to survey among lecturer participants about visual literacy in terms of their exposure and consumption of visual media, training experiences in visual literacy, and their practices as well as perceptions about visual literacy instruction. The lecturer participants' questionnaire responses were also used to formulate questions for individual and group interviews which followed.

In Part Two, questionnaires (See Appendix 6.8) were administered to triangulate data from the other research instruments so as to trace changes in students' perceptions and learning outcomes attributable to visual literacy instruction in both cycles of the action research. The questionnaires provided opportunities for the student participants as a class to reflect and report concurrently on the impact of the visual literacy interventions on their learning – a feature not achieved through the other instruments.

3.7 Data analysis

This section will briefly describe how the data were analysed for both parts of the thesis. Data analysis procedures for qualitative research such as case study and action research and other qualitative projects, are not "off-the-shelf" but are rather varied,

"custom-built" (Angrosino, 2007, p. 84), and "choreographed" (Huberman & Miles, 1994) in response to specific demands and challenges in a particular study. The current study adopted the spiral data analysis contour proposed by Creswell (2013) as its overall guiding approach to data analysis. The analysis began in a spiral pattern with data organization, then moved on to reading and memoing, and to classifying data into codes and themes. Findings were then interpreted directly (Creswell, 2013; Stake, 2010) in light of the study's context and presented in both verbal and visual forms, followed by naturalistic generalizations to be proposed as lessons learnt from the case study (Creswell, 2013, p. 85; Stake, 2010, p. 200). All the voice-recording data were transcribed in the QSR International's NVivo 11 software package for orderly data organization, convenient retrieval, code and theme developing, and identification and representation of relationships among codes and themes.

The export of direct quotes provides authentic voices representing the participants who are empowered in the study to tell or write their own stories and construct meanings of visual teaching and appreciate their construction of knowledge in the research practice and learning practice at DoE as described and interpreted in Part One of the thesis.

3.7.1 Document analysis

A combination of content and thematic analysis methods were adopted to analyse the imagery content of the collected learning materials. The content analysis of the materials resulted in a quantification and classification of the imagery, while the thematic analysis revealed the recurring themes and contents that imageries embody. To enrich the analyses and interpretation of the findings, sources, authors, target audience, and, potentially, purposes of the materials were identified and accommodated in the analysis. Specific analysis frameworks and procedures are further explained in Chapters 4 and 7, where research results are presented and discussed for Part One and Part Two, respectively.

3.7.2 Interview data

The interview data were transcribed based on a framework which combined (Gibson & Brown)'s (2009) *focused* approach (p. 114) with Jeffersonian conventions (Liamputtong, 2011, pp. 169-170) and analysed in two phases, as elaborated by Rubin and Rubin (2005), beginning with transcription, establishment of concepts and themes, and data coding to represent the identified concepts and themes through a number of sorting, summarizing, ranking, comparing, and combining processes. The second phase of analysis involved formulation of what Rubin and Rubin call *case-level* and *middle-level theories* (p. 230). Each interview transcript was first coded by the researcher and checked against the coding of samples by another researcher. In the case of differences, a meeting was set up to negotiate the differences until an agreement was reached for at least 90% of the topics and themes identified.

3.7.3 Classroom observation data

Analysis of data generated by observation was conducted alongside the observation. Gibson and Brown (2009) postulate that, "observational work is data analysis" and separating the two processes could potentially cause "confusion" (p. 107). The observational protocol adopted included sections on descriptive notes of the observed activities, demographic information, and the researcher's reflection on observed data (Creswell, 2013).

3.8 Conclusion

This chapter has explained the study's two-part design, its philosophical foundations, research paradigms, and data collection and analysis methods. The complexity and multiplicity of the study's data contribute to exploring the different realities viewed by the different groups of participants regarding visual literacy teaching and learning practice in the DoE at RUPP, Cambodia.

The next chapter presents Part One's findings based on the data obtained through document analyses, participant recruitment surveys, individual and group interviews, and classroom observations.

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4.1 Introduction

This chapter presents the findings of Part One of the project. These were corroborated through recursive analyses and cross-case examination (Yin, 2009, 2012, 2014) of data generated through the six collection methods set out in Table 4.1. Types and roles of visual resources present in the learning materials collected during the document analysis will be presented first, in order to ground the object of study in Part One. This then is followed by the findings of the lecturer survey to understand their relevant visual literacy experience. Next, in turn, classroom observation, lecturer individual interview, student group interview, and lecturer group interview findings are all presented, shedding light on the current

Table 4.1. Summary of the data collected

Document analysis	 Over 30 images/graphs/diagrams Over 10 PPTs by both students and teachers Two videos used by a teacher (30 minutes each) Over 10 students' posters
Lecturer questionnaire	Twenty lecturer questionnaire responses
Lecturer interview	- Pre-teaching: Three audio-recordings (10-15 mins each)- Post-teaching: Four audio-recordings (25-35 mins each)
Classroom observation	Twenty-three audio-recordings and 23 observational protocol sheets
Student group interview	 Eight student group interviews with audio-recordings (at least 90 mins each) Two lecturer group interviews with audio-recordings (at least 90 mins each)
Student questionnaire	Six completed questionnaires for each of the student group interview (24 questionnaires)

practices and future directions for visual literacy instruction in the target ELT context. A discussion of the findings of Part One is provided in Section 4.8.

4.2 Document analysis: Visual resources in learning materials

This section partially answers the first research question by examining the learning materials collected before and during the classroom observation period running from 26 January to 27 June 2014. They comprise the coursebooks themselves and additional resources utilised by the lecturers and students.

4.2.1 The coursebook

The main materials used in the Core English (CE) lessons observed were the Unit 10 of Liz and John Soars' (2005) *New Headway Upper Intermediate Student Book* (3rd edition) published by Oxford University Press. This is the fifth of the six books in the New Headway series which teach general English from beginner to advanced levels. Below I set out a brief overview and analysis of selected visual materials found in this coursebook.

In addition to the text about the title, level, material type, author, and publisher of the book, the cover of the coursebook contains multiple equilateral triangles of the same visual content, with one connected to another in a series (See Figure 4.1). The same triangles can also be found on the covers of the other levels in the series. The triangle in the centre is the largest and the last few fade into the background of the cover. Each triangle contains two smaller triangles, and all together make up a collage of photographs including those of translucent smiling faces, Compaq Discs, and the lens of a digital camera, depicting a range of topics suiting diverse social and age groups of learners. The rightward pointing of the triangles potentially signifies progress and development in language learning as the title of the series suggests. The same triangle is used as a starting point to introduce each chapter, as can be seen in figure 4.6.

Another standout visual feature of the cover is the enlarged and highlighted word "New" placed at the top of the cover to emphasize the new edition of the book as opposed to the previous ones. The book has 12 chapters and is arranged based on topics, language points in focus and language skills, as indicated in the book contents. Unit 10, titled "Risking life and limb", focuses on modal auxiliary verbs, metaphors and idioms with the body parts, important historical events such as the discovery of Otzi the iceman and the white settlers' migration to the West of the United States of America.

Three modes of meaning making resources were analysed in terms of their pedagogical functions and relations in promoting language learning opportunities for students – image, floating verbal text, and page layout (Bezemer & Kress, 2009). These are dealt with in sequence in the sub-sections that follow.

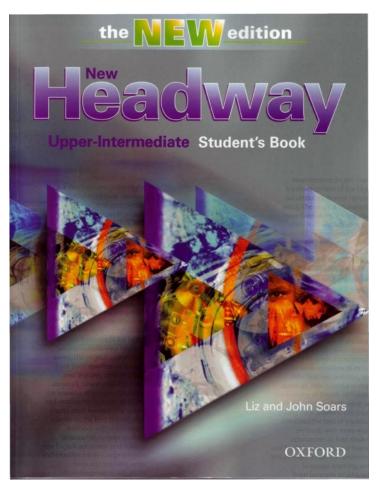


Figure 4.1. Cover of the New Headway Upper-Intermediate Student's Book, used as the coursebook for the Core English subject

4.2.1.1 *Image*

The coursebook images that I have analysed in this study are drawings and photographs which feature prominently on each page of Unit 10. Small signs, symbols, and icons used to signpost different sections of the unit were deemed relatively unimportant and, therefore, were not included in the analysis. These signs, symbols, and icons do not make up the content of the text (Misanchuck, 1992); instead, Waller (1982) regard them as "part of the access structure of the text" (as cited in, Romney, 2012, p. 395).

At least one image could be found on each of the eight pages in the unit. Among the 23 images counted, only two (pp. 87 and 89) appeared to have an aesthetic or decorational (Levin, 1981) function; the rest have significant pedagogical functions. All the images, even the two which were included in the unit for decorative purposes, are well connected to the texts. The most dominant role played by the images is to help students build background knowledge in preparation for subsequent language-oriented activities practicing the language points and micro-skills in focus. Four of the images are drawings by various artists specifically commissioned for this coursebook, whereas the rest are reproduced works from multiple sources, as identified in the publishing information page at the end of the book.

The majority of the images perform a representational function (Levin, 1981), mirroring part or all of the textual contents. They also have mnemonic properties, enhancing the students' memory of the information and language points they learn in the activities accompanied by the images.

In four instances (pp. 86, 87, and 92), there are instructions directing students' attention to interpret and discuss the images. In such cases, prompts in the form of WH-questions are given, and students are expected to answer the questions, using the target language points they are about to learn or have just learned.

In two instances, images carry information not discussed in the text, for example, the drawing in Figure 4.2, which displays a native American on a horseback hunting a buffalo in what appears to be the Great Plains, where the conflict between the white settlers and native Americans was reported to have taken place. Discussion of the drawing would help students understand the significance of the hunting and the Great Plains to the native Americans, especially for those with limited background knowledge about the conflict and its causes.



Figure 4.2. A drawing accompanying the reading passage "How the West Was Won" on pp. 90 and 91, providing important information not found in the text
4.2.1.2 Floating verbal text

A "floating verbal text" is defined is this thesis as the text which is placed in a shape (e.g., box, bubble, cube, etc.) and/or shaded with a coloured background. These visual properties distinguish a floating verbal text from a regular text which runs across pages. The use of boxing plus colour shading set clear boundaries between different entities on a page and, importantly, effectively highlight the key lesson components students should focus their attention on. Floating texts as speech bubbles provide examples of an interactive activity

students are to carry out in a given activity. These features are illustrated in the Figure 4.3. The use of colour background also sets the tone for the activities for example, in the case of the reading passage found on page 90, as found in Figure 4.4.

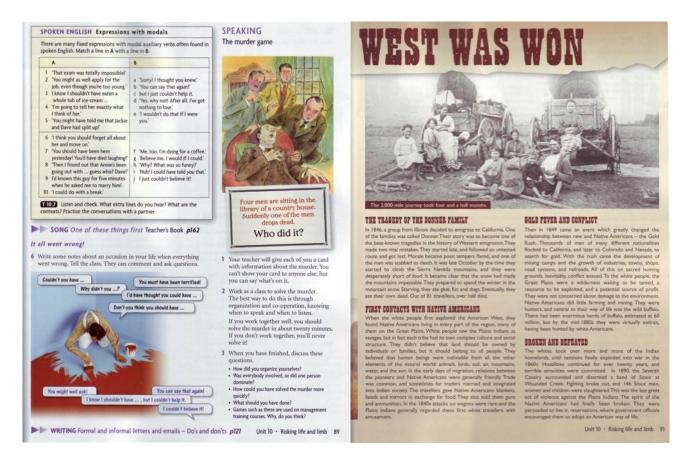


Figure 4.3. A page showing examples of floating verbal texts

Figure 4.4. A page showing the use of colour background with colour headings to set the reading mood

4.2.1.3 Page layout

Most of the pages are divided into two columns with clear boundaries, as seen in Figure 4.5 – a pattern which can be observed throughout the book. One of the exceptions is the first page of Unit 10, as illustrated in Figure 4.6. In this case, the images change the layout of the page and appear to take on a more prominent role in learning activities. In many cases, images occupy close to half the space on the pages. Recognising the page layout pattern helps speed up students' reading and can help them decide which page components to make a concerted effort in learning.





Figure 4.5. The typical two-column layout found throughout the book

Figure 4.6. The first page of Unit 10 with a different layout

Just as in the texts themselves, the three meaning-making resources of image, floating verbal text, and page layout combined create plentiful learning opportunities which supplement those generated by the texts and, in many instances, cannot be achieved by the texts alone.

4.2.2 Visual resources extracted from additional sources

In addition to the visual resources found in the coursebook, a selection of maps and pictures were introduced and used by the CE lecturer (by way of an LCD projector) to enhance the student participants' schema about the topics. Figure 4.7 shows a map of the United States of America, which the CE lecturer used to provide necessary geographical information in addition to that mentioned in the reading passage. The map performed an organisational function in helping students visualise the American white settlers' migration journey to the West of the USA discussed in the passage – an activity which Tomlinson (2011) argues to be highly important for both first and second language learning.



Figure 4.7. A map of the United States of America downloaded from the Internet and shown to the students by the CE lecturer in a reading lesson

4.2.3 Visual materials produced by the students

In addition to the coursebooks and the supplemental materials introduced by the lecturers, visual learning resources were created by the learners themselves as in the case of a wall poster displayed in Figure 4.8 and a PowerPoint slide displayed in Figure 4.9. These visual cues show different ability levels the learners had developed in creating visual materials. For the wall poster, the students used their limited drawing and sketching skills to transform the textual information they had gathered about a protagonist's escape plan as they read the novel in their Literature class to a visual diagram illustrating the escape plan. For the PowerPoint slide, the students exhibited a limited knowledge about scaling and image.

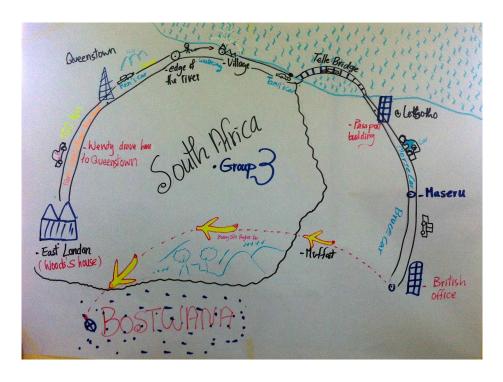


Figure 4.8. A wall poster created in the class by a small group of learners to illustrate the escape plan of a protagonist in a novel

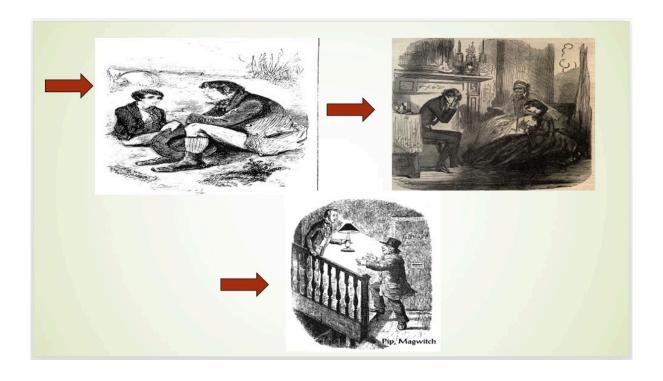


Figure 4.9. A PowerPoint slide used by a group of learners to present the novel "Great Expectations" to their class

Now that I have introduced and clarified the visual materials relevant to Part One, I next turn attention to the survey used to recruit lecturer participants and which provided useful data about their current understanding of and practices in visual literacy teaching.

4.3 Survey of lecturer participants

This section further answers the first research question and reports on the descriptive data generated through the questionnaire administered to 25 IFL lecturers. The aim was to survey the personal and professional experience of the target group of lecturers concerning the topic of visual literacy teaching at the Department of English of the IFL.

The department, at the time the questionnaire was administered, had 109 full-time English lecturing staff members. Thirty-five of them were on study leave, and five others were away for miscellaneous reasons (IFL information booklet, 2013). The questionnaire was distributed to 25 lecturers out of the 33 lecturers who were teaching the Year 2 Bachelor degree units. Twenty lecturers returned completed questionnaires. The completed questionnaires were coded for the frequency counts using SPSS software (Version 21).

Out of the 20 participants, seven (35%) were female, and 13 (65%) male. Figure 4.10 shows that nine (45%) were aged between 18 to 25 years old, and half of the participants (50%) were in the 26-35 age group. Only one participant (5%) was above 35 years of age.

Concerning the participants' education levels, while none held a PhD degree, 14 (70%) of the participants had already obtained either an MA or MEd, and six other participants (30%) were recent graduates from the bachelor's degree program in TEFL at the IFL. Recruitment of recent graduates to teach undergraduate students is a common and accepted practice among Cambodian universities although a sub-decree has been issued by the Cambodian Ministry of Education, Sport, and Youth, prescribing that a university lecturer complete a post-graduate study program prior to teaching at their respective institutions.

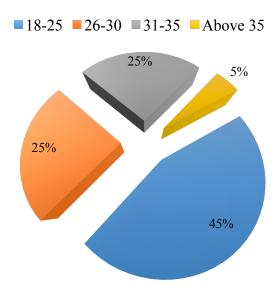


Figure 4.10. Part One lecturer participants' age groups

As can be seen in Table 4.2, at the time of reporting, six (30%) of the respondents had been teaching the units they were in charge of for one semester or less, whereas eight (40%) had been teaching it from two to four semesters. The other six (30%) had been teaching the units longer than four semesters.

Table 4.2. Duration the participants had been teaching their specific units

Teaching duration	No. of lecturers	%
1 semester or less	6	30
2-4 semesters	8	40
Longer than 4 semesters	6	30
Total	20	100

When asked how well they could explain visual elements, such as colour, line, texture, hue, contrast, saturation, dimension, etc., the participants' opinions were divided, with 50% reporting either "not so well" or "no idea at all," and the other 50% "well" or "very well." Only 35% of the participants, however, had heard of the term "visual literacy".

In terms of the participants' perceived understanding of visual literacy, 25% opted for a more restricted definition of visual literacy, reporting that visual literacy involves only either understanding or interpreting abilities, as opposed to 75% of the respondents who believed that visual literacy entails an ability to understand, interpret, and use visual representations of information, including still images, videos, and dynamic online materials.

In a similar vein, the majority of the respondents (18 or 90%) reported a medium level of visual literacy, and none of them was confident enough to claim a high level of visual literacy. Figure 4.11 summarises various visual literacy training received by the lecturer participants. Fourteen of the respondents (70%) received from "none at all" to "not so much" training to interpret various visualization methods. The lack of training was increasingly evident in terms of producing (18 or 90%) and using (17 or 85%). Only one (5%) of the participants, notably,

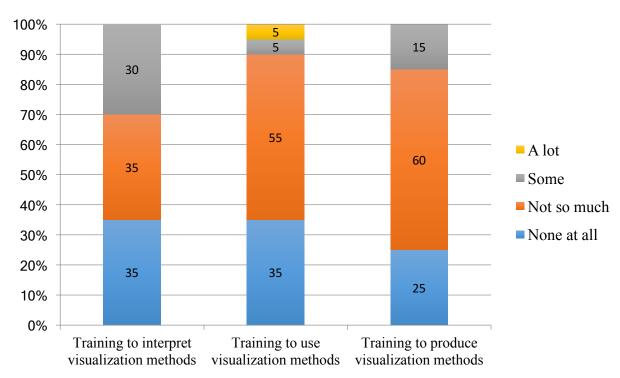


Figure 4.11. Previous training the lecturers had in interpreting, using, and producing various visualization methods (n = 20)

claimed to have received "a lot" of training to produce visualization methods⁴ (i.e. to prepare such materials for classroom use). In brief, the participants had undergone minimal training in using visual representations. The participants' responses also indicate a great variation in the frequency the participants question if a picture had been altered, with two (10%) never doing it. Nine (45%) of them rarely did it, as opposed to seven (35%) and two (10%) who would question it "often" and "all the time," respectively.

The participants, however, reportedly guessed the meaning of a picture more frequently, as illustrated by frequency and percentage in Table 4.3. Eleven of them (55%) "often" did it, and two (10%) did it "all the time." Seventeen (85%) "often" questioned the context of a picture, while 10 (50%) would rarely question where and when a picture was taken.

Table 4.3. Frequency the lecturer participants guessed the meaning and questioned the context of a picture

	Guessing the meaning		Questioning the context		Questioning where and	
	of a picture		of a picture		when a picture is taken	
	Frequency	%	Frequency	%	Frequency	%
Never	0	0	0	0	0	0
Rarely	7	35	1	5	10	50
Often	11	55	17	85	8	40
All the time	2	10	2	10	2	10
Total	20	100	20	100	20	100

Two (10%) and three (15%) of the respondents "never" and "rarely," respectively, used a digital/phone camera, in contrast to 15 (75%) of them, who used it either "often" or "all the time". Eleven (55%) of them would edit images they take with their digital/phone camera, and 17 (85%) would share the images on social networks like Facebook, Instagram,

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⁴ The term "visualization methods" was used to refer to various types of visual resources, and was properly explained and exemplified in the questionnaire. (See Appendix 4.1)

and Twitter. Only 10 (50%) of them, however, would upload the images as supplements to the narration of a story.

The participants used PowerPoint considerably more frequently, with 12 (60%) of them claiming to use it "often" and two (10%) using it "all the time." Seven (35%) of them rarely designed their own PowerPoint slides, while the other seven (35%) and six (30%) did it "often" and "all the time", respectively. The participants also included images in their PowerPoint slides, with six (30%) of them "rarely" doing it, nine (45%) "often", and five (25%) "all the time."

The visualisation methods most often encountered and used by the participants are set out in Table 4.4. As for their involvement in seeing and using various types of visual resources, 18 (90%) of the participants reported that they saw pictures the most often. Table and Drawing were the second most often seen resources. The respondents reported no

Table 4.4. Visualization methods the lecturer participants most often saw and used

Method	Most often seen		Most often used	
	Frequency	%	Frequency	%
Timeline	6	30	4	20
Table	10	50	7	35
Pie Chart	1	5	1	5
Flow Chart	4	20	6	30
Organizational Chart	4	20	2	10
Bar Chart	1	5	0	0
Histogram	0	0	0	0
Line graph	0	0	0	0
Scatterplot/Scattergraph	0	0	0	0
Map	2	10	1	5
Mind map	2	10	2	10
Cluster	4	20	4	20
Drawing	10	50	6	30
Concentric circle	1	5	2	10
Picture	18	90	15	75
Cartoon	6	30	2	10
None of the above	2	10	2	10

sighting of Histogram, Line graph, and Scatterplot/scatter graph. Fifteen (75%) of the respondents most often used Picture, in contrast to seven (35%) and six (30%), who would prefer to use Table and Flowchart/Drawing most often, respectively.

Table 4.5 sets out a summary of visualization methods the lecturer participants found most comfortable in using and producing. Picture and Table remained the most common resources the participants found comfortable to use and produce. None of the participants reported feeling comfortable in using and producing Histogram, Line graph, and Scatterplot/Scattergraph. Flowchart, Drawing, and Timeline were selected by at least four (20%) of the participants. Picture appeared to be most ubiquitous, being selected by 13 (65%) participants who felt comfortable using it; however, the participants seemed less comfortable in producing them as the percentage dropped to 50%.

Table 4.5. Visualization methods participants most comfortably used and produced

Method	Most comfortably used		Most comfortably produced	
	Frequency	%	Frequency	%
Timeline	4	20	4	20
Table	7	35	8	40
Pie Chart	1	5	3	15
Flow Chart	5	25	6	30
Organizational Chart	3	15	1	5
Bar Chart	1	5	1	5
Histogram	0	0	0	0
Line graph	0	0	0	0
Scatterplot/Scattergraph	0	0	0	0
Map	1	5	2	10
Mind map	2	10	3	15
Cluster	2	10	3	15
Drawing	5	25	4	20
Concentric circle	1	5	1	5
Picture	13	65	10	50
Cartoon	3	15	1	5
None of the above	2	10	1	5

Asked if they would be interested in pursuing further training in visual literacy and use of visual resources in their teaching, 19 (95%) of the participants responded positively, with nine of them indicating a preference for training and/or workshops on how to "use" visual representations in teaching. Eight (40%) wished to train in "interpretation or explanation" skills, while seven (35%) were also keen on being trained in "production or design" skills. On the other hand, purposes of the training, as stated by five of the respondents, include:

- To choose which (visual resources) to use for different (learning) purposes
- To teach different skills
- To use visual information for pedagogical purposes
- To better teaching materials and styles
- To know how pictures can be used to promote students' writing

Half of the participants did not specify what types of visual representations they would prefer the training to focus on. The types specifically indicated were *video tutorials* (one (5%) participant), *PPTs* (three (15%) participants), *mind-mapping* (one (5%) participant), *graphs and tables* (one (5%) participant), and *pictures* (one (5%) participant).

To sum up, the lecturer questionnaires provided considerable information about the level of understanding of and appreciation for visual literacy teaching in general, and attitudes towards professional development in this area.

4.4 Classroom observation

Classroom observation provided me with a vital opportunity to see visual literacy teaching practices in action.

With "graph interpretation" as one of the core components of its syllabus, Writing

Skills (WS) was the only one among the four Year 2 subjects which explicitly taught students to interpret a visual resource, in this case "line graphs". A total of four 90-minute lessons were observed over a three-week period. Two lessons during the period were not observed as requested by the WS lecturer participant. This series of lessons followed a clear transition from teacher dominance in the first lesson to student control in the last lesson. With this structure, the lessons aimed to develop the student participants' competence in writing a paragraph to interpret line graphs following academic writing conventions.

The first lesson started with the WS lecturer's demonstration of how "trend" vectors which illustrate rising and falling development curves for the phenomenon in discussion over a period of time can be interpreted. Figure 4.12 shows a photograph of a section of the lecturer's transparency which was projected through an overhead projector (OHP) in the first lesson of the series.

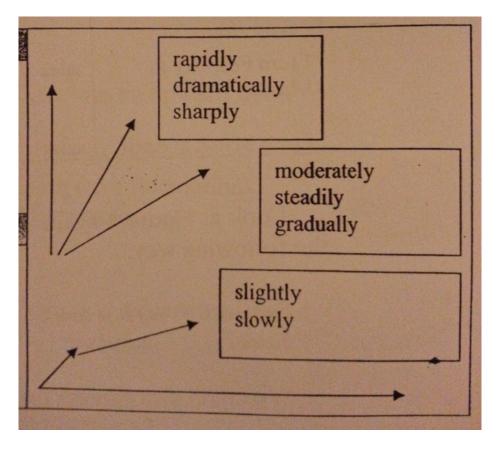


Figure 4.12. A photograph of an OHP-projected handout teaching students to interpret "trend" vectors indicating computer sales development in the 1990s.

Extract 1 taken from a WS lesson exemplifies how explicit teaching of visual resource interpretation was conducted in the WS class:

(Extract 1) WS lecturer Yes. So you can use "peak" as a verb. It peaks. Or it reaches its

peak.... How about that curve? That curving line? So you say. It grew exponentially. Or there was an exponential growth. And next, when you see the line go up a little bit, and then it goes horizontally. So you can say it's reached its plateau. It levels off.

Or it plateaus. So these are expressions you should use...

WS lecturer ... How about if there's no movement? The line goes straight from

the beginning till the end. [Two seconds of silence to give time to students to think] Yeah, you say it remains constant. Or it remains stable if there's no movement... We're going to move on

to the next slide, Number 4... So what does it describe?

Whole class Number of tourists in a particular country

WS lecturer Ok. Look at the horizontal axis [The students responded that the

axis represents months]... And the vertical axis? [The students said the axis displays the number of tourists]... So how are you going to describe this graph? You're gonna describe from month

to month?

Student 1 No, we'll describe from January to July.

WS lecturer Uh-huh. And then?

Student 2 And then July to August. September to November. And November

to December

WS lecturer Alright, it's possible. You agree? Good. Now, let's take a look.

[The WS lecturer showed a sample description of the graph]

The learning activities, following the structural flow of the lesson series, ranged from matching the "trend" vectors with the given textual descriptions to passage completion and culminated in the out-of-class individual essay writing. Following the last lesson observed, a test was given to students to monitor their progress in graph interpretation abilities and to check if the learning objectives had been achieved.

The WS lecturer did not follow any particular coursebook but used handouts and worksheets extracted from multiple sources – an earlier version of the WS textbook, the

Internet, and an IELTS test practice book. Only single black and white line graphs were taught. Colour, textures, symbols, and other visual features were not taught. In the WS lessons observed, visual representations appeared to play a superordinate role to texts as the lessons developed around what line graphs were in focus, and removal of the graphs would have rendered the language-focused activities and handouts meaningless; however, verbal literacy remained equally important as a large proportion of class time and activities were devoted to learning suitable vocabulary, structure, and language expressions appropriate to write a graph essay report.

4.5 Lecturer individual interview

In this section, I report key themes of Part One data that deal with lecturer interview responses to various aspects of visual literacy teaching, including full-colour vs black and white visual materials, the roles of visual resources in class activities, the lecturers' challenges in using visual stimuli in teaching, their perceptions of students' visual literacy level, and further training in teaching visual literacy. The interview questions can be found in Appendix 4.3.

4.5.1 Full-colour vs black and white visual resources

In the case of Core English (CE), the lecturer and a number of students used photocopied black and white coursbooks, instead of the original full-colour version. Black and white learning materials in the form of handouts and worksheets were also used in Writing Skills (WS) lessons, as a suitable textbook was reported to be non-existent at the time the interview was conducted.

The novel and handouts used in the Literature Studies (LS) class were also in black and white, while in the case of Global Studies (GS), the coursebook was a compilation of learning materials extracted from two textbooks. Only a black and white version of the compilation was available.

A lack of clarity and attractiveness were the two major issues caused by the use of black and white materials. The CE lecturer revealed that:

(Extract 2) The difference [between full-colour and black and white textbooks] is in terms of attractiveness. If I just look at this, it feels like it's not really attractive to read at all, but when I really look at students' book, for example, here's the colour of the stadium of Chelsea. OK, that's Chelsea. That's clear. And sometimes because of the black and white, the print is not clear enough for us to identify the things from there. Some of the students' books you cannot even identify the mountains in the background over here. ⁵

The GS lecturer also echoed the lack of clarity in the GS textbook. The class had to depend on the verbal description of the pictures in order to complete the activity.

(Extract 3) Some pictures are not clear... The pictures here are not clear, but there is a label for each picture.

4.5.2 Roles of visual resources in class activities

Visual stimuli were reported to play a prominent role in warm-up activities for CE and GS lecturers, as displayed in Figure 4.13. For LS classes, visual representations would help students visualise what the literary characters look like, review chapters they have learned, and emphasise significant details mentioned in the novel, as explained by the LS lecturer.

(Extract 4) Mainly I use those drawings for the review of the story... When we finish the chapters, and then we would like to begin new chapters, I might ask them to look at the drawing. Just to recall what they have learnt. And some of the drawings are used to raise their awareness about the conditions of specific issues in the story itself. For example, in Oliver Twist, we have the baby farm, work house. We would like to see the conditions. And conditions usually could be reflected through the picture, the drawing itself.

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⁵ The participants' quoted responses have been slightly altered. Grammatical slips have been fixed and fillers as well as unnecessary repetition have been deleted for ease of reading.

In the case of WS lessons, line graphs were the focal point as the lecturer and students worked together to interpret line graphs and write descriptive paragraphs about them.



Figure 4.13. The visual representations used in a warm-up activity in a CE lesson

Lexico-grammatical focused lessons were designed and provided based on the needs to describe different structural components of line graphs (See Appendix 4.3 for a sample of such lessons).

4.5.3 Lecturers' challenges in using visual stimuli in teaching

Time was reported to be the major challenge faced by the lecturers when their lessons involved visual resources, as exemplified in the CE lecturer's reflection of the challenges he faced in teaching a highly visual lesson which had been observed earlier.

(Extract 5) To prepare a good lesson, one hour and a half for each session, it really takes quite a lot of time to prepare the materials available, the materials for the students, but the most important thing is this, make sure the students, I mean, are in the mood to learn.

The GS lecturer voiced a similar concern in both the amount of time required to prepare lessons and that which was available for her to properly focus on visual components of the lessons.

(Extract 6) (There is) little time to find good and relevant visual aids that I want to use... It is hard. It is. I think I can just google... [But] it's always time consuming for me when I google or I need to search something online... In GS class, I've got so many things within two sessions, and when the majority of the students haven't read the lesson in advance, so when I give them a lecture, it's gonna be time-consuming, and plus, I need to focus on language as well.

The WS lecturer emphasised the impact of not having sufficient time to develop visual resources on the content of his teaching:

(Extract 7) ... I think our main challenge is the resources. Now we have limited resources. We're able to teach only the line graphs. We also want to move on to bar charts or pie charts, [and] make sure the students have a variety of the materials... One [challenge] is time constraint... We didn't have time even to sit and talk to share our materials.

A different challenge was raised by the LS lecturer, admitting her lack of skills in selecting visual resources which would serve her teaching purposes and in explaining them to her students.

(Extract 8) The first [issue] is the selection of the appropriate graph or graphic, visual. Sometimes, I don't really know which one really matches the activities in the class. It has been trialled a few times and then maybe through successes and failures several times, and I realise that maybe some graphs are more preferred by the students or it is easier for them to understand what it means. And the second is about the interpretation itself... I rarely consider whether my students understand it or not. I just draw it on the board, and they never ask me questions whether they really understand my graphs or not, but I assume that it's just a way I look at the story. How they take notes or how they copy it or how they understand it depends a lot on the listening and explanation of the story.

4.5.4 Teaching visual communication skills

The WS lecturer, by the nature of the subject, was the only one who provided explicit instruction of how to interpret visual resources by working with students on handouts containing language exercises which taught students expressions to be used in interpreting line graphs.

The CE lecturer taught it implicitly by asking questions to elicit responses from the students and encouraging students to lead the interpretation of the resources by themselves.

(Extract 9) I usually have some comments and I explain to them. Let's say, this picture here. I start with the mood. Look at this picture. Look at this man. Why is this man wearing this some kind of things. And look at the background... Sometimes I even use the students' input. After a few words, and then I ask them to explain by themselves to the whole class. What do you think about this? What can you say about this picture?

The LS lecturer, on the other hand, expressed her disinterest in teaching students how to interpret her visual stimuli such as diagrams and graphs.

(Extract 10) My intention to use the diagram is just make sure the students learn the story in different ways only. I don't mean to teach them to interpret my graph.

The GS lecturer, when asked if she would teach visual communication skills, expressed her low visual literacy and lack of ability to provide explicit instruction on those skills.

(Extract 11) Interviewer ... You said it [visual literacy] is important?

GS Lecturer It is.

Interviewer The students need explicit instruction. [Repeating what the

GS lecturer said earlier] Who's gonna give the explicit

instruction?

GS Lecturer That's the problem. I have very little knowledge about how to

use visual aids, so I cannot give them instruction... I think teachers should be trained. And then teachers can pass that

knowledge to the students.

4.5.5 Students' perceived visual literacy level

The participants also differed in their observation of their students' visual literacy levels, with the CE lecturer reporting his students' limited abilities in critical interpretation of visual resources.

(Extract 12) ... They cannot get much into that point because they get into the pictures because they are interested, because they are beautiful in some way. And after that, if there're some texts related to that... [They] just focus and learn this a little bit because that comes with the picture. But in terms of interpreting the pictures critically, I think they're still limited.

The WS lecturer had stronger confidence in his students' visual abilities as the students were thought to do well with his line graph interpretation lessons as indicated in this excerpt from an interview with the WS Lecturer:

(Extract 13) Interviewer: You think the students will be able to transfer their ability to

interpret line graphs in your lessons to the line graphs that

they are exposed to outside [of the class]?

WS Lecturer: I think so. To some extent they can still do it.

Similarly, the LS lecturer observed a high visual ability among some of her students as noted in this excerpt from an interview with the LS Lecturer:

(Extract 14) Interviewer: You think that your students will be able to interpret your

diagrams with no big challenges, no big issues, no problems?

LS Lecturer: I tried a few times. Because we're going through together one

step at a time, and then I ask them more questions like "What does that imply here in this section? So what have you learned? What do you see from here? And how does that relate to what?"

Some of them are able to go quickly into the interpretation.

The student participants in the LS class, as suggested by my classroom observations, did display relatively high abilities to interpret and create visual resources such as PowerPoint slides and wall posters such as those in Figures 4.8 and 4.9. However, their ability to interpret the LS hand-drawn diagrams was unconfirmed.

On the other hand, not being a highly visual person herself, the GS lecturer was not able to provide a rating for her students' visual abilities as she had not paid particular attention to this aspect of students' learning.

4.5.6 Further training in teaching visual literacy

Despite their different perspectives on the roles of visual resources in their teaching and their different practices in visual literacy instruction, the lecturer participants expressed an interest in further training in teaching visual literacy, believing that the training would help make their teaching more efficient and significantly facilitate students' learning. This finding supports the positive responses generated by the lecturer questionnaire, for which

95% of the respondents expressed an interest in additional training on visual literacy instruction.

Although the CE lecturer thought that the training would not be that important as he had already mastered some basic visual communication skills, he stated that he would be keen on the training as it would develop new skills in using visual resources in his teaching and communication.

(Extract 15) It's good to have those kinds of training. But it's not really that important. For example, I cannot teach. It's not so. I have basics. So receiving it is good, but without that, it's still fine. I can do some kind of learning by myself. I still have the ability to teach with some visual resources... If there's a formal training, I can go beyond what I have right now. I do not have time to improve to be visually literate at all. So with that training, it will help me improve my ability to use all these resources. And of course, it will be more efficient in terms of the resources that I use. It's really more effective for me to interpret or get my message across, using those visuals, I believe.

The WS lecturer, on the other hand, saw more necessity in the training, asserting that:

(Extract 16) Now we have only basic skills. We haven't even been trained yet when we teach them the graph lessons, or even other visuals. So I think it's very important. It also can build our skill as a lecturer because this is what we need to use in our teaching career.

The LS lecturer further emphasised the need for such training to match the current development trends in today's technological and media consumption society.

(Extract 17) I think it's very important right now... I'm talking about the development of technology, the development of society itself. We are moving forwards, so students get more access to media through the social networks like this. What they see from the media should be not too far different from what we teach them in the class... They have access to something very modern outside that they try to display something in different ways. So why can't we teach in a different way then, besides the traditional method we are using... We might use a different way, just to give them a picture, and how they describe it. Maybe it's more spontaneous so that we are able to judge [assess] them and maybe see how fast they really develop themselves in the area by not just reading from the written texts or summarise it in a written way.

Also agreeing that the training in teaching visual communication skills would be important, the LS lecturer added that the training could even be provided by the students.

The authority shift and roles switch between a lecturer and students would not be an issue for her.

(Extract 18) I don't mind at all. I don't mind. You know, I'm happy to learn from the students because I, I feel like in classrooms, I'm not the only one who can provide the knowledge, but I also learn something from them, and I always tell the students, if you're in class, you don't only learn from me, you learn from your friends as well, and I also learn from you.

To sum up, the lecturer interviews provided rich data from which key themes emerged regarding beliefs, attitudes and practices concerning the use of visual materials and visual teaching practices in Year 2 of the BEd program at the Department of English.

Sections 4.6 and 4.7 explore these issues through student and lecturer group interviews, and they together with Section 4.5 provide responses to the second and third research questions, which investigate the visual skills the participants claimed to have developed and those which should be taught to the student participants.

4.6 Student Group Interview

Valuable input was also obtained from Year 2 students through their participation in group interviews in this case study (See Appendix 4.2). This section reports more than a dozen aspects of visual literacy as viewed by the students: (1) the students' preferred channels of communication, (2) their thoughts on impact of visual communication on reading and writing abilities, (3) skills a visually literate person should develop, (4) their perceived visual literacy levels, (5) PowerPoint slide design, (6) the ways they used visual materials in the coursebooks, (7) full colour coursebooks, (8) their thoughts on their lecturers' visual teaching, (9) visual materials' facilitation for language learning, (10) visual literacy's promotion of critical thinking, (11) extending use of visual materials to support their learning, (12) further training in interpreting visuals, and (13) visual communication skills

to be taught in a language education program. The report in this section was based on the student participants' own observation, and no evidence was available to verify those claims.

4.6.1 Communication and the student participants' preferred channels

At the time of the interview, five of the six Core English student participants were doing double degrees in such fields as Accounting, Economics, and International Relations. SP3 was highly visual and was the only participant in the group who can draw. SP3, who was awarded the first prize in a drawing contest in primary school, liked reading books with pictures, and used drawings and choices of colours of clothing to communicate her feelings to friends and others around her. P3 used Facebook regularly but rarely shared her pictures or drawings although she was active as an artist.

SP1, on the other hand, preferred to use SMS plus a social media application named "Line" – an interactive mobile phone application popular among young Asian mobile phone and tablet users. P1 preferred Line for the reason that it has a lot of stickers (Emojis), is more interesting, and enables her to express her feelings in direct and quick ways which would not be possible through words. SP1 was also an active user on Instagram – another picture-sharing platform. Every day, she would share photos of things like her belongings, gifts, and natural scenery to express her feelings and document her life as memorable images she can enjoy when she grows older. These photos would make a happy recollection for her later in life, and "text cannot describe the whole situation and it's not as interesting," SP1 insisted.

SP2 watched TV a lot and used this channel to receive information about latest developments in the world, while SP4 self-reported to have low visual literacy, did not use visuals much, and thought that visuals are ambiguous and may cause miscommunication or even a communication breakdown. To SP4, texts provide more exact meaning. SP4 did not like communicating with friends in a visual way for negative or sad messages and used visual communication for happy moments only.

SP5 believed that he used face-to-face communication and social media equally to connect with the world and thought that he was above average in visual literacy.

SP6 self-rated as highly visual, used a lot of video calls with close relatives abroad and used Instagram for posting pictures with picture effects he can easily select on the platform, based on their suitability for particular photos.

4.6.2 The impact of visual communication on reading and writing abilities

The students were split on opinions as to whether the omnipresence of visual resources in communication and learning reduces abilities to read and write.

P1 observed that her using a lot of pictures and stickers in communication made her read and write less. As a result, she did not like reading and writing and believed she had limited abilities to express her ideas in words during an exam. However, if allowed to combine texts with visuals, she would perform better. P4, who would prefer working with texts to working with visuals, observed that her younger brother as well as other teenagers who used modern textbooks containing rich visuals struggled with reading, writing, and, especially, spelling. SP4 speculated that today's teenagers undervalue texts and depend too much on pictures to understand lessons. When challenged by the other participants about her emphasis on poor spelling, SP4 further explained that her brother, like many other teenagers, has rich knowledge but perform poorly on tests, especially those requiring writing. SP2, similarly, thought that visuals divert readers' attention and their overdependence on visuals may take away opportunities for them to learn new English language points.

SP3, SP5, and SP6, however, thought that both verbal and visual literacies are equally important as they communicate messages in different ways, and that verbal and visual literacies may even complement each other. SP3 explained that working with a visual resource also requires a verbal literacy as verbal explanation is often required to accompany the pictures/drawings. It may be possible that visual literacy enhances verbal literacy in a

foreign language as learners may not need to translate texts into L1. Instead, the visuals accompanying the texts may enable them to understand texts and practice using English without L1. SP5 echoed SP3's position by raising the case of watching Korean drama on television, the experience of which is enhanced with the use of English subtitles. According to SP5, they are interconnected because one depends on the other. SP6 also emphasised the need for both literacies, for example, in the case of comic books and PowerPoint Presentations. SP6 also thought that people understand pictures better and pictures enhance memory, which he reported as the reasons why he includes many pictures when making PowerPoint slideshows.

4.6.3 Skills a visually literature person should develop

All the participants agreed that a visually literate person should have abilities to interpret maps, graphs, pictures, photos, and drawings as well as to produce them by themselves. However, the participants demonstrated a restricted perception of visuals as they appeared to think of visuals as still images almost exclusively.

4.6.4 The student participants' perceived visual literacy skills

SP1 explained that she could use clustering techniques to brainstorm ideas, could produce pictures by taking a picture and sharing it on multiple media platforms, but could not draw. SP2 reported being very poor at visual literacy, unable to read maps or interpret most of the pictures. The only visual skill she thought she was good at was using a mind map to summarise lessons to supplement her written summary of the lessons. SP3, in addition to possessing drawing skills, would be able to use Microsoft Word and Excel to produce charts, diagrams, and graphic organisers. SP4 found interpreting the subjective meanings of pictures very challenging, a skill she reported being very poor at. She would feel more comfortable in using organisational/structural charts to visually represent lessons she has recently learned. SP5 could interpret typical pictures on social media like Instagram

and could understand the posters' feelings and emotions, but not abstract art. SP5 had had training in production of tables, organisational charts, mind maps, and clusters. SP6 reported having very good visual literacy and was usually responsible for slide design. He even included charts and graphs in his Accounting class presentation and was able to draw cartoons in a computer program.

4.6.5 PowerPoint slide design

All the participants had been involved in making PowerPoint slides and showed some degree of awareness of design elements in producing a PowerPoint slide. For example, SP6 would put clearness and simplicity of the slide above all else and include visuals only when they enriched the presentation and helped the audience understand better. SP3 and SP4 choose colours of the backgrounds to suit the topics. For example, they reported they would choose "green for the environment, blue for men, and pink for ladies." SP4, who indicated a preference for verbal texts, often used a lot of visuals in PowerPoint slides, acknowledging that visuals make a presentation more interesting and can sustain the audience's interest. SP1 and SP2, on the other hand, rarely design PowerPoint slides by themselves. However, while SP2 would not like the task and would try to finish the slides as quickly as possible, SP1 would put as much effort as possible into ensuring that the fonts and colours are clear and can be seen from a distance. SP1 would also spend time searching for interesting pictures suitable for her slides as they are thought to be interesting and make audience pay more attention to her presentation. Half of the participants wished to include videos in their PowerPoint slides, but only one actually knew how to do it.

4.6.6 How the participants used visual materials in the textbooks

Two of the participants did not use the visual materials in the textbooks much. SP4 would always check the texts first and only check pictures when she failed to understand the texts after several attempts. In the case of CE, SP4 believed that language points like

grammar cannot be learned through pictures. SP5 simply found many of those images unappealing and not helpful for his learning.

The other four participants found useful in visual resources for different learning circumstances. SP3 used pictures to keep herself engaged in the lessons. As a stress relieving activity, SP3 often drew by duplicating those interesting pictures she encountered in the textbooks, while SP2 used visuals as a starting point to determine how much time and effort she would invest in a reading activity. SP1 used the visuals in the coursebooks to learn about cultures in the other countries and to aid her memory of the lessons. She associated pictures with the lessons and used them to learn technical terms. SP6 would also start with the visuals first. Those visuals helped him understand the lessons more clearly. The absence of such visuals illustrating key terms, on the other hand, would make learning very challenging. For example, he was not able to conceptualise what tuna looks like even after reading the description many times. SP6 also expressed dismay at the GS textbook compiler for not having included many visuals for technical terms, an argument the rest of the participants agreed with.

4.6.7 Full colour coursebooks

All the participants thought that the quality of the visuals in the coursebooks after reproduction should be improved, with SP1, SP2, SP3, and SP6 wishing to have the coursebooks designed in full colour since, to them, black and white visuals were not clear and comprehensible enough for deep interpretation. SP4 and SP5, however, would prefer for the textbooks to be kept the same as they believed that an upgrade to full colour would unnecessarily increase the costs.

4.6.8 The student participants' perceptions of visual materials used by their lecturers

All the participants thought that the visuals used by their lecturers made the lessons interesting, provided contexts for the lessons, reduced cognitive load, and made them understand the lessons more easily. In the case of the reading passage "How the West was Won", verbal descriptions would not have performed the same function as maps of the USA and would not have helped them develop contextual knowledge about the reading text as much as the maps did. Texts about locations and geography of the states would have made the texts even more complicated.

4.6.9 Visual materials' facilitation for language learning

SP2 observed that despite the important role the visuals played in building background knowledge about the topics under discussion, they did not help SP2 read faster. SP6, however, had a different observation. SP6 found the activity to locate the US states in the maps introduced by his CE lecturer "fun and fascinating". The activity was reported to help him and his classmates visualise the geographical locations mentioned in the texts and enabled them to understand the significance of those locations.

SP4 and SP5 thought that only the maps were useful. The other pictures, for example, those showing the Sahara desert, did not help much. They suggested that only those visuals filling in knowledge gaps would be useful and should be included in the lessons.

The visual support helped SP3 understand the passage despite her limited knowledge of the target language expressions. It also helped with a memory and preview of the text. For example, the pictures on p. 88 helped SP3 guess what the listening text was about and helped her infer the meanings of the text successfully even though her listening ability was limited. She also acknowledged that a few visuals had no facilitative values but ended up

checking them all, i.e., checking the colours first, then the appearance and shape before checking the rest of the images (p. 28).

Despite the different opinions, the participants appeared to be conscious of the potential roles visual materials could play in supporting their language learning.

4.6.10 Visual literacy and critical thinking

The participants were divided on the issue of visual literacy and critical thinking, with SP1, SP3, and SP6 arguing that visual literacy promotes critical thinking. Attention to details in the visuals would help SP6 infer what is not stated or presented explicitly in both visuals and texts. For SP1 and SP3, visuals prompt them to question more about the topic, whereas a detailed explanation in the text can be self-contained and does not require much imagination.

By contrast, SP5 explained that visuals do not make him think as much as texts do, while SP2 was not willing to invest time in interpreting visuals and would turn to texts for clues in interpreting the visuals. If that failed, she would skip the visuals. She believed that her low visual literacy will not make her more critical. SP4, by contrast, thought that pictures reveal too much detail and do not promote imagination. She would rather read texts and develop her own mental images. That way, she could become more critical.

4.6.11 Extending use of visual resources in learning

SP4 thought that only those visual materials that are directly relevant should be included in the students' learning, and there were already plenty of such resources in the current learning materials. She postulated that visuals take a lot of time to interpret, and in learning English, reading the text is more important, and students can search for visuals by themselves when they are interested. SP1 agreed that the CE coursebook contains sufficient visuals, but not the other subjects especially LS and GS. More visuals in the LS subject, to SP1, would help interest and motivate students, expand the students' imagination, and

deepen their understanding of the situations in the novels they study. In the GS subject, SP1 clarified, visual materials to teach technical terms like fishing equipment would be crucial as they provide a clear mental image of what the equipment looks like – something which the text alone cannot do. SP3 echoed SP1's suggestion that there should be more visuals in the coursebooks, especially those for LS. Pictures make SP3 feel confident and relaxed as her understanding of the text is enhanced by the visuals. SP2 wished to have more videos, especially interesting ones on the current global issues. The other participants challenged SP2 about not having sufficient time to play and discuss videos in the class. SP6 emphasised that not every learner is good at reading texts. Some may find reading boring and are better at learning through videos and visual resources. Using more visual resources can help those students learn better.

4.6.12 Further training in interpreting visuals

Even though all the student participants, SP4 included, expressed a desire to have more useful and interesting visuals included in their learning materials, six out of the students who participated in group interviews would not want their lecturers to provide more visual literacy training in the class because they believed that the task should be the students' own responsibility, and it would take up too much class time, which can be used to learn other useful knowledge and skills. SP1 added that visuals are different, and it may not be useful for the current context to learn just a few samples. Interested students should develop the skills by themselves.

4.6.13 Visual communication skills to be taught in a language education program

Some of the skills the participants thought would be necessary for language students to learn included PowerPoint slide design, using Microsoft Word and Excel to produce

visual resources, and reading maps and body language as language students will be involved in much international communication and travel to foreign countries.

Thought to be less necessary but still important was making a good poster because posters, the participants agreed, are widely used in public and professional displays. The participants thought that posters can get messages across quickly and effectively.

SP5 and SP6 argued that how to make short video clips should be taught in a language education program as, for them, this skill can promote language learning and at the same time teach students to be creative and productive. SP5 and SP6 further added that video clips also promote confidence in speaking, develop team spirit, and improve leadership. The other participants clarified that video clips also improve their English speaking skills as they have to speak English when shooting the clips and that before shooting a scene, students would be required to carefully consider the significance of the scene, the plot, and many other elements. The participants strongly emphasised the idea that much critical thinking is involved in these processes.

4.7 Lecturer Group Interview

The last set of data analysis to report is that of the lecturer group interviews (See Appendix 4.1). Two group interviews were conducted with six lecturer participants – one at the beginning of the classroom observation period and the other one after the classroom observation period was completed. Lecturer Participant 1 (LP1) taught Global Studies as well as Core English and used to teach Writing Skills in the previous semesters. LP1 did not participate in the classroom observation procedures due to a family crisis. LP2 was the Core English lecturer whose classes were observed. LP2 was the only participant who had not completed a graduate study program by the time the interviews were conducted. LP3, the most senior of all the participants, was teaching Global Studies and used to teach many other

subjects, including Core English and Writing Skills. LP3 was also a principal syllabus and curriculum developer for the Department of English. LP4 taught Global Studies, while LP5 taught Literature Studies, and LP6 taught Writing Skills. LP4, LP5, and LP6 were all included in the classroom observation procedures. The thematic analysis of the interview transcripts revealed the following issues concerning visual literacy teaching and learning practices at the English Department: the extent to which the "world" has become visual; visual resources the lecturers frequently encountered; their visual teaching practices, their own visual literacy, relationship between visual literacy and critical thinking, their attempt at defining visual literacy for the Cambodian ELT context, and lastly their thoughts on promoting and teaching visual literacy in the department's future curricula and syllabuses. Each of these themes is addressed in the sub-sections that follow.

4.7.1 The extent to which the "world" has become visual

The lecturers observed a significant increase in visual components in two major areas: learning materials and communication. Whereas sketches and drawings used to be the main types of visual resources found in coursebooks and learning resources, multi-colour photos and images have increased in number, as indicated by LP5 in the first group interview.

(Extract 19) I do agree to some extent the world has become visually oriented through the use of teaching materials, textbooks... Right now, we're moving to a lot of publications containing real photos and images of the world, people, and so on.

At the same time, technological development and digitalization of mass media have also been observed to contribute to the visualisation of today's communication, as LP1 explained:

(Extract 20) I think compared to 10 years ago, I'm sure that the world has become very, very visually oriented, with the advancement of technology and media... What I think is visually-oriented now is that when people go on to research on the Internet, they go to YouTube.

The presence of multimodal communication platforms such as YouTube, Skype, and other video apps may even be bolstered by our very own "visual nature" and the spread of "smart" devices, according to LP6:

(Extract 21) From smart phones, from everything, it becomes very visual. I'm sure you have heard of Google glass. I think technology is now developing that stuff, so it proves that it's human nature that we're visually oriented.

4.7.2 Visual resources the lecturer participants frequently encountered

Age was a clear determining factor for types of visual resources the participants accessed and consumed. The more senior the participants the more likely they were to have been exposed to printed visual resources, such as drawings, sketches, graphs, and photos, especially those found in books and textbooks they were reading while preparing lessons for their teaching. By contrast, the younger participants were more likely to search online for both still images and multimodal resources like video clips and documentaries, the main source of which is YouTube. LP1 explained that:

(Extract 22) I mostly find them [videos] on YouTube. Topics like industrial revolution, capitalism, [and] fishing. I think I could find many resources related to that. There's a specific channel called Crash Course on YouTube. And they have a lot of themes, like history, not totally like documentary, it's like a lesson, and it's really useful.

4.7.3 Use of visual resources in teaching

The participants used visual stimuli in very different ways, and their personal learning styles were credited as factors influencing their teaching preferences and choices. LP1 and LP3 are highly visual individuals with a habit of regularly using visuals in their teaching. LP3 explained that:

(Extract 23) I, myself, I'm a visual person... If possible, I try to include some pictures in my handouts and worksheets. Not for the sake of being there, but to get the students to discuss, to look at the pictures and see if they can come up with some ideas related to what they see

LP2 and LP4 are less visual in learning and thus also less visual in teaching.

4.7.4 The lecturer participants' visual literacy skills

Four of the lecturer participants, LP2, LP4, LP5, and LP6, were asked to rate their visual abilities in the survey and reported a medium level of visual literacy. The group interview revealed further what they were and were not capable of.

- (Extract 24) ... I mainly make use of that as well. Some are movies, watching movies. Some could be in the form of documentary... I teach Global Studies. Actually, I make lots of use of videos. (LP1)
- (Extract 25) One kind of visual resource that I use the most is the images, which include photographs and drawings, but one more that I come across often as well is the videos. This is when I want the students to enjoy and learn the language at the same time, especially the authentic language which is used in the context of the movies. After we watch the movie, we're gonna reflect on some of them and learn some of the language which has been used in the movies. (LP2)
- (Extract 26) I can say I'm an artist, an amateur, not really a professional artist yet. But I can draw, I can paint, I can manipulate visuals, drawing in any way I like. I know what kind of colours should be used for which purpose. For example, when you're drawing, you know how to mix colours, this colour with that colour will become a mixture, for example, the colour of human skin. (LP3)
- (Extract 27) I'm not a visually oriented type of person... I don't actually pay attention to the details of the image or photographs that I usually see, but after the first group interview, after that one, I found myself for a few times analysing the meaning of a picture in an advertisement. Another time I analysed the colours in the menu... I did not how to produce a video. I did not know how to, you know, assess or, you know, analyse the video in that case. (LP4)
- (Extract 28) Because I'm teaching LS, sometimes I find it pretty fun to represent characters [with portraits] so that students don't feel bored. And one more [point] is the use of graphs, because I'm teaching Research Methodology...

 They display a lot of graphs. I also use those graphs as well in teaching. (LP5)
- (Extract 29) ... Normally we use pictures, photographs, and in my WS classes, normally I use graphs and tables. (LP6)

However, after reading the definition of visual literacy provided by the Association of Colleges and Research Libraries (ACRL) (2011), they either rated their visual literacy level lower or claimed they were visually illiterate.

- (Extract 30) Looking at this definition, I would not rate myself as visually literate. (LP4)
- (Extract 31) Just like LP2, I'm amazed to see what a visually literate person can do. And I asked myself how visually literate I am. And then, I think I'm just a bit because I cannot do all of these things. (LP4)

Even LP1, who initially thought he had high visual literacy, expressed his limited abilities with visual resources.

(Extract 32) The most important point that strikes me is the third point "interpret and analyse meanings of images and visual media." I don't think I can interpret or not all the visuals I can see, especially if it is graphics in finance, in accounting, or reports of stock markets or something. Although I can be visually oriented, I don't think I can interpret those stuff.

LP3 demonstrated a very high level of visual literacy as he explained how he would approach visual resources both in his communication with the world and in his teaching.

(Extract 33) I have seen many examples of what is considered inappropriate in terms of using pictures to advertise a product... These advertisers do not really understand the connection between their messages and the pictures. They simply cover pages with colourful pictures, thinking that being colourful is the most important thing. Having pictures for the sake of pictures doesn't mean that you can get your message across in this way. And that's why sometimes it's pretty awkward to see an information sheet and poster that are covered with all of these pictures. Kind of like, it's not just about pictures but about the way they design, the background and things like that, the colours, for example, which do not really bring out the message.

4.7.5 Visual literacy and critical thinking

The participants agreed that visual literacy helps increase critical thinking but disagreed on the extent it does so. LP4 and LP6 thought that a picture, which was used to refer to a visual stimulus in general, potentially meaning "a thousand words" makes students think, analyse, and interpret its actual meaning in context. This habit, when adopted, promotes critical thinking among students. LP1, LP2, LP3, and LP5 contended that the extent to which critical thinking is facilitated by visual literacy depends on the types of visuals and the ways the visuals are approached. LP1 cautioned that:

(Extract 34) In the case of diagrams and graphs... I don't think they facilitate critical thinking... They are just a quick easier representation of certain data or information, and the message is straightforward. In the case of a picture or photo, it can promote critical thinking, yet it depends on how much attention had been given to the various details in attempts to understand the message beyond the surface, as well as the time spent.

LP3, in a similar vein, added that:

(Extract 35) In the context of language learning and teaching, visuals such as pictures for discussion... help promote students' critical thinking, for students are required to understand the message or information presented by the visuals by using their judgment and evaluation and applying their reasoning powers.

4.7.6 A definition of visual literacy for the Cambodian ELT context

The issue of defining visual literacy in the fourth research question was raised separately among student and lecturer participants during their group interviews. Using the ACRL's (2011) definition of visual literacy as the basis, the participants were asked to identify what skills a visually literate English language learner in Cambodia should have. The analysis showed a good congruence among the respondents' opinions, which determined that a more fitting definition of visual literacy should include competencies in searching, analysing, interpreting, evaluating, and using visual resources for various learning purposes. P1 mentioned that:

(Extract 36) I think the definition can be defined as a set of abilities that enables an individual to effectively find visual media, understand and able to interpret the visual media correctly, evaluate the visual media in terms of its truth, reliability, and beauty; and be able to use visual media effectively in the right context for one's own work.

The participants were divided regarding the ability to produce visual resources. Half of the participants thought that the skill was too specialised for the target learners and beyond the lecturers' teaching capacity, as postulated by LP2.

(Extract 37) I don't think that.. because they are studying language, they are not the experts, you know, in designing graphs or designing visuals for other purposes, right? ... I think that we should omit the ability to design, create meaningful images and visual media.

LP4 added that:

(Extract 38) I'm thinking about myself. You know, I, I consider myself visually illiterate, so in what ways can I teach my students to be highly visual, you know, literate in that case?... In the last academic year, I actually wanted to have a video project in my subject, but then, I did not propose or implement the project because I did not how to produce a video.

The other half of the lecturer group interview participants argued that the skill would be integral to visual literacy as language learners are often required to produce such materials as posters, PowerPoint slides, and, in some cases, videos, as LP3 explained.

(Extract 39) In the context of teaching and learning, especially in the context of learning, students, the students in the English Department are also required to, for example, produce or create, you know, pictures that they can use for their posters, and so on. (P3)

4.7.7 Visual literacy in the future curriculum and syllabus development

LP1, LP4, and LP6 thought that there were sufficient visual resources to be exploited in the current syllabuses. Instead of increasing the number and kind of visual stimuli, efforts should be made in helping students make efficient use of the current resources, ensuring that they develop interpretation skills targeted in the current curriculum. LP5 and LP6 wished to include explicit instruction in how to approach additional types of graphs and diagrams, while LP3, being directly involved in curriculum and syllabus development himself, planned to find clearer visual resources and design questions which would help students develop a higher level of visual literacy.

The participants all agreed that visual literacy training should be introduced early in the program.

(Extract 40) The skills of analysing language-related visual aids should be taught explicitly right from the first year because being visually literate can greatly assist students in their language learning.

Among all the responses regarding visual literacy teaching, the one raised by LP6 was more explicit and could be worth exploring further:

(Extract 41) Visual literacy should be taught differently based on the year level of students.

Year 1: how to use visual aids

Year 2: how to use, interpret, and evaluate

Year 3: how to use, interpret, evaluate, find and create

Year 4: how to use, interpret, evaluate, find, create, and TEACH

4.7.8 Explicit instruction of visual literacy

The group interview also revealed different forms of guidance and instruction on how to manipulate the visual resources available in the textbooks and the additional ones used by the students and lecturer participants. LP1 and LP2 questioned the necessity to teach visual literacy explicitly as the task was deemed unnecessary and would defeat the mission of the program in teaching English language to the students. LP1 and LP2 expressed their opinions in the following quotes:

- (Extract 42) There isn't much that the department needs to promote in terms of visual literacy, as too much of visual literacy can be seen as a deviation from language learning. (LP1)
- (Extract 43) I do agree that visual literacy should be promoted..., but explicit teaching in terms of how to create a PowerPoint slide. I mean that's too beyond the language teaching in our class. I mean students are required to do this, to learn this outside of the class by themselves. There's some explicit teaching, of course, when we interpret the pictures and images, but how to produce. My point, my point is we cannot have explicit teaching on how to produce the visuals for their assignment or some kind of homework. (LP2)

The group appeared to compromise and reach an agreement that explicit instruction would be needed for students to develop a higher level of visual literacy. Led by LP3, the group thought that, because many of the students would go on to become English teachers, explicit instruction on how to interpret, use, and, even, produce certain forms of visuals would be justifiable.

- (Extract 44) I think P1 mentioned that they have learned something from high school. The important thing is that some, some students might not be able to interpret what they have learned, you know, from high school into university level, so we have our duties to at least remind them or to let them know that they can integrate what they learn or they have learned into a different level of learning. (LP5)
- (Extract 45) They lack, they lack this kind of judgement what should be and what should not be. I mean the thing is that there is more that we can learn about... We can help our students learn about visual literacy... We can do something to develop the students' interest. (LP3)
- (Extract 46) Year 4 students, for example, they learn, you know, they should be equipped with some knowledge about visual literacy as well. For example, as teachers,

they are supposed to be able to draw stick figures on the board, things like that, for students, right? Or some kind of pictures if they cannot find any available pictures to use in the classroom. (LP3)

(Extract 47) Visual literacy also includes message design as well because when you, when you include a picture in, in a page, or in a worksheet or in a handout or on any piece of paper, at the same time you include a certain amount of text as well. And underlining, for example, a feature of message design, you should be taught. For example, if you use capital letters, you don't use, you should not underline. (LP3)

Section 4.7 has examined the current visual literacy practices at the Department of English from the lecturer participants' perspectives through two group interviews. The lecturers, like their students, reported having noticed an increase in visuality in communication and education. They claimed to have developed varying visual literacy levels, and used visual resources in different ways depending on their teaching preferences and learning dispositions to achieve their teaching objectives. Having read the definition of visual literacy proposed by ACRL (2011) made the lecturers reconsider their visual literacy, with at least two of the lecturers confessing the high visual literacy standards stipulated in the ACRL's definition made them accept that they had lower visual literacy than they had thought. In response to the fourth research question, they thought that a simpler definition of visual literacy with fewer and lower standards would be more suitable for language learners, but no consensus was reached regarding which of the ACRL's visual literacy standards were to be modified or discarded.

4.8 Discussion and implications of Part One results

4.8.1 Introduction

To further explore the visual teaching and learning practices adopted by the students and lecturers at the research site, this section will now discuss the findings of Part One, which have been presented in Sections 4.2 to 4.7. This discussion relates the findings to suggestions and implications put forward by the previous research. Then, implications will

be drawn to guide the way forward for visual teaching practices at the research site. This serves as a justification for the action research component of the thesis set out in Part Two.

In the following section, I discuss the findings of Part One by following the structure of the research questions presented in Chapters 1 and 2.

4.8.2 Discussion of Part One's results

4.8.2.1 The current visual teaching practices at the Department of English
4.8.2.1.1 The visual learning materials used and encountered

The high visual content of the *New Headway Upper-Intermediate* coursebook revealed earlier in this chapter in the analysis of a unit extracted from the book mirrors the observations made by Bezemer and Kress (2009), who reviewed 23 textbooks for the English subject for secondary education in England in three eras – 1930s, 1980s, and 2000s, and Moghtadi (2012) and Riasati and Zare (2010), who each evaluated two EFL textbooks. A good selection of visual imagery such as maps and posters, and multimodal media like PowerPoint slides were also commonly used in the lessons I observed in Part One. This visual-multimodal pedagogy reflects the latest developments in language education classrooms as observed by Kress et al. (2005), Burn and Nixon (2005), Kalantzis and Cope (2008), Hosni (2016), Sagnier (2016) and Kumagai, López-Sánchez, and Wu (2016).

One of the confronting issues raised by both the student and lecturer participants regarding the learning materials was the black and white copy of the coursebooks and photocopied handouts. The supplemental visual materials introduced by the lecturers and students, however, were generally in full colour and appeared captivating during my classroom observations. Tomlinson and Masuhara (2004) suggest a number of criteria to assess the value of learning materials, including clarity of instructions, clarity of layout, comprehensibility of texts, achievability of tasks, flexibility of the materials, appeal of the materials, and motivating power of the materials. Such features are generally weak or

sometimes absent from black and white learning materials as seen in Figure 4.14. The students generally complained of not being motivated by the black and white copy of the coursebook, but a certain number of them expressed reluctance to pay more for full colour coursebooks.



Figure 4.14. The black and white and full colour learning materials used in a GS lesson

4.8.2.1.2 Attitudes toward current visual teaching practices

In general, both the lecturer and student participants' remarks of the increased visuality and multimodality in both learning and communication reflect pre-eminent scholars' suggestions that we have now reached a visual-multimodal era (Burn & Nixon, 2005; Jewitt, 2008; Kress & van Leeuwen, 2006; Pettersson, 2015). A few student participants expressed scepticism of the visual orientation of "world development" and voiced concerns about the potential collapse of print literacy – a concern shared by critics of visual literacy and multimodality.

The use of multimodal-visual supplemental materials and equipment, consisting of digital images, videos, overhead projectors, maps, and posters, was a common practice among five of the lecturer participants observed. Despite its strong presence and richness, the true potential of visual imagery is often underexploited (Coleman & Dee Goldston, 2011), reducing the value and contribution of such useful resources to language learning. In Part One, many of the student and lecturer participants have reportedly skipped the pictures and diagrams present in the coursebooks due to the perceived irrelevancy of the materials to their learning, their inability to interpret those resources, and the lack of clarity of the imagery for the participants who were using black and white copies of the books. Those who paid attention and did use visual representations in their teaching and learning did not appear to take full advantage of the resources. Studies by Robertson (2007), Yeh and Lohr (2010), Bleed (2005), Brumberger (2011), and T. A. Farrell (2013) uphold this finding. Clark and Lyons (2011) and Carney and Levin (2002) have documented various pedagogical roles of visual imagery in addition to the decorative function a number of the participants in Part One simply assumed visual materials fulfil.

Layout, visual design, typography, headings and sub-headings, and colours inherent in the materials used were not a topic of discussion during the lessons I observed. Only one lecturer participant reported having taught his students about such visual aspects in a lesson about PowerPoint slide design. S. Goodman (2007) and McDonough, Shaw, and Masuhara (2012) argue that these visual components in English texts should be paid proper attention to and there should be instruction for learners to take advantage of them.

The majority of the student and lecturer participants agreed with Gilakjani (2012) and Brown (2007) that learners bring to their lessons different learning styles and strategies. The focus on the visual aspects of learning accommodates this diversity and ensures various learners' needs are met more effectively. Certain student participants, however, had less

positive attitudes toward visual learning materials and their potential impact on their language learning, an observation also made in Robertson's (2007) study on visual literacy among a group of pre-service secondary teachers in North American and Ryu's (2015) investigation of Korean ESL teachers' attitudes towards multimodal ensembles. Yeh and Cheng (2010) and Yeh and Lohr (2010) in their assessment of pre-service teachers' perceptions of visual materials also reported a similar level of negative attitudes among some participants.

To sum up, Part One results show a mixture of attitudes among lecturers and students towards the use of visual materials in everyday classroom practices. This was partly due to ignorance about the potential benefits and an unwillingness to change long established habits of teaching and learning.

4.8.2.2 Visual communication skills the participants claimed to have developed

Acknowledgements by both the lecturer and student participants regarding their low visual literacy and limited training help to explain their use, or rather under-use, of the visual resources available to them in both the coursebooks and supplementary materials brought to the class by both the students and lecturers. Both the lecturer and student participants reported the lowest-level competence in producing such materials.

Felten (2008) rightly advances the view that "living in an image rich world... does not mean students (or faculty and administrators) naturally possess sophisticated visual literacy skills" (p. 60). This observation has been upheld in a number of studies to assess visual literacy among teenagers and university students, especially those with the privilege of having rich visual-multimodal learning and communication environments, usually in more developed countries. Matusitz (2005) characterized American students as "passive consumers in the classroom" not employing critical analysis of visual communication (p.

101), while Brumberger (2011) debunked the myth that despite being labelled as digital natives, a group of so-called "21st century" learners did not possess sufficient visual communication skills and competences. A lack of visual communication skills among university students who, for example, were not able to interpret graphs and charts accurately was also reported in Malamitsa, Kokkotas, and Kasoutas (2008). Other studies (Rourke & O'Connor, 2009) reported undergraduate students' approval of visual literacy instruction. In the current research context, graph interpretation was being taught explicitly in one of the four subjects my study investigated. However, the lecturer participant's decision to restrict his teaching to line graphs only limited the impact of such visual teaching on students' critical knowledge and abilities to interpret other graphic/visual representations they might come across in their learning and later at work and in life.

4.8.2.3 Visual communication skills considered to be necessary and worth teaching

Both the student and lecturer participants acknowledged the visual "world" they lived in (Jewitt, 2008) and recommended an assortment of visual communication skills to be taught in their English language program as well as other language programs of a similar nature, ranging from video making, to wall posters, to the reading and use of body language. The lecturer participants expressed a desire for the training to focus on development of both their visual literacy and a pedagogy in teaching visual communication skills to their students.

One of the most mentioned skills was PowerPoint presentation. PowerPoint's facilitative potential for language learning has been documented in numerous studies (Alkash & Al-Dersi, 2013; Bossaer, Hinkelman, & Miyamachi, 2002; Oommen, 2012; Rajabi & Ketabi, 2012; Seigle & Foster, 2000). The request for additional training in using and designing PowerPoint slides in English teaching by the student and lecturer participants in Part One of the thesis is hardly surprising given the ubiquitous presence of

this multimodal ensemble in language teaching (D. L. Fisher, 2003; Oommen, 2012) as well in education of other disciplines. It is worth noting that PowerPoint is not without its critics, who believe that PowerPoint tends to oversimplify complex ideas or constrain ways of explaining certain phenomena and thus limit learning opportunities to a certain extent (Knoblauch, 2008; Tufte, 2003). In addition, studies such as those by Ding and Liu (2012) and Nouri and Shahidy (2005) found no significant benefit of using PowerPoint for learning. The varied degrees of experience, knowledge, and expertise of the lecturer and student participants with PowerPoint would require different training programs and generate both challenges and opportunities for visual literacy development training — issues which will be further explored in Chapter 8 in Part Two of the thesis.

4.8.2.4 Components and traits of a definition of visual literacy for English language learning in Cambodian higher education

Group interviews with the student and lecturer participants in Part One reveal varied opinions regarding what it means to be visually literate. The majority of the participants, however, argued that some standards stipulated in the definition of visual literacy proposed by the Association of College and Research Libraries (2011)⁶ for higher education would be unattainable or even unnecessary for English language learners and educators such as them. The participants suggested a modified definition of visual literacy which excludes components which require competence in visual media production and awareness of legal, ethical, and economic issues surrounding the use, distribution, and production of visual media. This proposed modification resonates with the finding in Arbuckle's (2004) study with a group of South African low-literacy adults who thought a specific definition of visual

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 $^{^6}$ The full definition was provided to the participants to read before they were interviewed about their opinions on the definition.

literacy and new visual literacy instructional approach should be specially developed for them.

A lack of consensus in the participants' opinions regarding what it means to be visually literate suggests that the controversies surrounding visual literacy reported in all of the studies aiming to consolidate and operationalise the term and concept of visual literacy (Avgerinou & Pettersson, 2011; Bleed, 2005; Braden, 1994, 2001; Brill et al., 2007; Seels, 1994) remain unresolved. Part One further confirms the difficulty experienced by researchers and scholars aiming to propose a visual literacy definition which is applicable for all the areas and sub-areas covered by visual literacy studies.

4.8.2.5 Promoting visual literacy in Cambodian ELT higher education

Fearing that visual resources may have insignificant facilitative values for language learning as found in Lane's (2015) study, a small number of student and lecturer participants refrained from endorsing a full-blown initiative to promote visual literacy in a language education program like that in this thesis, but the majority of the participants agreed that a well-developed visual literacy instruction complementing, not replacing, the teaching of English as the main semiotic mode of meaning making could potentially impact significantly on language learning. The extent to which visual literacy is to be promoted was not agreed on and is further explored in Part Two of the thesis.

4.8.3 Implications of Part One and prelude to Part Two

While visual literacy advocates have been challenging educational paradigms to bring visual literacy to the core of the curricula (Eilam, 2012; Metros, 2008; Metros & Woosley, 2006), Part One of this thesis reveals that the English student and lecturer participants belonged to a 'mixed bag' of consumers, producers, and distributers of visual media, and a sweeping effort to impose such a significant change across the curriculum could be counter-productive, leading to strong resistance from a number of students and

lecturers. A wide discrepancy in their visual literacy levels and their consumption behaviours further suggests that in order for any future visual literacy training to work, a further study in context would be necessary and could potentially generate pedagogical implications which could then sustain the efforts to promote visual literacy among Cambodian English learners and educators in the long run. Part Two of this thesis pursues this path as it continues to investigate the issue of visual literacy instruction in Cambodian ELT, this time through the lens of an action research study to investigate what pedagogical approaches to teaching visual literacy would be effective in ameliorating visual literacy among learners and educators in Cambodia without negatively affecting the ultimate language learning goals of achieving English language proficiency and communicative competencies.

4.8.4 Conclusion

In this Chapter, I have introduced and discussed the research results of Part One of the thesis. I presented the typical imagery found in a Year 2 coursebook as well as supplementary visual materials provided by the lecturers and students themselves. A profile of 20 Year 2 lecturers was presented in order to describe their own sense of their visual literacy attainment and raised the implications that the exploratory investigation in Part One of the thesis has for developing an ELT program that integrates visual literacy learning with language learning. The ultimate aim of the thesis to derive a pedagogical framework and approaches to teaching visual literacy will be pursued in Part Two through a study which is informed by the findings of the Part One investigation.

The next Chapter presents a critical review of research focusing on the teaching of visual literacy in English language learning contexts in order that pressing issues and controversies can be identified and understood, and therefore inform the study in Part Two

of the thesis which further probes the facilitative potential of visual literacy instruction through an action research study.

5.1 Introduction

This chapter presents a literature review of pedagogical and empirical works conducted to promote visual literacy in English language pedagogy. The first section scrutinises the integration of visual literacy into the mainstream curricula in the educational contexts of English as a first language in three countries – the United Kingdom, Australia, and the United States of America. The second section reviews empirical research reports as well as discussion papers which promote the teaching of visual literacy to both students and teachers in the context of English as a second or foreign language. The reviews in both sections are classified according to the levels of education.

In addition to the literature reviews in these two sections, the chapter also discusses the relevant Cambodian ELT landscape and teachers' professional development needs which are essential considerations in this thesis. The chapter concludes by presenting the research questions for the action research component (i.e., Part Two) of the thesis.

5.2 Visual literacy in English language curricula in three major English-speaking countries

The importance of visual literacy has been acknowledged in various ways and to varying degrees in a range of education settings, from English language education in American primary schools, to ELT in contexts where English is not spoken as a first language, and to teacher education. The following sub-section will examine the ways visual literacy has been integrated in learning curricula in three countries where English is widely spoken as the first language, i.e., the United Kingdom, Australia, and the United States of America. Given the influence that ELT pedagogy and research in these three contexts has

had on language teaching in the rest of the world, a review of the latest developments in visual literacy and its roles in education as well as language learning in these contexts is an essential point of departure informing a literature review of visual literacy teaching and research in the other ELT contexts.

5.2.1 The United Kingdom

The UK Department of Education (1991) stipulated in the National Curriculum for art that:

Young people need to be visually literate ... pupils can become visually literate by employing visual perception in the solution of a range of practical tasks and through regular reference to the work of others ... Pupils' understanding of the possibilities of visual language and of the variety of forms of expression available is significantly expanded through the study of the work of artists, craftworkers and designers (as cited in, Howe, 1999, p. 216)

Raney (1999) made a similar observation that visual literacy became an important goal for art and design education in the UK as stated in the English National Curriculum for Arts in the early 1990s, but much to the confusion and uncertainty among educators at all levels. Howe (1999) argues that "art design" and "design and technology" subjects in the UK National Curriculum for primary education share the goal to teach students skills of critical thinking and aesthetic awareness, which could be seeds to visual literacy.

However, Jenkin (2008) postulated that explicit visual literacy instruction was found in the curriculum of few schools only despite the research pointing out that more than half of children's learning came from visual information (as cited in, Smith, 2015). By 1999, the National Curriculum for "art design" and "design and technology" made no direct mention of visual literacy or visual awareness. However, Howe (1999) contends that visual literacy should be taught in the primary curriculum on the grounds that visual literacy is a means of establishing a connection between the two subjects in ensuring that the students develop critical visual communication skills in design and technology and art contexts.

Burn and Nixon (2005) noticed a gradual increase in the teaching of visual content in school curricula in the UK, particularly media texts such as film. Jewitt (2008) reviewed historical and theoretical scholastic efforts to capture the latest development of communication environments resulting in the increasing use of multimodal, visual and creative domains in education in England from 1993 to 2008. In this comprehensive review, Jewitt documented an upward trend in young peoples' multimodal worlds and educational initiatives responding to this visuality and multimodality through the use of a wide range of multimodal and visual representations, activities, devices in learning and creativity in classrooms and learning spaces across the UK curriculum.

5.2.2 Australia

In Australia, the movement to incorporate visual literacy in a curriculum revamp from the Foundation to Year 12 (F-12) is well documented as indicated in the outlines set forth by the NAPLAN (National Assessment Plan – Literacy and Numeracy) Teaching Strategies 2013, which highlights the abilities to derive meaning from verbal and visual texts, and critically analyse "messages and information in a variety of literacy modes (visual literacy, multimodal texts) for a variety of purposes" as key components of teaching strategies for F-12 Reading in New South Wales, Australia (NSW Government, 2013). In addition, the Foundation to Year 10 (F-10) Australian curricula (Australian Curriculum, 2015, 2016) regard 'viewing' as important to acquire as reading, writing, listening, and speaking for students studying English. These curricula have been designed to help F-10 students achieve literacy targets in two main streams, as displayed in Figure 5.1: The abilities to comprehend various texts through listening, reading, and viewing and the abilities to produce multimodal texts for different purposes through speaking, writing, and creating. To elaborate,

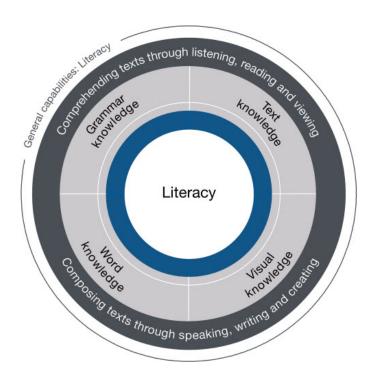


Figure 5.1. Literacy Continuum: The key ideas for literacy (Australian Curriculum, 2016)

Literacy is developed through the specific study of the English language in all its spoken, written and visual forms, enabling students to become confident readers and meaning-makers as they learn about the creative and communicative potential of a wide range of subject-specific and everyday texts from across the curriculum. (Australian Curriculum, 2016)

The key role played by visual literacy in Australian English curricula was also noted by Burn and Nixon (2005, p. 2) who observe that "the 'viewing' of still and moving image has been accorded an equal place alongside reading, writing and speaking as cornerstones of the English curriculum" in parts of Australia, New Zealand, and Canada although production of visual texts using digital media as learning content has received much less attention.

Moreover, visual literacy has also transcended into curricula and pedagogy for adult migrant English programs such as that run by the New South Wales Department of Education and Training. Da Silva Joyce (2014), within the multiliteracy tradition, elucidates guiding principles, sample activities, instructional procedures, and additional resources for

English teachers to promote multimodal and visual literacy among the adult migrant learners whom they teach.

5.2.3 The United States of America

In the USA, the North Central Regional Educational Laboratory (NCREL) and the American Association of School Libraries (AASL) emphatically reiterate visual literacy as being an essential skill for K-12 digital-age education (American Association of School Librarians, 2007). The National Council of Teachers of English (2016) asserts that there is an increasing need for students to develop multiple literacies as technology promotes the "intensity and complexity of literate environments". Multiple literacies, including digital, visual, textual, and technological, and information, are crucial skills for 21st century learners (American Association of School Librarians, 2007). As one of the standards to achieve for K-12 education, students need to develop abilities to communicate in visual language for various personal and professional purposes (NCTE/IRA, 2012).

Visual communication skills and visual literacy are subsumed and promoted through practice and explicit teaching in English language arts subjects in the national curriculum across the nation, which sees the promotion of students' competence standards in six categories - listening, speaking, reading, writing, viewing, and visually representing.

Through a direct survey with educators and program administrators, Shifrin (2007) presents primary and secondary education initiatives in ten states across the USA, which explicitly taught visual literacy from the late 1990s to 2007. Shifrin observes differences in the ways visual literacy was operationalised, the theories and practices informing those initiatives' implementation, the visual materials and artefacts forming the core of their curricula, and the partnerships between those initiatives with local communities such as museums, collegiate programs, and private organizations (p. 113).

Section 5.2 has presented the ways in which visual literacy has grown in importance to become one of the core components in English and literacy curricula in three major English-speaking countries in response to the increasing visuality across today's fast-changing, dynamic, multi-platform communication practices.

5.3 A generation of visual literacy research in English Language Teaching (1991-2016)

This section reports on a representative, if not comprehensive, review of empirical studies conducted on visual literacy instruction across different English language learning contexts over the past 25 years. There have been studies which indirectly promote visual literacy, sometimes without stating it as a study objective but that can be inferred, through the use of various visual tools such as graphic organisers, mind maps, and infographics. Another cluster of studies reviewed in this section is the academic endeavours which have directly investigated and discussed the teaching of visual literacy and its impact on student learning in a language class.

The section is set out in three parts. The first concerns studies on visual materials and their contribution to learning development. The second deals with studies on the use of visual tools such as mind maps, concept maps, infographics and information/visual/graphic organisers to facilitate language learning. The third part closely relates to Part Two's action research and reviews studies which aim to investigate the impact of visual literacy instruction on language learning.

5.3.1 Studies on visual literacy for students

5.3.1.1 Studies on visual materials and their contribution to learning development

As an attempt to fill the void in visual literacy studies in English Language Teaching, Tang's (1991) ethnographic study on the roles of graphic representation of knowledge

structures among two groups of multicultural ESL seventh graders in Vancouver revealed that a large number of graphics and visual resources were used in the observed pedagogic setting. The self-proclaimed ground-breaking study, being one of the first of its kind, employed Brody's (1984) naturalistic approach in directly observing how and when learners and teachers use visual materials. The target group of participants were found to develop a "negative" attitude toward graphics accompanying texts as the participants gave minimal importance to graphics, reducing the role of graphics to being "decorative", while instructional guidance on how learners could make use of graphics to facilitate their learning was found to be almost non-existent.

With the observation for a need to contribute empirical findings to the inadequate literature which posits that picture books assist learners in their English as a Second Language acquisition, Astorga (1999), drawing on a Systemic Functional Linguistics analysis framework and early social semiotics work, examines the generic structures of the stories, writers' linguistic choices, and visual representations accompanying the stories in two picture books for children. The study design is built on Barthes' (1977) approach to text-image relationships, i.e. elaboration and relay, and Kress and van Leeuwen's (1990) categorization of images, i.e. conceptual and presentational. The clause-by-clause analysis of the ideational functions of the stories in comparison to those of the visuals reveals that "the more material processes a story contains, the more likely the image will contribute to the meanings of the story. By contrast, the more verbal and mental processes a story contains, the less likely the image will realize the ideational meanings of the narrative text. Based on these findings, Astorga proposes a text-based approach to teaching which promotes learners' explicit awareness of macro and micro aspects of a narrative text through both the linguistic analysis of the text and accompanying visuals.

Canning-Wilson (2001) observes that at the turn of the 21st century there has been insufficient empirical data and research to validate the claim that visuals or videos improve foreign language learning despite the "considerable confidence" embedded in the pervasive pedagogical adoption of audiovisual materials to facilitate language teaching. Canning-Wilson also identifies two drawbacks which constrained the visual aids studies in the 1980s and 1990s – first the studies' investigation of the impacts of generic visual aids, rather than an actual English language video, and second, the selection of intact groups as participants, rather than random ones. In her 1997 study about the facilitative effects of a visual representation on descriptive essay writings by 145 non-native English female students at the United Emirates University, who were divided into two groups. As an experimental task, the two groups were asked to describe a blender. With the linguistic inputs and teaching contents controlled and provided equally to the two groups, the only factor which distinguished the two groups was that group A was given a verbal prompt and a picture of a blender, whereas group B received only a verbal prompt. Both groups had learned about kitchen items in their previous lessons. Group A outperformed group by 41%, suggesting that visual resources establish additional opportunities for non-native English learners to develop language abilities in a way textual materials cannot.

Ajayi (2009), working within Kress and van Leeuwen's (1996) visual grammar framework, explores the teaching of multimodally-constituted texts such as a mobile phone advertisement to 18 seventh grade ESL migrant learners in a junior high school in the USA. The study involves four stages of investigation: pre-teaching activity, scaffolding activity, group practice session, and participants' showcase of their drawings representing their understanding of the advertisement. The analyses of the participants' visual interpretive works of the advertisement suggest that the participants' social and cultural experiences play

a major role in their processing of the advertisement and the use of multimodal resources in teaching has potential to increase language and literacies development.

Through an individual semi-structured interview with 11 international students in a university ESL program, Zewary (2011) compares the effectiveness of two types of language class visual resources – a series of still pictures and a video of the same story – in assisting the participants to narrate and elaborate on the story after being shown each visual type. A series of still pictures were found to be as effective as a video in stimulating the learners and enabling them to expand on their linguistic resources in their narration of the story, and thus stand as a useful visual prompts in low-resource contexts where videos are non-existent.

María (2013) investigates the use of multimedia visual aids in an English learning context in Spain, using survey questionnaire, classroom observation, and a trial implementation of a series of six lessons to teach highly visual lessons, using short videos, PowerPoint presentations, students' PowerPoint and handmade materials, and Prezi presentations. The findings confirm that visual resources are under-utilised by the target teachers and learners, and the series of lessons implemented positively change the classroom dynamics and learners' attitudes toward learning and language acquisition, raising the learners' motivation and active engagement in their own learning.

5.3.1.2 Studies on the use of visual tools to promote language learning

Another visual literacy research stream examines the impact of using visual tools such as mind maps, concept maps, infographics and information/visual/graphic organisers in language teaching on language learning improvement. Kang (2004) defines visual tools or visual organisers as "a creative technique used to present information through graphic depictions of the relationships between concepts" which can be web-like (spider and

semantic maps), hierarchical (concept map and network tree), linear (Venn diagram, storyboard, and continuum) and matrix (compare and contrast table) (pp. 58-59). Other studies (Dunston, 1991; İlter, 2016; Jiang & Grabe, 2007; Manoli & Papadopoulou, 2012) use the term "graphic organisers" as an umbrella term to refer to various visual methods used to transform textual information into visual representations.

The most commonly researched area in the literature on the impact of the use of graphic organisers on language learning is reading comprehension. D. P. Sam and Rajan (2013), for example, compares performances on reading comprehension tasks between two groups of middle school ESL students in the western part of Tamil Nadu, India – one working with graphic organisers (the experimental group) and the other reading and answering comprehension questions without assistive graphic organisers (control group). The ANOVA statistical analyse reveal statistically significant, superior reading performances among the experimental group treated with self-constructed graphic organisers, further supporting the assertion upheld in the previous literature that graphic organisers aid student learning in reading comprehension (Ciascai, 2009; Dunston, 1991; Jiang & Grabe, 2007; Manoli & Papadopoulou, 2012; Miranda, 2011).

The use of graphic organisers in ELT has also been found to have a positive impact on vocabulary learning such as in the studies by Al-Hinnawi (2012) and İlter (2016). Al-Hinnawi (2012) conducted an experiment with 102 Jordanian EFL university students, who were divided into two equal groups – control and experimental. Both groups were taught eight aspects of English vocabulary such as "spelling, pronunciation, part of speech, meaning in the first language, meaning in the foreign language, synonym, antonym, and using it in an example sentence" (p. 62). The control group followed the traditional instructional approach, while the experimental group were taught with graphic organisers.

The pre- and post-test ANCOVA results show that the experimental group outperformed the control group. The "graphic organisers" approach were also found to have an impact on the experimental group's vocabulary building over time even after the study intervention was halted. Using a similar design, Îlter (2016) investigated the use of three graphic organisers (concept definition map, a word-questioning strategy and a circle thinking map) to help students learn new words. This quasi-experimental study compared post-test performances between two groups of fourth graders in a state school in Turkey – the experimental group was taught using the three graphic organisers, while the control group was taught in the conventional way. The post-test results indicated that the graphic organisers group's performance was superior as they were found to acquire better word recognition knowledge and the target word meanings.

Another area probed by graphic organiser researchers is grammar learning. Dahbi (2014), for example, conducted an action research study among forty-six secondary school students in Morocco. Both the questionnaire and post-intervention results supported the use of graphic organisers in teaching grammar as this visual approach improved the student participants' test performances, motivated them, and helped them approach complex information found in the verbal text. It is worth noting that despite the author's claim to have conducted an action research study, the interventions were implemented in just one cycle and no follow-up actions were taken after the post-test results. The study was classroombased, conducted by the teacher themselves, but may not be considered a complete action research study (Burns, 2010; Kemmis & McTaggart, 1988).

To summarise, the use of graphic organisers as visual-spatial representations of textual concepts and information has been found to significantly impact language learning, especially for reading comprehension. However, not enough studies have yet produced

empirical evidence supporting the facilitative potential of graphic organisers for grammar and vocabulary learning.

5.3.1.3 Studies on visual literacy instruction and its impact on student learning

The final area of visual literacy studies to be considered over the past generation concerns the impact of visual literacy on student learning. Corbett (2003), in a study which follows the principles of Kress and van Leuwen's (1996) grammar of visual design and Goodman's (1996) work on "visual English", explores the teaching of visual literacy in ELT to develop students' intercultural skills. Following a practical discussion of the theoretical and conceptual framework of visual literacy within the social semiotics paradigm, a list of questions was presented as potential classroom activities to raise awareness among the learners in intercultural aspects as depicted in visual and multimodal representations to which the learners were exposed.

Brizee (2003), following Horn's (1998) Visual Language framework, investigates the use of visual literacy and document design elements to assist a group of students at Virginia Tech in the USA in a first-year composition program in learning academic rhetoric and professional workplace writing. Throughout the program, the students were treated with a detailed presentation and discussion of visual literacy and document design through slide presentation, analyses of print advertisements, and a video session. At the end of the program, the participants demonstrated first-rate performances in producing expository essays, cover letters, and project reports which met and even exceeded the course requirements.

I have reviewed in this section three streams of empirical works and discussion articles regarding the impact of visual pedagogies and visual literacy training on student language learning and, in some cases, learning across the curriculum. As observed in Part One of the thesis as well as in the literature discussed above, one of the deterrents hampering efforts and initiatives to increase students' visual communicative competence and visual

literacy is the teachers' own lack of visual literacy and training to teach visual communication skills. In the next section, I discuss studies which aim to improve teachers' visual literacy and help them develop skills and methods to teach visual literacy to their students.

5.3.2 Studies on visual literacy for teachers

Another direction of visual literacy research explores the pedagogical aspects of the phenomenon, i.e., visual literacy instruction in various learning contexts. One instance of such attempts was made by Royce (2002), who presents a sample analysis of a multimodal text in the frameworks of Halliday and Hasan's (1976, 1985) and Halliday's (1994) systemic functional linguistics to examine the visual-verbal synergy in English language lessons. Based on the analysis, Royce discusses how TESOL professionals and teacher education can make use of the enormous potential of multimodal resources to teach the four macro skills and vocabulary in English.

Arbuckle (2004) emphasises the unresolved issue of defining visual literacy and unification of the field's divergent theoretical foundations which could be applied to adult basic education and training in South Africa. Despite the author's claim to elaborate on empirical work into visual literacy for the target adult learners, the paper essentially reviews literature and discusses educators' roles through suggested activities based on Harley et al.'s (2000) "Learn with Echo" picture-story project to promote adult literacy.

Atkin's (2006) ethnographic case study investigates the multiliteracy practices adopted by three pre-service upper-primary school teachers and focuses specifically on visual literacy practices within their respective classes. Repeated semi-structured interviews, participant observations, field notes, document analysis, and research journals reveal the conditions needed for a successful enactment of a visual literacy curriculum such as (1) a clear conceptualisation and theorisation of visual literacy in the curriculum; (2) a change in

teachers' conception of literacy or literacies (3) a re-evaluation of teaching goals and objectives in light of the visual-multimodal social development and communication; and (4) available resources, other institutional support, and the use of integrated, flexible instructional approach which embraces and promotes visual literacy.

Similarly, Robertson (2007) conducts a survey of secondary English/language arts teachers in three counties in central Kansas, the USA. The study reports that there was little formal training obtained by the participants and only informal training existed in the forms of independent self-study and peer discussion and that, although visual literacy had been made a standard in the state-wide curricula, emphasis of the state and national exams on verbal literacy put the participants in situations in which visual literacy instruction received secondary treatment. The findings also underscore the critical roles teacher education programs and school districts play in supporting the teachers' implementation of visual literacy lessons.

Britsch (2009, 2012), within the curriculum design and instruction research area, postulated that trainee educators and professionals working with ESL learners be taught to exploit the enormous potential of visual literacy in their teaching. English language development is multimodal as language does not develop as an isolated mode of communication. Based on her empirical work, Britsch (2009, p. 719) proposed that it is essential visual literacy teacher education:

- Incorporates the visual thinking that is so central to the language and content learning of English language learners;
- Provides training in the use of technological tools that facilitate this kind of learning (TESOL, 2003);
- Focuses on sophisticated and informed instructional uses of visual literacy and visual thinking, based on a solid understanding of visual literacy as a basis for second language development.

In 2009, the National Authority for Quality Assurance and Accreditation of Education in Egypt made non-print literacies learning standards, visual literacy included, to be achieved in secondary school education. However, Mostafa (2010), in a survey of teachers in 15 public secondary schools in Egypt, posits that the respondents lacked deep and clear understanding of how visual literacy instruction could be provided to their students and the minimal in-service professional development at their respective schools offered little assistance. To make matters worse, the Ministry of Education in Egypt had not established sufficient training facilities and professional development plans for the teachers to integrate visual literacy pedagogy in their teaching to achieve the prescribed visual literacy standards. A mismatch between the expected visual literacy standards and the existing practice of traditional assessment procedures was reported to be another major flaw in this campaign to promote visual literacy among high school students in Egypt. Mostafa's research findings support those by Robertson (2007).

In a phenomenological study, Yeh and Lohr (2010) investigated eight pre-service teachers at a university in the USA in terms of their abilities to define visual literacy, interpret the meanings of four visual instructional materials, and assess the effectiveness of those materials. In a similar vein, Yeh and Cheng (2010) explore the impact of teaching visual design principles on the development of visual literacy among 86 pre-service teachers at a mid-western university in the USA. Both studies point to a potentially positive influence of explicit instruction in developing visual literacy skills and abilities among the target participants.

T. A. Farrell (2013) uses the visual literacy index developed by Avgerinou (2001) to conduct a preliminary assessment of visual literacy abilities among 125 graduate level preservice teachers from the randomly stratified national population in the USA.

Sadik (2009) investigates how a readily available online visual tool like Flickr could improve pre-service teachers' visual literacy and posits that such a versatile platform holds a key place in language classrooms and should be focused on in both teacher education and language learning programs.

In his study of two groups of Somalian adult migrant students with comparable traits — one with no or low L1 literacy and the other with some L1 literacy — in an adult basic education program in the upper Midwest of the USA, Bruski (2011) used a demographic video interview and an individual think-aloud session with verbal report prompts, both facilitated by an interviewer speaking the L1 of the participants, to observe if literacy in the first language impacted the participants' visual literacy after the training was provided. Both groups of participants were exposed to 12 rudimentary images containing common "graphic devices" such as an arrow drawing attention and indicating a movement, a bubble indicating speech, a compass indicating a map, etc. L1 literacy was found to be non-assistive in the participants' interpretations of the images. Instead, previous exposure to and individual experience with graphic devices would be more important, and so would contextual clues be the images in narrowing the learners' interpretation possibilities to match those intended by the designers or teachers.

Mathews (2014) uses "the Arrival" by Shaun Tan (2006), a picture book with no verbal description, to demonstrate how pre-service secondary social studies teachers can use such a resource to teach visual literacy to English language learners in their classes. A series of lessons involving three stages of instruction paralleling the three parts of the picture book are proposed, with stage one aiming to build the learners' linguistic knowledge repertoire based on projected images extracted from the picture book and stage two involving student group discussion of different scenes depicted in the book plus the teacher's introduction of

additional, related books to expand the learners' background and contextual knowledge of the issues depicted in the book. Stage three involves students in practicing visual literacy skills such as reading maps and images. The study offers practical suggestions on how a picture book can contribute to the verbal and visual literacy development in a language classroom, but fine details about the types of visual communication skills which are targeted in each stage of the lessons and how the skills can be taught to the students would make the report even more useful for visual literacy teachers and researchers.

In summary, the majority of the literature reviewed in this section has indicated that visual literacy can potentially contribute to language learning in substantial ways, while a few studies suggest otherwise, attributing visual pedagogies' lack of positive impact to the implementation and the design of the particular studies. In the next section I provide a brief discussion of the Cambodian ELT landscape and Cambodian teachers' needs for professional development. I do this to argue for an integration of visual literacy instruction into Cambodian ELT syllabuses and curricula.

5.4 Cambodian ELT and Cambodian teachers' professional development needs

The "phenomenal" boom of English language teaching and learning in Cambodia over the past two decades (S. H. Moore, 2011) brought a bricolage of courses and their accompanying materials and instructional approaches to the industry – what S. Clayton (2008, p. 144) calls "a burgeoning private sector in education with English language teaching at its core." With limited funds and training opportunities together with restricted access to and knowledge of the latest ELT research (Takeda, 2015), Cambodian English teachers, as reported in Chapter four, are more often than not confined to a textbook-driven pedagogy and treat coursebooks as "unexamined" curricula, a situation which deprives

learners of language learning "principles" to help them learn a language with optimal results (Macalister, 2016, p. 41). Igawa (2008) made a similar observation in his survey with 36 Cambodian teachers of English at various levels of education as training in teaching skills and methods was identified by the participants to be the most preferred area of professional development.

Given the rapid integration of visual and multimodal meaning-making resources in communication and education coupled with Cambodian learners' rapid embrace of information and communication technology (Richardson, 2014), it would be justifiable to concentrate teacher training efforts around teaching students to navigate, utilise, and contribute to their visually saturated world and develop their multiliteracies as required by today's personal, public, and workplace spaces (Cope & Kalantzis, 2009, 2015; Kalantzis et al., 2016).

In sum, visual literacy and visual arts pedagogies have substantially grown to occupy an important place in the main curricula for both primary and secondary education in the three English-speaking countries, i.e., the United Kingdom, Australia, and the United States of America. These visual literacy pedagogies are particularly relevant to this thesis and the English language learning contexts in Cambodia, especially that used in the Australian Curriculum (Figure 5.1). These bodies of work have been adopted as a guiding framework for this thesis to develop a visual literacy instructional framework of its own for English language teaching in Cambodia.

Moreover, a review of the visual literacy research conducted between 1991 and 2016 tends to favour the use of visual materials such as PowerPoint (e.g., María, 2013), still images and videos (e.g., Zewary, 2011), and graphic organisers (e.g., Kang, 2004, and Manoli & Papdopoulou, 2012, Sam & Rajan, 2013) to improve learning attitudes, motivation, and learning outcomes in English reading comprehension, grammar,

vocabulary, and abilities to transfer a text into a visual representation. Those studies' findings, however, were inconclusive regarding the extent to which students should be taught to use these visual resources, that is, implicitly or explicitly.

5.5 Part Two research questions

Following from the above review of the literature, Part Two of the thesis is framed by the following the research questions.

- 6. To what extent does the implicit teaching of visual literacy promote English language learning?
- 7. To what extent does the explicit teaching of visual literacy promote English language learning?
- 8. Where both approaches of visual literacy instruction facilitate English language learning, what pedagogical framework can be used to promote visual literacy among Cambodian English language learners and teachers in the long term?

5.6 Conclusion

The literature review in this chapter has identified two main research niches in the recent literature concerning visual literacy teaching in English as a first language and EFL/ESL contexts. First, given the critical role of visual literacy and the potential enormity of its relevance to English language learning, there is an underrepresentation of ELT visual literacy research in the literature as reflected through the relatively small number of studies archived across leading databases. The recent spike of empirical studies indicates a growing interest and expansion of the field, which by itself necessitates fresh research data, especially in contexts where English assumes an additional language status. Second, the literature lacks systematic, rigorous, and commonsensical instructional procedures to teach visual literacy

which could be implemented in the language teaching contexts where human and physical resources are limited.

This literature review does not aim to disregard verbal or textual literacy. In fact, as Kalantzis and Cope (2012) state, verbal literacy is more important now than ever, but the visual and multimodal orientation of educational and social development warrants that other critical literacies like visual literacy should be emphasized and taught explicitly in ELT curricula. Verbal and visual meaning-making resources in language teaching can and should co-exist, and learners will be better off when equipped with skills and abilities to manipulate these resources to support their language learning and multiliteracies development.

The following chapter presents an action research study, the first of its kind in Cambodia, to develop instructional strategies and materials to train an EFL teacher in Cambodia in visual literacy instruction. The study goes on to investigate the teacher's implementation of a series of visual literacy lessons in an EFL class at a leading local university.

6.1 Introduction

This chapter aims to answer the research questions set out in Chapter 5. It presents findings of an action research study conducted for Part Two of this thesis. The findings were corroborated through recursive analyses of the data generated from six data collection methods, namely visual material analysis, classroom observation, lecturer interview, student focus group discussion, student diary, and survey.

This chapter first shows key visual resources found in the learning materials used by the lecturer and student participants during the study. Then, it discusses the types and roles of those resources, and analyses their significance in helping improve the students' language learning outcomes. Next, the benchmark-setting week of the study, explained in Section 6.3, is recounted in a reflective narrative in order to set the scene for the two cycles of the action research study. Findings from Cycles One and Two of the study are then presented in two separate sections, each having its own extensive discussion. These findings and their discussion comprise the heart of the thesis and directly relate to Part One's case study, which was presented earlier in Chapters 2, 3, and 4.

6.2 Visual resources in the learning materials

The learning materials included in this analysis were collected during the classroom observation period from 21 December 2015 to 9 March 2016. They comprise the learning materials in Units 6, 7 and 8 in the subject's coursebook – *New Headway Upper-Intermediate Student's Book*, the visual and multimodal materials used by the lecturer and the students, and real-life objects. The analysis of the materials follows the conceptual framework of multimodal discourse analysis (da Silva Joyce, 2014; Kress, 2003; Kress and van Leeuwen,

2001, 2006), which draws on the foundational concepts of M.A.K. Halliday's Systemic Functional Linguistics and has been used in many evaluations of ELT coursebooks (Li and Qu, 2014; Weninger and Kiss, 2013, 2015; Yassine, 2012).

6.2.1 The coursebook

In recent decades, ELT coursebooks have increasingly become more multimodal and incorporate more visual design. Kress (2003) observes that "it is possible to see writing once again moving back in the direction of visuality, whether as letter, or as 'graphic block' of writing, as an element of what are and will be fundamentally visual entities, organized and structured through the logics of the visual" (pp. 6-7). It is justifiable to analyse the meaning making potential and limitations of each modality and the pedagogical advantages of combining the multimodal affordances (i.e., verbal, oral, and visual) readily available in the coursebook so as to help improve teaching effectiveness and learning outcomes.

The main materials used in the Core English (CE) lessons observed in this action research were Unit Five, the first half of Unit Six, Unit Seven, and the first three pages of Unit Eight of Liz and John Soars' (2014) *New Headway Upper Intermediate Student's Book* (4th edition) published by Oxford University Press. This is the fifth of the six books in the *New Headway* series which teach general English from beginner to advanced levels.

The Upper-Intermediate book has 12 units, arranged by topic, language points in focus, and language skills, as indicated in the book's contents pages. Each unit is eight pages long and is structured in a uniform way: test your grammar, introducing the theme of the unit and the target language points in context, followed by grammar focus and practice exercises, then skill practice, vocabulary practice, and everyday English. Besides the 12 units, the end of the book contains "Tapescripts" or transcripts for all the listening texts; Grammar reference providing explicit explanation of grammar points taught in each unit; Word list showing important vocabulary for each unit and its pronunciation with phonetic

symbols; Extra materials apparently designed for fast learners who have completed exercises in the units before others and need additional practice; Verb patterns listing verbs in the units which require "to-infinitive" or "gerund"; Irregular verbs; as well as Phonetic symbols. In addition, the teacher has access to the teacher's book, class audio CD, iTools for digital classrooms, the teacher's website for additional teaching resources and ideas, while the students can use the student' book with i-Tutor DVD-ROM, student's workbook, and student's website for extra practice and games.

The Headway series is touted as the world's best-selling English language teaching coursebooks on the official ELT Oxford University Press website and is immensely popular, as indicated by its multiple editions and the number of times it has been reprinted.

Three modes of representations with meaning making potential were analysed in this study in terms of their pedagogical functions and relations in promoting language learning opportunities for students – image, floating verbal text, and page layout (Bezemer & Kress, 2008).

6.2.1.1 Image

Displayed in Figure 6.1 is a page taken from Unit 5 of the coursebook. The page features photos of three inspirational teenagers discussed in the text the students are to read on the next page, as shown in Figure 6.2. As in the case of many other pages, the photos occupy approximately half of the space on the page and present to students authentic, real world figures whose inspirational stories are narrated in the reading text.

In Cycle One of this action research, the students were taught implicitly to discuss the photos, and decode their meanings and their relations to the reading text. The implicit teaching aimed at helping the student participants interpret visual representations without having to learn technical terms of visual literacy. The three photos are presented vertically, with one on top of the other, starting with Nick D'Aloisio (henceforth, Nick) and followed



Figure 6.1. Photos of three inspirational teenagers Figure 6.2. Corresponding texts about the the reading texts in Unit 5 discuss three inspirational teenagers

by Jake Bugg and Sarah Thomas. Each photo is captured with a unique camera angle – high angle for Nick, low angle for Jake, and eye-to-eye level for Sarah. Students are invited to view the photos from different perspectives and power relations. In the first photo, the students are positioned in a higher position than Nick, who is sitting, smiling, and looking at the camera and, thus, creating a direct connection with the audience. The fact that Nick is seated would possibly "humble him down", while raising the status of the students as individuals who can stand and look down at Nick, a multimillionaire before the age of 18. Nick is presented as a normal teenager in school with no extraordinary features or qualities – information which is not found in the corresponding verbal text. Behind him is a bookshelf, and he is cradling a MacBook computer in his lap, a possible allusion to the text stating that Steve Jobs was Nick's idol. Outside the photo frame is a mobile phone held up by a hand, with its screen facing the audience and lit up to show "Summly", Nick's mobile application

which made him a multimillionaire. This inclusion of a mobile phone with its screen turned on could be said to bear an iconic value symbolizing Nick, an app entrepreneur, and his mobile phone application "Summly." Other information possibly revealed through the photo but not expressed in the verbal text is Nick's apparent humble and casual aura, which would most likely engage the student readers and motivate them to read the text about Nick. The photo encodes both the information in the text such as "He is a teenager... enjoying and working hard at school" and information not found in the text – Nick's friendly and humble personality.

In the second photo frame is Jake Bugg, a singer and song writer, who can be seen holding a guitar and presumably performing on stage, judging from the stage lights projected above and behind him. Also behind him is a sign with his name written as a white signboard probably displayed on stage to self-promote and brand himself to the audience. The students are invited to look up to Jake as an entertainer revered by fans, boosting the power position of Jake. Such information is not emphasised in the corresponding verbal text. Outside of the photo frame to the left is a guitar symbolizing Jake, the singer and songwriter.

Sarah Thomas, on the other hand, was photographed from an eye level angle, placing the subject in the photo and audience on the same power level. Pictured with Sarah is an older lady with her hand placed on Sarah's shoulder, displaying closeness, attachment, and trust – the qualities needed of a social worker like Sarah, the carer. Both can be seen smiling and looking straight at the camera and, thus, the audience. Outside of Sarah's photo frame is a symbol containing both sides of the hands opening to support a person seated in a wheel chair, signifying the job of a carer held by Sarah.

In the three cases described above, visual affordances enhance and supplement information generated by the corresponding verbal texts.

6.2.1.2 Floating verbal text

As defined earlier, a "floating verbal text" is a predominantly textual element placed in a shape (e.g., box, bubble, cube, etc.) and/or shaded with a coloured background. These visual properties distinguish a floating verbal text from a regular text which runs across pages. Boxing plus colour shading set clear boundaries between different entities on a page and, importantly, effectively highlight the key lesson components students should focus their attention on. Floating texts such as speech bubbles provide examples of interactive items students are to carry out in a given activity, while a shaded section might alert students' attention to it, as exemplified by Figure 6.3.

6.2.1.3 Page layout and typography

Most of the pages are divided into two columns with clear boundaries, as seen in Figure 6.4 – a pattern which can be observed throughout the book. One of the exceptions is the first page of Unit 8, as illustrated in Figure 6.5. In this case, the images change the layout of the page and appear to take on a prominent role in learning activities. In many cases,



Figure 6.3. The section circled in red is one of the many floating verbal texts found in the coursebook



Figure 6.4. The typical two-column layout found throughout the coursebook

Figure 6.5. The first page of Unit 8 with a different layout from most pages

images occupy close to half of the space on the pages. Different font types, sizes, and colours can also be observed for different sections and sub-sections. This different yet consistent typography serves the function of signposting and helping students navigate through the units. Recognising the page layout and sectioning patterns can help speed up students' reading and help them decide which components on each page they should make a concerted effort to engage with and learn. Just like the verbal texts, the visual meaning-making resources combined create plentiful learning opportunities which supplement those generated by the texts themselves and, on many occasions, cannot be achieved by the texts alone.

6.2.2 Additional visual resources used by the lecturer

In addition to the resources in the coursebook, a selection of visual cues, including but not limited to still images, real-life objects, graphic organisers, and videos, was used by the lecturer to improve the student participants' engagement in the class activities and their language learning. Those visuals were downloaded from the Internet and presented to students through an LCD projector.

6.2.2.1 Still images

Still images, in this case, included photos, drawn cartoons, diagrams, and logos. Figure 6.6 shows the projection of a collage of pictures reporting an incident occurring in an Air Asia flight, which the CE lecturer used to contextualise the activity, introducing the student participants to the topic in focus "In-flight announcement".

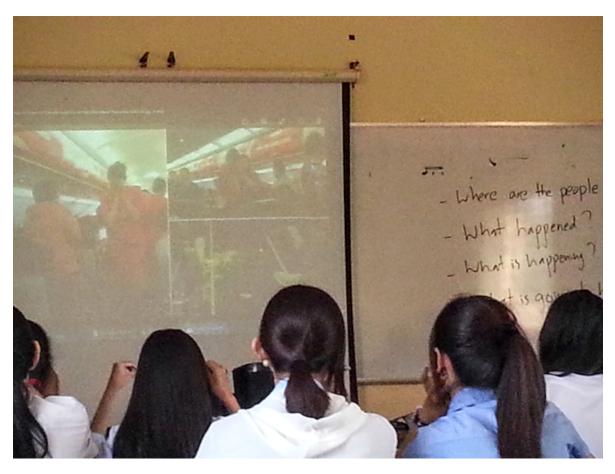


Figure 6.6. A collage of pictures used to generate student participants' interest in the lesson and to contextualise the activity which followed

6.2.2.2 Graphic organisers

The lecturer produced a number of graphic organisers, at times with plans and at other times apparently out of spontaneous improvisation. The graphic organisers were drawn on the whiteboard and explained to students orally. The students took notes from

them or captured them with their smart phones. The roles of such organisers in helping students learn the target language points will be explored in Section 6.3.

6.2.2.3 Videos

YouTube was the main source from which the lecturer extracted videos for his teaching. The videos were used for both pre- and post-activities on top of the practice exercises in the coursebook. Figure 6.7 shows a screen capture of a video the lecturer played for the class before the students read a biography and did exercises about Jamie Oliver, a celebrity chef. The lesson was about expressions of quantity, and playing the video about the amounts and numbers of ingredients needed to cook the dish displayed was of high relevance.

6.2.3 Additional visual materials used by the students

Students also contributed their resources to the learning activities by bringing to the class the visual materials they had collected personally and shared with their classmates (See Figure 6.8). Those materials, as noted in my classroom observation, included digital images and cutouts, music videos, real-life objects, and PowerPoint files (See Figure 6.9). The visual



Figure 6.7. Screen capture of a video the lecturer played for the class



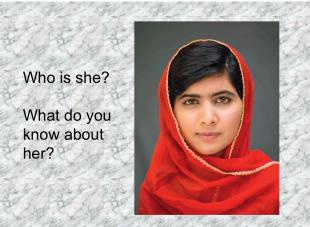


Figure 6.8. Students' visual presentation

Figure 6.9. PowerPoint slide by a student on an inspirational teenager

materials were displayed either by posting them on the wall or projecting through laptops and smart devices.

As elucidated in this section, the learning materials collected during the study contained a great deal of dynamic contents rich in visual affordances which could be transformed into learning opportunities and props to bolster English language learning speed and productivity. The depth and breadth of those visual resources have only been partially explored. Their learning values are yet to be capitalised on fully by the lecturer and student participants through a systematised visual literacy framework, the discussion of which will be presented in Chapter 7.

The next section describes one week of non-participant classroom observation conducted by the researcher prior to the start of the action research study in order to analyse the existing visual teaching and learning practices before the pedagogical interventions were to be introduced to the student participants in Cycles One and Two of the action research study.

6.3 Benchmark-setting week

As explained earlier, the lecturer participant-collaborator (henceforth, lecturer) had learned about my thesis research during my Part One data collection conducted at the same

research site, and expressed an interest in using visual literacy instruction and its pedagogical implications to help improve his English language teaching practices. From that point, we exchanged electronic messages over the course of six months to explore the possibility of conducting a joint study in one of his classes to investigate issues and challenges in his teaching, his students' learning, and materials and curriculum, and then to find ways to improve his teaching through visual literacy instruction. As seen in the lecturer's statement of interest (Appendix 6.1), the lecturer and I then decided to use the second phase of my thesis research as an opportunity to improve his teaching and develop his professional potential. This joint commitment led us to collaborate on an action research study, which became Part Two of this thesis.

Before we began to collect data, in order to capture an accurate picture of the prestudy teaching and learning practices, the lecturer and I decided to spend time discussing the forthcoming lessons which would be the focus of the action research study. As we discussed the issues the students were facing, the lesson objectives, and what a typical lesson would be like, the need to observe the lecturer teaching actual lessons in the class became self-evident. The semester was approaching its end, and we decided I would spend just one week observing the lecturer's "normal" teaching and the student participants learning in their natural environment without being introduced to any specific teaching interventions. We called this week a "benchmark-setting week" — one week of four 75-minute lessons. On the weekend following the benchmark week observations, the lecturer and I then discussed the teaching and learning issues further in a one-on-one interview. The following subsections present the information we gathered and discussed during and after the benchmark-setting week.

6.3.1 The lecturer participant's pre-intervention teaching plans and methods

In all the lessons observed, the teaching was coursebook-driven and, therefore, aligned closely with the materials presented in the coursebook. Suggested learning tips and teaching strategies for the materials are explained in the Headway teacher's book. All the activities were pre-arranged in progression as organised units aiming to help students learn and practice the target language points. The lecturer was content with the richness of the readily available course materials, commenting that:

(Extract 48)⁷ ... unlike other subjects, I'm not sure about other subjects, but for Core English, we have quite a good number of resources. We have the teacher's book, we have the CD, the resource disc for the teachers, and not to mention some other resources from the Internet as well. [Pre-study lecturer interview, 2:19⁸]

Given the strenuous efforts the lecturer had to put into teaching, his limited teaching experience, and the institution's policy requiring the same exam items for all classes that taught this subject, adhering closely to the coursebook materials and the accompanying teaching tips and methods would be considered a fitting and obvious solution for teaching in the current learning situation. However, the lecturer was conscious of the coursebook's limitations and did make efforts in producing and using additional materials, especially visual ones, to supplement the lessons and optimise learning outcomes. The teaching was conducted mainly in the oral mode, with the lecturer most frequently addressing the students as a whole class.

⁷ The language use in the extracts has been slightly edited for improved readability while efforts were made to ensure the original meanings of the extracts were not affected.

⁸ This timestamp indicates the time the extract was taken from its corresponding transcript. The number means the extract was taken from the interview starting at the 2 minutes and 19 seconds' mark.

6.3.2 The lecturer's approach to visual teaching

Although the lecturer was familiar with teaching this particular unit of the coursebook, he had not previously focused extensively on its visual dimension. Having received hardly any prior training in visual teaching, the lecturer had to depend on his colleagues, guides in the teacher's book, and his ability to search for explanations through Google® to help him interpret the visuals in the coursebook and decide how to teach them to the students. The visual elements of the lessons would be discussed early on, in the beginning stages of the lessons to establish the learning contexts, draw learners' attention, and build background knowledge necessary for understanding the core of lessons. The common approach, as revealed in the lecturer's one-on-one interview, would be asking students thought-provoking questions about the visuals.

(Extract 49) ... normally, I focus on those visual resources at the beginning stage of the activity, which means that we focus on the visual resources first, and then the students are asked to do some certain kind of activity according to the book... Almost all of the time, even with or without the instruction [in the book], I still ask my students the questions... some of the common questions are: Who are these people? What are they doing? And why are they doing it? And some other questions, like what do you think will happen in the text or what will happen next? [Pre-study lecturer interview, 7:05]

Over the space of two weeks, the lecturer participant used a timeline to teach future perfect tense (See Figure 6.10) and a table to summarise the grammar lessons on future tenses.

(Extract 50) It's more about my previous experience with the previous classes. I used to teach that point to my former students, and at that time, I didn't use this kind of visual aids to help the students. I just asked them to read the Grammar Reference at the back of the book without the visual aids, and then I tried to reflect back to my teaching, "Oh, maybe it would be a good idea if I try to point out the difference of certain tenses in a table so that everyone can see it, and everyone could understand the language point more clearly." That's what I thought, and then I did it. It's better that way than just asking them to read the Grammar Reference. Because sometimes they just read for the sake of reading, and then they just forget, but if I draw, I write something on the board, then I can get all of their attention. They can remember clearly. I think it's better. [Pre-study lecturer interview, 18:17]

The use of such "graphic organisers" seemed to be effective in helping students understand the target language points and remember them well. As I observed, the students could understand the use of future perfect tense easily and quickly and could even make correct sentences spontaneously after being shown and receiving an explanation with a future perfect tense timeline.

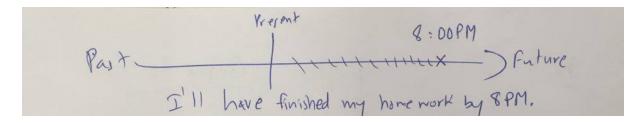


Figure 6.10. A graphic organiser: The timeline drawn on the board by the lecturer

In the case of the future tenses summary table, the students were able to compare and contrast different future tenses without having first to read the lengthy grammar explanation in the book. The student participants' ability to acquire the two grammar points quickly could be attributed to the possibility that they had come across the grammar points earlier. Yet, the graphic organisers' role in simplifying the explanation and organising various Future Tenses into one table was undeniable. The students had no problem recalling and explaining to others about the Future Tenses visualised in the table, as displayed in Figure 6.11.

A visually-oriented activity, depicted in Figure 6.12, was conducted as a pregrammar practice in the third lesson of the week. For this activity, the students were introduced to six portraits of people at different ages, looking forward to some future key life events. The students were asked to study the pictures and guess what the people were looking forward to. In this way, the students would be framed into a situation requiring them to use some language form to express a future activity.

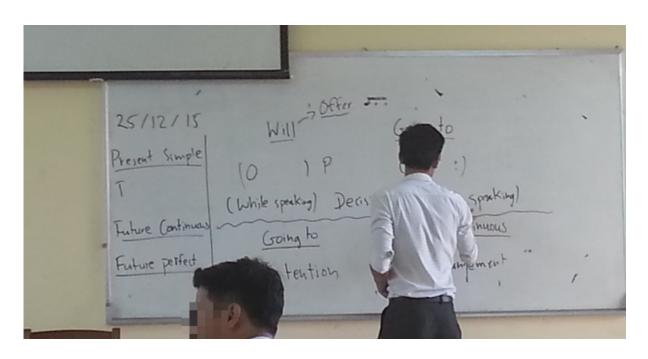


Figure 6.11. The summary table drawn on the board by the lecturer to compare future tenses

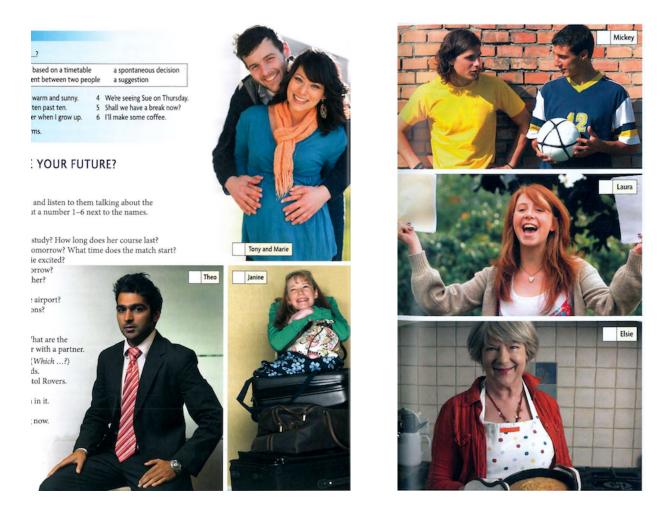


Figure 6.12. The first two pages of Unit 5, showing people looking forward to different life events

6.3.3 The lesson objectives

Having clearly defined learning objectives helps direct students' learning and enables appropriate learning activities to be implemented in order to achieve the desired learning outcomes. In the action research study context, the lesson objectives were overwhelmingly influenced by the units in the coursebook as the lecturer would follow the activities in the units closely. For the lessons in the benchmark week and the next few lessons which followed, the students were expected to recognise and identify prefixes and make antonyms with those prefixes, use future tenses correctly in sentences, and use expressions with the verbs "take" and "put" in situational conversations. The lecturer also expressed an intention to help the students develop visual communication skills which would be sufficient for them to discuss visual texts in pairs or groups on their own, rather than depending on his guidance alone.

6.3.4 The student participants' observed interests in visual texts and their ability to interpret them

In the third lesson in which pictures were discussed in a good proportion of the lesson's duration, the students displayed strong interest in the pictures, and all were observed to participate in the picture interpreting activities. Citing one instance in which visual materials helped complement language learning, the lecturer remarked:

(Extract 51) For me, I think they [video clips downloaded from YouTube] do help students remember. I think it is more interesting for me. I noticed some of them were having a good time watching the clips. Some of them were so excited, since maybe some of the activities were new to them, so I think most of them did enjoy watching the clips. [Pre-study lecturer interview, 12:15]

As for the students' ability to tap into visuals for their learning, several students appeared to be more competent and experienced as opposed to the majority. The lecturer confirmed that:

(Extract 52) In the class, I notice a few of them [who could understand visual meaning making], but I could not remember. I just know that there are a few of them, and they are very good at answering, I mean, all my guiding questions about the photos. They can answer all those questions, but in general, I think there are more students who could not interpret, rather than people who could. [Pre-study lecturer interview, 22:55]

My classroom observation further validates the lecturer's assumption, suggesting that the learners had developed interest in visual texts they were exposed to in their learning but had acquired a restricted ability to use them to their learning advantage. However, the lecturer cautioned that:

(Extract 53) The common challenge that I face in teaching with those visual resources, for example, let's say, photos, I think is that it is sometimes time-consuming. If I focus too much on those photos or pictures, some students might feel some kind of boredom or lack of interest. They think that it is not really effective or useful for them when the teacher focuses too much on the photos or pictures. [Pre-study lecturer interview, 27:23]

6.3.5 The lecturer participant's motivation to conduct the study

Three motivational factors prompted the lecturer participant to collaborate in this study: preparing students for the real world, helping students understand the language point, and helping the lecturer himself learn new things.

- (Extract 54) I think one of the main purposes of doing that [teaching students visual literacy] is try to prepare them for the real world, I think, because after they graduate, it's not over in terms of reading the signs, reading the, interpreting the photo in public places or maybe at a workplace. So I think it's somehow like a kind of what we call the mini practice for them in the classroom to train them, to teach them bit by bit about understanding the sign, understanding the visual cues, and try to interpret in some ways. [Pre-study lecturer interview, 25:00]
- (Extract 55) I think they [those visual resources readily available in the coursebook] do help much. They help, in terms of helping the students understand the language point, and without them, I think that probably it would not really be interesting for the students, which is also a main factor if you cannot get the students' attention or interest into the lesson, they could not engage or participate with you. [Pre-study lecturer interview, 33:31]
- (Extract 56) I think it's some kind of help for me as a teacher to learn new things. So in order to focus on that kind of visual cues or photos, I myself need to understand it as well. So I think it does help me as well as the teacher or lecturer. The more I do research, the more I prepare about those visual cues,

the more I understand, and then I can improve myself. [Pre-study lecturer interview, 26:17]

The lecturer also intended to explore through the study teaching strategies to equip the students with skills and abilities which would enable them to exploit independently the language learning potential of visual affordances they are surrounded by in their learning context and actual everyday communication.

6.3.6 The student participants in their pre-intervention learning environment

This section provides a brief profile of the students generated through the preintervention survey and my non-participant class observation in order to better understand the student participants' interests and needs.

The students on average were 20 years of age. Twenty (77%) out of the 26 students who completed the questionnaire reported that they were doing another degree, with 11 (42%) of them studying Accounting and/or Finance. Fifteen (58%) of them had been learning English longer than six years. The student participants were, observably, funloving individuals who at the suggestion of "Let's do something fun" would not raise an objection. They enjoyed using each other as learning resources, would not mind teasing others or being teased after making a mistake, and developed considerable confidence in taking risks and talking openly in the class even when they suspected what they were about to say would be laughed at by their classmates. They were cooperative and participative in learning, overall, despite the intermittent displays of disinterest or boredom by a few students at different times, for example, by leaning lazily on their desk or checking their smart phones while the class was focused on a learning activity. These students, after these intervals of disengagement, appeared to make efforts to re-engage in the activities, but they were not always successful in doing so and were then the object of some ridicule by their peers. They found ways to make light of the situation and carried on learning like nothing

had happened. A discrepancy in abilities was observed among the students, with around half of the group at the correct ability level while a quarter appeared under-proficient. The rest, labelled by the class as the "elite" group, appeared to be superior in English language abilities and were the ones the others would turn to for leadership when doing exercises, and, therefore, seemingly displayed a desire to get more out of the lessons. A good majority of the students brought along portable digital devices like smartphones, tablets, and laptops, and did use them for learning as well as, apparently, non-learning purposes while the lessons were under way.

6.3.7 Post-benchmark-setting week and preparation for the action research

Over the period of one week following the benchmark setting week, the lecturer and I assessed and reflected on the insights from the benchmark-setting week and used the inputs to consolidate the teaching plans we jointly prepared for action. We met face to face two times to discuss how to overcome the challenges, how to modify the visual teaching method for improved learning outcomes, and what indicators of learning improvement we would hope to collect. Other than the two meetings, we also used Facebook messenger and text messages for more immediate correspondence and less extensive discussion of the intervention issues. We discussed a range of visual literacy teaching ideas and brainstormed a number of challenges we would face in his teaching and in the implementation of the action research. The lecturer anticipated that implementing the visual teaching interventions would add demands to his preparation time, effort, and resources and the interventions could be overwhelming and confusing for a number of the students. It would also be a challenge to have the students understand the necessity of the interventions and their connection to language learning. With very limited training in visual teaching, the lecturer was rather concerned about his ability to implement the interventions in a way which would enable the learners to develop the desired level of visual literacy.

Constrained by the time factor and other practicalities such as the lecturer's workload, his limited visual literacy and willingness to teach new visual analysis skills, and the enormity of the regular curriculum content he had to cover, we agreed through this series of discussion sessions that the action research would entail two cycles of visual pedagogical interventions to be implemented in the next six weeks. As previously noted and discussed in Section 3.5 in Chapter 3, action research is a form of research which is typically initiated by teachers and is driven by their teaching problems, issues, or even motivation to introduce change or improvement in their teaching situations (Burns, 2010; Carr & Kemmis, 1986; Craig, 2009; Mertler, 2009; K. Richards, 2003). The researcher and lecturer agreed that this action research would set out to achieve teaching goals set by the lecturer to ensure that the interventions would be "within the realm of possibility" for the lecturer to achieve (Craig, 2009). All the decisions were discussed and made through our collaborative meetings. On the occasions where the ideas were initiated by the researcher the lecturer had the authority to decide whether to take the ideas, adapt them, or discard them completely in light of the practicality of the teaching situations and achievability of the ideas themselves. This collaboration pattern was reinforced throughout the study to ensure that the lecturer developed a sense of belonging, ownership, participation, commitment, and agency toward the study. Only then could the action research involve all parties in the learning, and the research would produce practical results with potential to influence the lecturer's teaching and learning practices (Kemmis & McTaggart, 1988).

We developed a series of teaching blocks pre-planned for both cycles of the research, with Cycle One spiralling into Cycle Two. The plans were orderly, organised, but not rigid, leaving room for adapting depending on the student participants' reception of the interventions. The plans were drafted in light of Kemmis and McTaggart's (1988) assertion that action research needs to be flexible and responsive while still remaining rigorous and

systematic. In addition to subjecting the research to two spiral cycles of planning, interventions/acting, observation, and reflection, the action research in this thesis also meets the other two criteria of action research proposed by Carr and Kemmis (1986). The first criterion requires action research to study about a social practice as a "strategic action susceptible of improvement" (Carr & Kemmis, 1986, p. 165), and the second criterion requires that action research involves those responsible for the social practice, which in this case were the lecturer and the students themselves, and gradually expanding the project to include those affected by the practice (Carr & Kemmis, 1986), which could be the lecturer's colleagues and the other learners taking the same subject at the target research site.

It is worth pointing out at this stage that the visual literacy interventions in both cycles aimed to integrate English language learning with the learning of visual analysis skills. The visual interpretation activities, both implicit and explicit ones, conducted in this action research provided opportunities for the student participants to improve their English proficiency subconsciously. The lecturer did not teach grammar and vocabulary explicitly during a visual literacy lesson, and the student participants were not required to develop explicit declarative knowledge of grammar and vocabulary in the visual literacy instruction. Some of them, however, did end up doing that when they made efforts to clarify their understandings of the communicative messages embedded in the visual materials in the coursebook and those provided by the lecturer participant, the visual skills required to analyse the messages, and the language system they needed to use to discuss the messages. In other words, the students learned the visual analysis skills, first implicitly and then explicitly, in order to develop a certain level of visual literacy so that they could interpret certain visual resources in learning and real-life communication. In the process of doing that, in addition to those generated by the language-focused activities suggested by the coursebook and the extra handouts/worksheets developed by the lecturer, the students had

opportunities to practice using the target grammar points and vocabulary for meaningful communication, for example, to discuss the purpose of an advertisement using either implicit or explicit visual analysis skills taught in the two cycles of this action research. By this principle, the two visual instructional approaches align well with the basic concepts of the Communicative Language Teaching approach, reviewed in Chapter 2 of this thesis, in promoting an acquisition of communicative skills and competence in context – a highly visual one in this case.

The next section presents the findings and discussion of Cycle One of the action research study, during which the student participants were taught implicitly a number of visual interpretation techniques. Cycle Two, reported in Section 6.5, involved the same students being taught visual literacy skills explicitly.

6.4 Cycle One of the action research study

One week following the benchmark week, the lecturer participant and I implemented Cycle One of the study, which saw the student participants being introduced to the implicit teaching of visual resource interpretation techniques. The students were tasked with using the visual materials in the coursebook as well as the supplemental ones sourced from different websites by the lecturer. The teaching approach was to provide a set of guiding questions to help students interpret the visual resources and connect them to language learning, starting with a teacher-led activity and ending with students' independent practice. During this process, excluding guiding questions, the students worked in pairs or in groups to decode the visual cues on their own. Two weeks of lessons (eight 75-minute lessons) were observed. In order to reflect on Cycle One interventions and their impact on the students' learning, the lecturer and I held three meetings. The first meeting was after the first week of interventions, while the second and third ones were after the second week of interventions.

6.4.1 Participants' attitudes toward, understanding of, and application of visual learning

In contrast to the more common approach of researching language learning attitudes mainly through questionnaires (e.g., Kara, 2009; Robertson, 2007), this study examines the construct of attitudes through the lenses of one-on-one interview, focus group discussion, learner diary, classroom observation, and questionnaires, which were used to triangulate the study findings and to add evidence for improvement in language learning after the Cycle One interventions. The plurality of data collection methods helps the researcher more fully examine, discover, and understand the complexity of the participants' visual learning and teaching practices through a close investigation of their attitudes as well as other learning factors such as motivation, engagement, critical thinking, as promoted or hindered by the visual literacy instruction. Such deep understanding is paramount for the action researcher to generate insightful findings about the social practice under investigation, which is visual literacy instruction in English language learning, and derive implications with potential to better understand and then improve the situation in which the visual teaching takes place.

The matter of a learner's attitude is acknowledged as one of the most important factors that impact on learning language (Fakeye, 2010). Kara (2009), on the other hand, stated that attitudes towards learning, besides opinions and beliefs, have an obvious influence on students' behaviours and consequently on their performance. De Bot et al. (2005), in a similar vein, assert that language teachers, researchers and students should acknowledge that a positive attitude of students facilitates second language learning, while Saade (2007) and Pierce, Stacey & Barkatsas (2007) showed that students' emotions, interest and beliefs about learning affected their behaviours. Positive attitudes help propel learners to develop positive feelings about the course, leading to strong learning engagement and efforts in making the most use of the course in developing their language competence.

6.4.1.1 The lecturer's attitudes towards visual learning

The lecturer personally stated that he is a "visual person" himself, being a keen user of visual resources in communication, learning, and teaching. Visual learning in the current context of English language education, the lecturer contended, is embedded in the language learning process, and has facilitative values helping learners acquire the target language.

- (Extract 57) Visual cues here, they have their own benefits, I can say. I think they can, what we call, yeah, complement the information or the point that the book is trying to give to the students to remember or to understand. Yeah, I think, the cues, the visual cues here help students to understand more, or to remember it more clearly. [Pre-study lecturer interview, 14:32]
- (Extract 58) If we have only the text itself, without the photo, without the illustration, it would be much harder for the students to get the main idea or to get the background knowledge before they read the text. Yeah, that's one example. [Pre-study lecturer interview, 16:05]
- (Extract 59) I think it [visual learning]'s a good thing for them to know, maybe not for now, but in the future. I think it might be useful for them. It comes in handy when they start working or when they graduate. They might use it, need it for their work or something like that. [Post-Cycle One lecturer interview, 2:59]
- (Extract 60) I think the better they can interpret the visuals, the more they will understand the language points that are discussed through the visuals in that part of learning. [Post-Cycle One lecturer interview, 3:37]

The lecturer's perspectives parallel those of Yang and Lau (2003), Merisuo-Storm (2007) and Watters & Watters (2007) about learners' likelihood to invest more efforts in partaking of activities to learn skills they anticipate to be effective and useful for their personal development and their future jobs (as cited in, Kara, 2009). Learners would be "more eager to learn information that was congruent with real life and which they thought they could make use of in the future" (Kara, 2009, p. 102) Visual learning as part of the language learning process potentially makes the whole learning experience even more worthwhile for the learners.

6.4.1.2 The students' attitudes towards visual learning

With Cycle One interventions, the students have expressed highly positive attitudes about visual learning and its potential benefits for their language learning.

- (Extract 61) When he [the lecturer] played us video and tell us to write down ingredients, it actually improved our listening skill. It actually makes us focused, and also it's really creative, not just to study from the book, but actually have something that actually make, like you know, us see and imagine what it's really like, and also engage us in the, in the study more than just reading the book. [Post-Cycle One student focus group, P59, 2:09]
- (Extract 62) Our teacher has provided us with a lot of visual aids, like slide and picture, and tells us to discuss what the picture means? What does it imply? He showed us a video of cooking like Thai curry, and he told us to write down all those ingredients, and what you can hear from the video as well, and I think it's like, yeah, it's very, it's relevant to the study, and also it makes the class become more interesting as well. Like people start to do stuff, think, and it used a lot of their imagination. [Post-Cycle One student focus group, P3, 1:20]
- (Extract 63) It's really creative, and there are some eye-catching colours like yellow, like blue, so you don't actually feel really sleepy, but if it's just all about letter and letter, and just text, it will be really boring. So I find that really cool to have pictures. [Post-Cycle One student focus group, P5, 11:56]
- (Extract 64) The visuals in the book are quite interesting because most of them are from the real world, so we learn a lot of stuff from the real world like the places, the people, and the weather, etc. You can picture it what's happening over there, so it helps us a lot to understand the actual real world over there. [Post-Cycle One student focus group, P3, 12:13]

The students, however, cautioned against the overuse of visuals, suggesting that so much is revealed in visual materials like videos that their creative thinking would be dominated and, therefore, constrained by the visual content. Reading, on the other hand, might promote higher creative thinking.

(Extract 65) ... If we follow the text, I can believe that it's going to be more creative than following the video. The challenge of the video is that it stops us from being creative. We see what it is like and we just make the food to look like it. But if we're given a text, we try to make the food according to the text. What we see [as the end result], we will be shocked ourselves... the result comes from our creativity based on the text that we have read. But for the visual, it just

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⁹ "P5" means student focus group participant 5.

shapes us to do it in their way as shown in the visual. [Post-Cycle One student focus group, P2, 30:24]

6.4.1.3 Understanding of visual literacy

After Cycle One interventions, the student participants potentially showed some significant improvement in their understanding of visual literacy and the skills it would entail as their responses revealed that the interventions helped them become more observant of the objects and their possible meanings in an image:

(Extract 66) It [Cycle One intervention] helped me in learning in like the way of observing because in the first picture, it shows about Nick. So he sits there with a bunch of books and laptop and mobile phone. So we can observe and can say that before he become the app entrepreneur, he actually read a lot of those books and worked a lot with the gadgets and the up-to-date device to actually make him become the app entrepreneur. [Post-Cycle One student focus group, P5, 16:43]

The lecturer agreed that the students demonstrated higher understanding of visual communication skills, commenting that:

(Extract 67) ... compared to the time that we haven't done Cycle One yet, somehow, they have improved. Even though it's not much, it's in a noticeable way in terms of interpreting the visuals. At least they know some aspects that I told them to focus on in the visuals. Before the study, they knew very little about them. [Post-Cycle One lecturer interview, 12:03]

6.4.1.4 Application of visual literacy

Students' mini presentations were introduced in Cycle One, and four volunteer students in each of the two-week period collected still images and videos related to the themes of the lessons, brought them to the class, and presented them to the other students. Both the presenters and the student audience engaged in discussion about the visuals by asking and answering questions the lecturer had demonstrated earlier. The lecturer also noted that:

(Extract 68) ... in terms of the small aspects, the background, the angle, so after Cycle One, I think they're able to analyse or to focus more on those small aspects. They do not take those aspects for granted. They are more aware of those aspects as well, "Oh, why in this picture, we have this kind of background? Why is the photo shot in this angle or that angle? I think somehow they're

kind of more aware of those little aspects. [Post-Cycle One lecturer interview, 13:10]

Section 6.4.1 has revealed a rather positive change in the lecturer and student participants' attitudes toward, understanding of, and application of visual communication skills taught in Cycle One in the process of learning the target English language lessons. The next section examines the benefit of the lecturer's use of graphic organisers to teach English grammar to the student participants.

6.4.2 Implicit teaching of graphic organisers and students' understanding of the target grammar points

The lecturer participant continued to use graphic organisers such as tables and charts when explaining grammar points in the same ways observed during the benchmark setting week, and the students found them highly facilitative for their learning.

- (Extract 69) ... because it's short, and he gives you the key word so you actually, when you see that, like about "will", so you know what comes to your mind about that word, but if, like some lecturers, they give you the whole thing, you have to read all that, and we believe that we won't remember all of those kinds of stuff, but actually we have some words that we find that particular grammar point, it's easier for us. It's easier for us to write down, too. We just spend little time on it. [Post-Cycle One student focus group, P5, 10:34]
- (Extract 70) [With the table he drew on the board] the lecturer just simplifies what we have learned and makes it as simple as possible for us [Post-Cycle One student focus group, P2, 12:00]

In one of the lessons, following the lecturer's explanation on the use of future tenses, a student who was reported to be among the low-performing group was invited to explain to the class the grammar points they had just discussed by using the table the lecturer had drawn on the board. The fact that half of the text in the table was missing made the task even more challenging for the student. I observed that the student indeed felt challenged but never threatened. He was, instead, encouraged by his classmates with claps and cheers every time

he managed to recall an explanation which had been omitted. The student struggled and his explanation was far from excellent, but the table as a prop and the supportive learning atmosphere helped the student finish the task successfully, apparently, with pride and a good sense of achievement.

The lecturer earlier noticed the utility of such graphic organisers for his grammar lesson explanation, commenting that:

(Extract 71) ... It's better than just asking them to read the Grammar Reference at the back. Because sometimes they just read for the sake of reading, and then they just forget, but if I draw, I write something on the board, then I can get all of their attention. They can remember clearly. [Post-Cycle One lecturer interview, 19:00]

To achieve an even higher impact on students' learning and learner autonomy, the lecturer planned to produce "grammar" diagrams in the form of a handout, encouraging students to take the lead in discussing the target grammar points.

6.4.3 Visual teaching and learners' attention, engagement, and memory in language learning

Students credited the use of visual imagery in improving their attention, engagement, and memory in language learning, as stated by P3 in the student focus group.

6.4.3.1 Attention in language learning

Schmidt's (1994, 2001) Noticing Hypothesis, Long's (1996) Interaction Hypothesis, and Swain's (1995) Comprehensible Output Hypothesis all document the key role of attention in language learning, proposing that learners' lack of success in acquiring certain language aspects despite the learners' high frequency of exposure to those aspects can be attributed to the learners' lack of attention to those aspects.

(Extract 72) ... it's not in CE class, but in WS class. I think, this week or last week? He showed us, our lecturer, he showed us a video of cooking, a TV show, it's supposed to be a comedy. And we study how to write a process essay. So, in

that video, it shows us, like, the process of cooking the chicken. And it involved visual aid, and as well as it's funny, so the whole class, like, pay attention to the video, so they learn new words and also the word you need to use in the process essay. And it's very helpful, like the class actually pay a lot of attention to it. [Post-Cycle Two student focus group, P3, 17:23]

6.4.3.2 Engagement in language learning

Students strongly emphasised the enjoyability of the lessons in Cycle One as the activities which were implemented were different and required their active participation, prompting them to interact with their classmates and use the language points they had learned in the coursebook and supplemental visual materials.

- (Extract 73) ... It became more enjoyable because the teacher provide us more visuals and because normally people, not just us but in general, we don't really like reading, and we like watching the video better, so it become more enjoyable and make us enjoy studying. [Post-Cycle One student focus group, P4, 47:12]
- (Extract 74) I think in the last two weeks, our CE class has become very enjoyable... normally when we get into groups, we just do all those grammar exercises, so we don't have anything to discuss, but in this last two weeks, we had a lot of new activities, like he [the lecturer] told us to think of our favourite food and discuss with our friends, so we can share what is our favourite food, and we can also speak a lot, use a lot of new vocabulary that you can learn from the textbook as well as the visual aid. [Post-Cycle One student focus group, P3, 51:13]
- (Extract 75) He [The lecturer] also asked us in another activity like who, we imagine who we want to be, for example, an auditor and we ask another classmate to a party or to a meeting, and we involve and we use a lot of vocabulary in the meeting like, we use a lot of vocab and phrase that we learn from the textbook to communicate [P5: Practice that] Yeah, with our classmates, and it become more enjoyable, and it engage all of the classmates to actually talk to one another and it also encourage like those who never talk or rarely talk to each other to talk to one another, so it's like encourage us to know more about each other. [Post-Cycle One student focus group, P3, 52:00]
- (Extract 76) I've learned a lot more even though in class I don't take much note, but because, thanks to those activities, it got me engaged in what they are going to do. If it is just like listening to the teacher, either I will fall asleep or I will discuss about other things rather than studying, but when the teacher got us into group, into a panel discussion, or walk around and talk with different classmates, at least I engage into what he's trying to teach us, and get some opinions or information or more knowledge about what we are studying. [Post-Cycle One student focus group, P5, 47:38]

(Extract 77) Most of them [the students] are interested in the lessons, and I could see that again most of them, again, actively involved in the lesson, which is a good thing and encouraging for us, teachers as well. [Post-Cycle One lecturer interview, 38:36]
6.4.3.3 Memory in language learning

Cycle One interventions were also reported to reinforce the students' memory of the language lessons they had learned earlier.

- (Extract 78) I think that like watching and picture those visual aids help us to memorise [remember] those words and new things longer. For example, if we were to learn grammar point, we should put a picture of, like compare two pictures together and let students guess what should be used in that picture, and what kind of grammar is used in the other picture. For example, I've been cutting my hand. It's like, it's an obvious one, but when you show the picture, the students kind of picture it, and it's kind of funny and they can understand it much easier so you can see. And another picture is I have cut my hand, so we can see the obvious in the picture as well as the grammar point as well, so it make us to remember like much easier. [Post-Cycle One student focus group, P3, 45:10]
- (Extract 79) I consider my learning successful in the last two weeks. I remember more vocabulary and expressions of quantity. [Post-Cycle One student focus group, P6, 50:02]

Section 6.4.3 has shown that Cycle One interventions had positive impact on the student participants' attention, encouraged them to engage more, and improved their memory of the grammar lessons they had learned through a graphic organiser.

6.4.4 Improvement of learning outcomes

Before Cycle One began, the lecturer contemplated that the frequency, amount, and relevance of the visual materials used would determine the extent to which students see the usefulness and impact of the study for their language learning outcomes – an observation shared by the participants in the focus group discussion.

Data from all the instruments show that many of the students had benefited from the use and teaching of visual materials in the lessons, suggesting that the Cycle One

intervention had an impact on the student participants' learning outcomes although the impact might not have been direct and immediate, and was apparently limited in strength.

In Cycle One of the study, visually-oriented materials were, for the first time in the class, introduced as a post-comprehension activity, pushing students to stretch their practice routines to initiate free production practice in speaking and writing – an activity infrequently conducted earlier.

The learning benefits of Cycle One interventions will be explored further in two separate sub-sections: Lecturer-led and students-led activities.

6.4.4.1 Lecturer-led activities

These were learning activities suggested in the coursebook and those initiated by the lecturer, with students closely following the lecturer's instructions and guidance in the form of questions.

- (Extract 80) It helped me in learning in the way of observing because in the first picture, it shows about Nick. So he sits there with a bunch of books and laptop and mobile phone. So we can observe that before he became the app entrepreneur, he actually read a lot of those books and worked a lot with gadgets and upto-date devices. [Post-Cycle One student focus group, P5, 16:43]
- (Extract 81) ... I had never done the observing like that before, not until the teacher asked us to do that because usually when I saw the picture in the book I just look at it [P6: Look at the face]. I didn't even think twice about it [P6: Just face, and that's all] [Post-Cycle One student focus group, P1 and P6, 18:47]

6.4.4.1.1 Critical thinking

(Extract 82) It improves our brain in one way. We don't have to read the text, but we can see the pictures, and we can predict what is it about. So we can use our imagination and critical thinking more. Instead of just putting a text on the face, and just read it, we can actually predict what is this, what is that, and what it's going to be about. We can predict that beforehand... if I just saw a page full of the text, I wouldn't bother reading. So I don't think about it. It's like, it's not interesting, but when I saw those pictures, it got me thinking. I saw something different from just a text. So it got me thinking more and more, and use my brain, what is it like, and how is it going to be before I read that text. So it improves my thinking in that way. [Post-Cycle One student focus group, P5, 12:48]

(Extract 83) I agree with them. I think it [using visual resources to develop critical thinking] is a good idea. It's a good practice to be done in the classroom. Even though I have to spend more time to find the visuals for them, I think it is worth the effort. [Post-Cycle One lecturer interview, 23:58]

6.4.4.1.2 Helping achieve learning objectives

- (Extract 84) It [Cycle One] is effective, the intervention helped me achieve the objectives. [Post-Cycle One lecturer interview, 38:34]
- (Extract 85) I think, more or less, it did help achieve my objectives because the visual, the main function of the visual is to help the students understand more about the point, the language point, and because the pictures or visuals, it doesn't exist there for no reason. It has its own function, and it helps the students learn more, and the use of that, it somehow helped me achieve the objective, so I think Yes, but if you ask me the level, I can say, in the moderate way. [Post-Cycle One lecturer interview, 32:56]

6.4.4.1.3 Fewer mistakes made and better grammar learning

Having gone through Cycle One interventions, the students were observed to make fewer mistakes with the target language points.

- (Extract 86) ... in the test, the point that I taught them, reflect back to that point, they just made a few mistakes only, I think, which is a good, a good thing. [Post-Cycle One lecturer interview, 38:34]
- (Extract 87) I also notice is when they move to the production stage, yeah, when I walk around to listen to them, I noticed that they, of course, they made some mistakes, but the level, the number of mistakes is not as great as what I expected. [Post-Cycle One lecturer interview, 40:07]
- (Extract 88) What I expect is that they make mistakes at this level at the production stage, but while I walk around and listen to them, observe them, maybe their level is below my expectation in terms of committing mistakes. [Post-Cycle One lecturer interview, 40:47]

The students' questionnaire responses, as summarised in Table 6.1, further enhance the merits of Cycle One interventions. Allowed to select multiple responses, the students credited Cycle One interventions with helping them learn grammar in different ways. Over half of them reported faster grammar learning. The interventions also helped over half of them see

a concrete illustration of the target grammar points through those visual materials. The interventions also afforded them practice using the newly learned grammar in different contexts.

Table 6.1: Effects of Cycle One on the students' grammar learning

		Percentage of	Percentage
	N^{10}	responses ¹¹	of cases ¹²
Remember grammar longer	7	12.7	26.9
Learn grammar faster	16	29.1	61.5
Practice using grammar	12	21.8	46.2
See concrete illustration of grammar points	14	25.5	53.8
Learn new grammar	6	10.9	23.1
Total	55	100	211.5

6.4.4.1.4 Vocabulary learning

Through the learning activities in Cycle One, the students reported good acquisition of new vocabulary on top of that in the units.

(Extract 89) ... watching a video, it helps us to learn a lot of new vocabulary. For example, prawn, vegetables, a verb like spank, so if ... [students are asked] to learn those words, it's hard to imagine what it looks like and it's hard to remember, but if you show them the video, they actually picture it, and they can remember it faster and more accurately, and they can remember it longer 'cos they know what it is and what it is called. So it helps a lot, to learn a lot of new vocab. [Post-Cycle One student focus group, P5, 26:58]

But new vocabulary required to interpret a visual cue or the vocabulary used in a dynamic and rich visual resource like videos could also pose a challenge for learners as P4 explained it.

¹⁰ Selection of more than one response was permitted for this question. Thus, in this table and subsequent ones, the total number of responses accumulates to more than 26, the total number of students who completed the questionnaire.

The percentages here represent the share each response received through the students' election in relation to the total number of responses selected by the students.

¹² The percentages here represent the number of times each response was selected in relation to the total number of students (cases) who answered the question. For example, seven out of the 26 students selected "Remember grammar longer", which is 26.9% of the group (26.9% = 7/26).

(Extract 90) There are new words [in the video], so we have to deal with that, and it's very difficult. [Post-Cycle One student focus group, P4, 29:33]

Cycle One appeared to have a considerable impact in multiple ways on the students' vocabulary learning as Table 6.2 depicts. Sixty-six instances of benefits of Cycle One for vocabulary learning were reported (2.5 responses per student). Over half of the students claimed to have learned vocabulary faster (17 times), to have seen a concrete illustration of vocabulary (15 times), and have learned new vocabulary (14 times) as they were introduced to the visual lessons in Cycle One.

Table 6.2. Effects of Cycle One on vocabulary learning

			Percentage of	Percentage of
		N	responses ¹³	cases
F	Remember vocabulary longer	10	15	39
I	Learn vocabulary faster	17	26	65
F	Practice using vocabulary	10	15	39
5	See a concrete illustration of vocabulary	15	23	58
I	Learn new vocabulary	14	21	54
Total		66	100	

6.4.4.1.5 Accurate illustration of learning concepts

With bountiful visual materials in Cycle One, students were introduced to precise representation of learning concepts in concrete forms. These illustrations, in turn, helped with their understanding of those concepts.

- (Extract 91) In the video, they mentioned something like two tablespoons of something. If we all read the text, we wouldn't have an idea of what is happen, or how much two tablespoons actually measure... We can see the accurate representation of it. [Post-Cycle One student focus group, P4, 26:29]
- (Extract 92) The visuals in the book are quite interesting because most of them are from the real world, so we learn a lot of stuffs from the real world [P4/P5/P6: Yeah] like the places, the people, and the weather, etc. You can picture it what's

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¹³ The percentages were rounded up/down for convenience in reading.

happening over there, so it helps us a lot to understand the actual real world over there. [Post-Cycle One student focus group, P3, 12:13]

6.4.4.2 Student-led activities

Led by volunteer students, students' mini visual presentations transformed the teaching/learning process by putting the students in charge of the class. They dictated verbal and visual inputs as well as delivery of the presentations by setting their own pace and styles.

The presentations were reported to improve the students' language skills, mainly reading and speaking; study skills like searching for relevant sources of information and note-taking; understanding of the units' themes and key concepts; understanding of visual support for learning; and use of visuals for maximum impact in presentations.

The students also used the presentations as a platform for self-assessment and reflecting about areas for improvement.

(Extract 93) I also was the one who volunteered to do that as well. And the reason that I chose to do it is because I wanted to improve my speaking skill... by doing that activity, I managed to know about my idol because at that time, I talked about Eminem. And I prepared some speech as well, but it's so sad that I couldn't talk well. Yeah, maybe next time, I will try my best to do it better. [Post-Cycle One student focus group, P1, 35:42]

Section 6.4.4 has presented the ways in which Cycle One interventions in both lecturer- and student-led visual learning activities were noted in my classroom observation and reported through the focus groups, interviews, and survey to help the participants learn vocabulary and grammar better and faster. Cycle One interventions also provided plentiful opportunities for practicing reading and speaking skills and had a positive impact on the students' critical thinking.

6.4.5 Discussion of the findings from Cycle One

6.4.5.1 "Visuality" of the learning materials used in Cycle One

There has been a significant increase in multimodality found in learning materials in today's English language teaching spaces as a result of the sophisticated interaction between language and other modes of communication, including visual, sound, space, and gesture (Jewitt & Kress, 2003; Kalantzis & Cope, 2008; Kress, 2003; Kress & van Leeuwen, 1996). The analysis of eight pages from *New Headway Upper-Intermediate* found this coursebook to be no exception. Verbal texts, audio materials, visual resources, and other visual design are featured prominently on each page of the book. The use of multiple resources, especially visual ones, to enrich the language learning experience is now common practice, and studies such as Angeli and Valanides (2004) and Park and Lim (2007) found the use of verbal text on its own to be inferior to the use of text plus visuals as visuals, when properly selected and attached to the learning units, can significantly enhance students' learning of the verbal text's content. In addition to the visual imagery, visual design such as page layout and typography were found to improve intelligibility, enjoyability, and reading duration of verbal text context, a finding previously observed by Landoni and Gibb (2000).

This combined richness of learning affordances, however, is frequently not taken full advantage of. In the English Department at the Royal University of Phnom Penh, a major focus is placed on verbal texts almost to the exclusion of other meaning-making resources. With an attempt to address this weakness in pedagogical practice in the English Department, the current study aims to investigate how visual resources can be utilized to promote visual literacy and improve learning outcomes among the student participants without deemphasizing the importance of verbal literacy.

The lecturer participant was knowledgeable about the readily available resources that come together with and complement the coursebook and used some of them to enrich the

students' learning experience. With this wide variety of learning resources to select from, the lecturer opted to design lessons in Cycle One by closely following the learning syllabus suggested in the coursebook. Widely regarded as the centrepiece of an English language teaching scenario (Apple, 2008; P. Benson, 2013; Hutchinson & Torres, 1994; Jack C. Richards, 2005, 2014; Rubdy, 2014; Tomlinson, 2003; Tsiplakides, 2011), coursebooks are arguably the most readily accessible resource providing an enormous number of opportunities conducive to effective teaching and learning. However, there is a downside to overdependence on coursebooks in teaching. Teachers could be de-skilled (Jack C. Richards, 2001, 2005), local themes are underrepresented, and predictability and few elements of surprise may generate learning boredom (McGrath, 2002).

To avoid this trap, the lecturer introduced additional "outside" learning materials such as still images, real-life objects, graphic organisers, and videos to supplement the lessons – conscious effort made to steer away from sole dependence on the coursebook, a practice observed in many other classes in the department. These efforts further added to the multimodality of the classroom (Jewitt, 2008) and were made to place more emphasis on visual affordances marginalised by the other lecturers in the English Department. In addition to the materials used by the lecturer, the students also brought visual materials to the class for their presentation on topics related to those discussed in the units of the coursebook. Justification behind the plan to involve students in leading the class activity was our intention to promote "active learning" (Bonwell & Eison, 1991), which aims to engage the students directly in their own learning processes, making them active participants and contributors to the development of the lessons, rather than passive receivers of the lecturer's sole input.

Central to the pedagogical interventions introduced in the study are Vygotsky's Social Development Theory "Zone of Proximal Development" (Vygotsky, 1978) and

Halliday's social view of language in Systemic Functional Linguistics (Halliday, 1978). Within these theoretical frameworks, the study provides scaffolding (Wood et al., 1976) in two forms – implicit (Cycle One) and explicit (Cycle Two) – to train the students in skills and strategies which would enable them to better exploit visual materials to facilitate their English language learning. Cycle One foregrounded the teaching of visual materials without explicitly teaching students visual interpretation methods and strategies. Rather, support was provided in the form of questions about the visual resources used, starting with the lecturer writing down questions on the board and showing the class how the tasks to interpret visual materials could be performed. The students were then asked to work with the visuals in pairs or groups, using guided questions provided in the handout. By the end of Cycle One, the students were tasked with interpreting the visual materials independently, with no prompt questions provided.

6.4.5.2 Impact of Cycle One on the participants' attitudes

8.1.1.1.1 The lecturer's attitudes towards visual teaching

The challenges arising from visual teaching in Cycle One did not interfere with the lecturer's positive attitude towards this teaching approach – a finding which is almost contradictory to those found in Robertson's (2007) study, in which only about 14% of the teacher respondents reported having a positive attitude towards the teaching of visual literacy. The reasons provided for the lack of positive attitude towards visual teaching in that study were a lack of training, insufficient knowledge of visual literacy standards and visual pedagogy, and an unwillingness to divert their teaching focus from traditional literacy. These traits were shared to some extent by the lecturer participant in the current study. It is, therefore, worthwhile discussing what other personal and professional factors might have positively influenced the lecturer's attitudes toward visual literacy.

6.4.5.2.1 The students' attitudes towards visual learning

Cycle One interventions were observed to have considerable positive impact on the students' attitudes towards visual literacy and language learning. The improved language learning attitudes among the students as a result of visual pedagogical treatment were generally upheld in previous studies (Huo, 2012; María, 2013; Zhang, 2013). These studies and the current one strongly suggest that visual teaching cause learners' attitudes toward language learning to change from negative to positive, remain positive, or become even more positive. However, realistically, it is difficult to determine exactly if the improvement in learning attitude could be attributed directly to visual teaching as attitude is a construct which is interwoven in a complex relationship with other affective and emotional learning factors, such as motivation and attention, the impact of which will be discussed in the following sections.

6.4.5.3 Implicit teaching of graphic organisers and the students' understanding of the target grammar point

Commonly found in conventional grammar practice books, graphic organisers such as timelines, charts, tables, etc. are frequently used to illustrate the way the grammar system of English constructs meaning in oral and written communication. As opposed to their elaborated verbal counterparts, graphic organisers used by the lecturer to teach grammar points in Cycle One were found to summarise the explanation, increase the students' attention, simplify the grammar lessons, and facilitate memory function. This finding supports the assertions put forward in Dabhi's (2014) action research on the use of graphic organisers to teach English grammar to a group of Moroccan second year baccalaureate students.

6.4.5.4 Visual teaching and learners' attention, engagement and memory in language learning

The impact of Cycle One interventions was assessed in terms of both cognitive benefits and improvement of affective and motivational factors. The following section discusses attention, engagement, and memory in learning as the students were exposed to the Cycle One lessons. The cognitive benefits will be discussed in the section on improvement of learning outcomes.

6.4.5.4.1 Attention

The current study's finding that visual lessons help learners focus better attention on learning activities and materials have also been documented in previous studies including those by Kemp and Dayton (1985) (as cited in Bradshaw, 2003), Peeck (1993), Arif and Hashim (2010), and María (2013).

6.4.5.4.2 Engagement and motivation

Enjoyability and interactivity were two key benefits the participants found from Cycle One visual lessons, supporting propositions set forth by Peeck (1993) and Carney and Levin (2002). Similarly, Yunus, Salehi, and John (2013) found that visual aids such as video clips, films, still images, and interactive visual texts like PowerPoint slide presentations helped their teacher participants to engage and motivate students in reading literary texts, a genre reported earlier to be challenging for the students.

6.4.5.4.3 *Memory*

Visual materials possess mnemonic properties which can potentially enhance memory and improve one's ability to recall verbal text contents (Canning-Wilson, 2001; Carney & Levin, 2002; Ghazanfari, Ziaee, & Sharifianfar, 2014). The student participants in the current study reported during the focus group discussion and in their diary entries a

similar positive learning experience in recalling lessons they had learned. However, their recollections of the lessons were not specific and were rather limited, prompting the researcher and the lecturer participant to investigate in Cycle Two if another visual teaching approach could further enhance the learners' memory of their lessons.

6.4.5.5 Critical thinking

Aristotle is attributed with having said, "without image, thinking is impossible" (as cited in P. J. Benson, 1997, p. 141). This adage manifests the deep interconnectivity between human thinking and visual imagery. To be visually literate means to develop a higher-ordered level thinking widely known as critical thinking (Association of College and Research Libraries, 2011). Cooper (2003), similarly, argues that "visual and multimedia formats capture students' interests and are more easily understood, allowing the learner to identify problem-solving steps and to focus on higher-level processes of critical thinking (as cited in Cheung & Jhaveri, 2016, p. 381). Having explained the relationship between visual literacy and critical thinking, Elkins (2008) argues that visual literacy presents even more (latent) potential than verbal literacy in promoting critical thinking.

A myriad of definitions has been offered in the literature to explain what critical thinking is and what it encompasses. Dewey (1909), the "father" of modern critical thinking, calls it "reflective thinking" and defines it as "active, persistent, and careful consideration of a belief or supposed form of knowledge" using evidence from all perspectives before reaching a conclusion (as cited in, A. Fisher, 2011). Ennis (1993), whose definition is widely quoted in the literature, defines critical thinking as "reasonable, reflective thinking that is focused on deciding what to believe or do" (p. 180). Ennis argues that the definition, by itself, is vague and requires elaboration, proposing an "abridgement of elaborations" that a critical thinker does when deciding what to believe or do. (See Ennis, 1993, for the complete elaborations)

Nosratinia and Soleimannejad (2016), Bagheri (2015), Shirkhani and Fahim (2011), Thadphoothon (2005), and Stapleton (2001) all suggest that critical thinking plays an instrumental role in language education. In the student participants' case in the current study, the connection between critical thinking and language education can be enhanced through the teaching of visual literacy, with the focus group participants and lecturer reporting to have benefited from the training in developing their critical thinking. This visual literacy-critical thinking relationship was previously noted by Lehman (2015), Sierra (2010), and Sinatra (1986), and more recently by Cheung and Jhaveri (2016).

6.4.6 Point of departure for Cycle Two

Cycle One fostered abundant language learning opportunities which would not have been made possible with just verbal texts alone as learning inputs. The students warmed up to the Cycle One interventions and expressed enthusiasm for further training in visual communication skills; they were keen to explore more methods and strategies which would enable them to tap into additional potential of visual materials to enrich their learning experience.

As can be observed in Table 6.3, the post-study questionnaire reveals that Cycle One facilitated the students' learning in one way or another as none of the respondents reported discarding the benefits of Cycle One. Seven students reportedly became more motivated, while 10 and 12 students, respectively, claimed to have more opportunities for practicing the key language skills targeted by the lessons and more understanding of the value of the visuals for their language learning. The biggest benefits related to visual communication skills and attention on learning as 15 of the respondents asserted that Cycle One taught them visual communication skills they could use to interpret visuals for their in-class and out-of-class learning, whereas 16 of them reported that they paid more attention to their learning as they went through the lessons in Cycle One.

Table 6.3. Overall impact of Cycle One

· ·		Percentage	Percentage
	N	of responses	of cases
Understand better the value of the visuals	12	20	46
Acquire visual communication skills	15	25	58
Become more motivated	7	12	27
Placed more attention on learning	16	27	62
Have more opportunities to practice language skills	10	17	39
Total	60	100	

Moreover, the lecturer and students were strongly determined to improve their performances when using visual resources. The lecturer intended to respond to students' insistence on incorporating more critical thinking into visual learning as there had been a lack of emphasis on the relations between visual communication skills and language learning.

(Extract 94) If you ask me about the relation between this [visual literacy] and the students' language skills, I don't think they have a close relationship, but I think it's not a bad thing that you learn a new thing, new skill [Post-Cycle One lecturer interview, 15:07]

The students' mini presentations would require reconfigured procedures, and time management would need to be reinforced more vigorously.

(Extract 95) It [Students' mini presentation] is a good practice. I can notice that, especially the presenters, they were happy doing it. I think it happened to the audience as well. But I think we need to set the time clearly, otherwise it will affect the plan of the whole session if we just go along with them... And to help the students learn the CE lessons even more effectively, the presentation topic has to be closely related to the lesson, the theme and possibly the language point as well. [Post-Cycle One lecturer interview, 26:10]

Students will need additional practice with visual interpretation to ensure gradual delegation of responsibility from teacher-assisted to students' independent practice – the very goal set by the lecturer at the outset of the study.

Furthermore, despite the observed improvement in students' participation in learning activities, signs of disinterest and boredom were still notably visible among a few students,

as explained by the lecturer:

(Extract 96) I'm not quite sure whether because it is the end of the semester or it is because of the lesson itself, or it is because of my teaching method because I notice that some of the students they show me, they expressed some kind of boredom. A few, a few of them, I noticed that, so I think, by their facial expressions, by their gestures... since they are not interested in the lesson, they take out their smart phone to check or to do something else... the ideal way is to get all the students' attention to get them really involved in the activities to make it as interesting as possible. That's what I want to do. I will try to focus on the reason why a few of them didn't really get involved. [Post-Cycle One lecturer interview, 36:00, 36:45]

These were the rationales which led the researcher and the lecturer to design and implement Cycle Two of the study.

The students were conscious that they were in an English language class, and that their lecturer was not an Arts educator but a language teacher albeit with keen interest in infusing visual dimensions in his teaching methods. As revealed in the post-Cycle One focus group and student diaries, they were well-informed of the study trajectory and purpose, and waited to participate in Cycle Two of the study with high anticipation.

With Cycle One as the backdrop, the following section presents Cycle Two of the action research study, the explicit visual teaching interventions introduced, the lecturer's impressions and reflection of Cycle Two's challenges and impacts on himself as well as the student participants, the interventions' reported and observed impacts on the students' learning outcomes, and the discussion of these findings in relation to the existing literature on visual literacy instruction in English language learning contexts.

6.5 Cycle Two of the action research study

After Cycle One ended, the students took a one-week break to prepare for the first semester exams. After the exams, the students had a three-week break, during which the lecturer and I conducted the post-Cycle One reflection and discussion, identifying which aspects of Cycle One intervention worked and what did not work and would require

modification in Cycle Two of the study. As explained earlier, having a second cycle is arguably essential in an action research project (See Burns, 2010; Carr & Kemmis, 1986; Edge, 2001; Kemmis, 1988; Kemmis, McTaggart, & Nixon, 2014), and extremely important in the present study to probe more deeply and investigate more completely the affordances and constraints the visual literacy instruction offers language learners.

The classes in the first week of the second semester were not observed as the students had just returned from the semester break, and a good proportion of the lessons was devoted to discussion of the planned course syllabus and course assessment procedures. Observation of such lessons would not have yielded substantial data for the study. Cycle Two took place in Weeks Two and Three of the second semester, involving non-participant classroom observations of another eight 75-minute lessons.

The coursebook contents taught in Cycle Two were Units 7 and the first three pages of Unit 8 in *Headway Upper-Intermediate*. Emphasis was placed on the learning of modal verbs, relative clauses, and "get" verbal phrases, while the themes included romantic relationships, "Peter Pan" generations who refuse to grow up, and getting famous through a talent show.

6.5.1 Explicit teaching of visual text elements and the rationales

Cycle Two involved explicit teaching of a number of visual communication skills: (1) interpreting the three levels of visual meaning-making aspects (i.e., ideational, interpersonal, and textual) (da Silva Joyce, 2014; Kress and van Leeuwen, 2006) minus the technical terms; and (2) identifying audience, social purpose, specific context, and elements of visual materials.

The lecturer justified the decision to teach only a selection of visual analysis techniques due to time pressures (Eilam, 2012) and the need to teach the pre-determined syllabus contents.

(Extract 97) [T]he main reason why I decided to present the points selectively is the time limit. I need to teach them the lessons in the syllabus and those visual analysis techniques as well. I don't have much time to focus in detail for these techniques and tools... and another reason is that, I think, at this beginning stage, I aimed to teach them some basic points that are easier to understand first, and when I have more time, I can take the opportunity to teach them more difficult concepts or more tools. [Post-Cycle One lecturer interview, 11:09]

Adopting the pedagogical foundations of the teaching and learning model (NSW, Department of School Department, 1992; da Silva Joyce and Feez, 2012), which is partially illustrated in Figure 2.3 in Section 2.7, Cycle Two moved along the lecturer-to-student control transfer trajectory, starting with the lecturer-led PowerPoint presentation and moving to guided student group/pair practice and finally student individual independent practice.

In the first pair of sessions, the lecturer gave a presentation about the visual analysis techniques which can be seen highlighted in Figure 6.13. The presentation also included a demonstration of how to analyse a highly visual text like the poster, displayed in Figure 6.14, which contains substantial visual content placed in the most prominent position and is supported by verbal texts on the right and at the bottom of the poster. After the presentation,

Overall analysis How the image represents reality What events are being shown? What participants are involved? How the image interacts with the viewer Gaze, angle, shot distance, and colour How the elements in the image are integrated (combined) Salience, placement, and framing

Figure 6.13. A PowerPoint slide highlighting the explicit visual lessons taught in Cycle Two



Figure 6.14. A poster used to demonstrate a visual analysis to the students

demonstration, and guided practice, the students were provided with an individual independent practice activity, requiring them to use visual analysis techniques that they had learned earlier to interpret a photo of apparently "concerned and upset" parents peeking at their sleeping son who had just moved in from a dorm after his graduation from college, as seen in Figure 6.15.

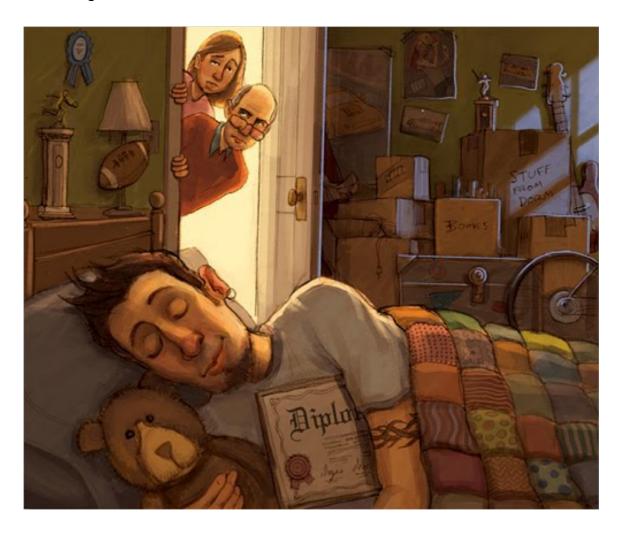


Figure 6.15. A photo given to the students for a practice visual analysis

The photo was made digitally available to the students before the lesson. They were encouraged to download it into their "smart" devices and bring the devices to the class for pair discussion. My classroom observation indicated that over half of the students did that, and a lively discussion ensued. To help with the visual interpretation, the lecturer participant

asked the students to revisit the PowerPoint slides he used to teach visual analysis techniques in the previous lesson. The activity ended with several students orally sharing their interpretation with the class. Typically useful was the lecturer's question "What makes you think so?", which was probably asked to make students explain their interpretation using terms and concepts of visual literacy they had learned.

6.5.2 Change in the participants' attitudes toward, understanding of, and application of visual learning

6.5.2.1 The lecturer's attitudes towards visual teaching and learning

The lecturer continued to favour and promote the visual teaching plans but found the explicit teaching of visual analysis techniques in Cycle Two rather challenging. The minimal previous exposure to such techniques meant the lecturer would need extra time to learn the techniques and explain them in the demonstration stage which was implemented after the PowerPoint presentation of the techniques. Extra effort made by the lecturer to explain the techniques to the students were noticeable during my classroom observation.

(Extract 98) When it comes to the presentation of the visual interpretation techniques and methods, I find it a bit hard to understand some of the aspects, for example, framing. I have to spend more time to read about it, to research more about it so that I understand it and then explain it to my students. [Post-Cycle Two lecturer interview, 03:05]

At the same time, the lecturer beamed with an enthusiastic smile and gave a reassuring nod every time a student appeared to finally understand his explanation of the visual techniques.

- (Extract 99) What I enjoy for this cycle is the new thing that I've learned from the visual interpretation, and I'm sure that most of the students would feel similar when they learn the new thing and some more techniques for interpreting visuals, the pictures. [Post-Cycle Two lecturer interview, 0:37]
 - 6.5.2.2 The students' attitudes towards visual learning

Positive attitudes could also be generally observed among the students as they were exposed to Cycle Two's explicit lessons on visual analysis techniques. The lecturer himself made the following revelation.

(Extract 100) I informally asked some of them [the students], and they told me that they learned new things, and they showed some kind of positive responses rather than negative ones. [Post-Cycle Two lecturer interview, 01:15]

A small number of students, however, either indirectly showed their slight discontent with Cycle Two lessons through their lack of active class participation or expressed in the focus group discussion a concern that some of the techniques were too difficult for them to understand fully and apply in actual visual interpretation.

- (Extract 101) I think that the picture interpretation is quite difficult because it required a lot of information and also observe things, the pictures, and it's not that easy for me. [Post-Cycle Two student focus group, P3, 01:45]
- (Extract 102) ... when he [the lecturer] asked us [P3 and friends] to analyse pictures and use all those techniques like gaze, salience, and so on and forth, it's quite difficult for some of us. It actually does not teach us more but distracts us because somehow we feel it's too difficult, so we don't want to do it anymore. We just feel off about it, and I don't like it at all. [Post-Cycle Two student focus group, P3, 23:43]
- (Extract 103) ... when it's difficult and we have to do it, we just feel uneasy, it's not our best. We think that CE [Core English the subject being taught] is supposed to study about grammar and so on, so when we focus on picture analysis, it's not only that we have to study it, but it's also challenging to us, so we feel like we don't want to study it sometimes. [Post-Cycle Two student focus group, P3, 27:00]

The lecturer noticed and acknowledged the challenge but countered that with concerted effort, the students would be able to learn the lessons well.

(Extract 104) ... It's a bit difficult for them [the students] in the presentation stage; they have to take in a lot of points to understand, and I think that stage is a bit difficult for them. I think if they put much effort in trying to understand those points, I don't think it's too much for them. I understand that it's the first time, and it might be difficult for them, but I could say that some of them can understand it well, while some others could not take everything in. We helped them a little bit, and basically they just used the knowledge that they just received from the presentation stage, and apply it in the independent practice. I think we don't have big problems. [Post-Cycle Two lecturer interview, 07:00]

The other focus group participants also rebutted that:

(Extract 105) ... the subject of CE doesn't have to be always grammar and all that stuff. This kind of thing [visual learning] is like extra knowledge that you can gain in learning. For example, it is important to understand about gaze and all that because in due time, in the future, you might need to take a photo and all the

stuff. [P5: Yeah] And this kind of key analysis can help you take a better photo. You can decide what you want the photo to look like, and it [visual learning] can help you a lot – something that you learn on the way of your learning. We can't specify, for CE, we have to only learn about grammar, and we don't focus on picture. [Post-Cycle Two student focus group, P2, 27:32]

(Extract 106) I can understand what P3 was saying because if it [the lesson] doesn't interest us, or it's not related to our major or what we like, we love to do, it's really distracting, but I also agree that we paid to study here as much as we can grab the knowledge. I think it's better. And if now it's not useful, it might be useful in our future. It's also in our mind set, I guess. Because if something is difficult or because we were taught easy things since we were young, if it's kind of challenging, we'll not really want to do that. [Post-Cycle Two student focus group, P5, 28:29]

The lecturer attributed the students' sense of challenge and difficulty in learning the visual lessons in Cycle Two to their insufficient knowledge of the study purpose of using visual resources as a platform for them to enhance their learning and use of the target language points, contextualised in the rich affordances of the visual materials.

(Extract 107) I can say they [the students who find the visual lessons in Cycle Two too difficult] are not sure about our real purpose of doing that because if I remember correctly our main purpose is to relate the visual interpretation with our lesson. We try to fuse, yes, it can be fused, we're trying to make them connected with one another. Maybe some of them didn't see that, and maybe they just face this kind of small problem, but they generalised that maybe they could not continue or move on to learn more difficult concepts. If we keep telling them, if we keep explaining them our real purpose, they would understand. We keep encouraging them not to give up. [Post-Cycle Two lecturer interview, 13:46]

And Diarist 1 summed up how different students would perceive the usefulness of visual lessons in different ways, and how visual analysis skills could be a utilitarian tool for language learners like her:

(Extract 108) This [visual analysis] is media class material, in my opinion, and English Department students should have learnt this since the freshman year. It would have saved us a lot of energy when we learn from the colourful textbooks (or copied black and white ones). Surely those editors are to be admired. I can't imagine all the time they spent looking for relevant pictures for each lesson. And only for us to look at them dumbly with our mouths hanging open? That's kind of anticlimactic for everyone. We subconsciously leave our critical thinking in the back of our heads because it's exhausting to even interpret pictures. So yes, teaching students to think whenever they see something is a priceless life skill. In the literature class, for example, no one

seems to know how to interpret the novel's pictures. I mean they can't talk about pictures in a meaningful way... Visual interpretation guides us in writing a meaningful piece and, we only need a picture. Other people might think, "Oh, it's just a simple photograph," but that happens when people don't like to apply critical thinking. That's when WE can help them understand how one photograph REALLY tells a thousand words (well, not literally). We don't have to be a media student to have this skill. [Cycle-Two student diary, Diarist 1, 4 March 2016]¹⁴

6.5.2.3 The students' understanding of visual literacy

Although the study objectives were frequently emphasised, a small percentage of the students failed to make a connection between their English language learning and the visual lessons, especially those in Cycle Two. However, to many other students, Cycle Two connected the dots and cleared doubts that had developed in Cycle One. Having been taught some visual interpretation techniques and having gone through some guided practice using the techniques themselves to interpret the given photos, these students had a clearer understanding of visual literacy and appreciated the visual lessons more. Diarist 2 noted in one of his diary entries that:

(Extract 109) One of the most interesting parts in this CE class was that the teacher did a presentation about How to analyse visual text. I have learned a lot from that presentation about the way to look at a photo and analyse it to another level. Now, the way that I look at the photo is different from what I used to do because I am able to understand more about its target audiences, its purpose. Moreover, I have learned about the gaze, angles, salience, placement, and framing that they enable me to see the photo in a better way. More than that, we also did some practice regarding to photo analysing in the text book and by that it helped us to understand more about the concept of the photos in the book which was about the different types of arrange marriage. It was really helpful that we learn how to analyse before continuing the lesson that has photos to be understood. [Cycle-Two student diary, Diarist 2, 24 February 2016]

Echoing Diarist 2's observation, Diarist 4, as presented in Extract 110, complimented the lecturer's visual teaching and its impact on her increasing understanding of visual literacy:

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¹⁴ Three student diarists chose to type their entries as a Microsoft Word document, while the other two chose to handwrite their entries. To preserve authenticity of the entries, I have presented in this chapter the excerpts from the hand-written entries the way they were written.

In the second session

teacher still use a visual teaching method. What I love about this method is that I enjoy this kind of teaching better than focus on text book all the time. I always learn new thing from teacher's dide every session. This time teacher showed us slide about how to analyse the photo. Actually in semester one I had no idea why teacher taught thanks about those photo angle but today lesson finally made time understand. I learntalot from teacher slide. Every photo we took actually has their pun purpose. I learnt to and them from gaze to angle to shoot stistance. I understand different angle tell different thing from the photo. For existance, up angle show that audiences have are powerful then people in the photo. There are two types offer and demand. When you look at camera mean that you demand attention from audience while offer, you looked away. In short, by the end of the session. I learnt a lot from teacher's slide and from text book. I was be able to use aff different modal verss and I can analyse photowhen I see it; &however, before I learn this I never notice any of those things on photo but after learning I can apply it to my everyday activity. I will be able to analyse picture when I saw

(Extract 110) An extract from a Diarist 4's diary entry about the visual lessons in Cycle Two

6.5.2.4 The Student's application of visual literacy

In addition to the activities led by the lecturer in order for the students to apply the visual communication skills they had learned, Cycle Two saw the return of the student-led visual presentation as volunteer students took turns giving a presentation within the stipulated time on the topics related to the themes of the units being discussed. As noted in

Table 6.4, this application-oriented highly visual activity was reported to help 16 (61%) of the students improve their memory of the lessons learned and enabled 15 (58%) of them to explore the themes of the unit further in new contexts in addition to those generated by the coursebook.

Table 6.4. Student visual presentation and its impact on their learning

		Percentage	Percentage
	N	of responses	of cases
Become more motivated	6	13	23
Improve learning memory	16	35	62
Opportunities to explore the themes of the unit further	15	33	58
More opportunities to practice language skills	9	20	35
Total	46	100	

Furthermore, as revealed during the second focus group discussion, the students started to use the newly learned visual communication skills in their "real world" communication immediately after having been taught the skills in Cycle Two.

- (Extract 111) I start to comment on everyone's picture on Facebook... Like analyses of the picture. You remember my comment about salience in your photo, P5? [Post-Cycle Two student focus group, P6, 55:05]
- (Extract 112) After I've learned these new techniques, I start to apply some of them, in terms of looking at random photos and try to understand them, the meanings, and rather than giving a quick answer, I just spend some of my time analysing it. [Post-Cycle Two student focus group, P2, 56:38]

6.5.3 Visual teaching and learners' motivation, attention and memory in language learning

6.5.3.1 Motivation

A few students found the explicit visual focus a bit too challenging and even demotivating, but a good majority of the students reported having significantly boosted their learning motivation through Cycle Two interventions and the accompanying activities, considering the lessons interesting, entertaining, and useful.

- (Extract 113) In terms of motivation? To me, somehow, it does help, but I think it depends, but at least it helps. I strongly believe that if we have only the text, and without any visual or any, just the text itself alone, 100% words, compared with another text which has at least some picture, some visual aid, I think, the latter is better compared to the former. [Post-Cycle Two lecturer interview, 22:53]
- (Extract 114) For me, it's not different from the other participants. I also find the photo analysis really enjoyable because now when I look at photos, I really just analyse it a bit. Not just scroll down. Yeah, it's something really interesting. And also it [the visual analysis] taught me a lot. [Post-Cycle Two student focus group, P1, 02:15]
- (Extract 115) They [Visual lessons] made the class more entertaining because, for example, when the teacher shows us a picture he will ask us for our opinion and different people have different perspectives so we can hear a lot of opinions towards only one picture, and it makes us more entertained, and students sometimes also provide an example or reason why they think this is the meaning behind the pictures. So it made the class more entertaining, and we were engaged in a lot of activities. [Post-Cycle Two student focus group, P3, 13:47]

6.5.3.2 Attention

Both the lecturer and students agreed that, as one of the hallmarks in using visual materials to facilitate language learning, visual imagery increased the students' attention on learning, and that teaching them fundamental skills to interpret the visual content provided only made them focus more on the visuals and the accompanying language learning activities.

- (Extract 116) It's about reading. I remember at that time. We focused on a life of a celebrity. Since the text contains so many new and difficult words, and even the context is quite, I mean, the students find it so hard to relate to. And then, I can say that they, somehow, some of them lost the attention to focus on the text... I decided to use a video clip about that person's life. I showed it to the students first so that I can get their attention. They found it more interesting, rather than just my speech, my, my explanation alone. [Post-Cycle Two lecturer interview, 27:05]
- (Extract 117) ... Many different kinds of pictures have been shown. Some pictures are really relatable to our situation, and some pictures are interesting or emotional. When it relates to us or our situation, it kind of grabs attention because we are related to it, so we are touched by it. And then we have a lot to talk about. For example, like the picture in the quiz that we did last week about the kids doing some labour. I had a lot to say about that. It's interesting and made me focus more than the test about grammar because I had a lot to say about it. [Post-Cycle Two student focus group, P5, 18:32]

(Extract 118) The main point about the picture is it interests you. When the picture is very interesting, it will grab attention by itself. And at that time, you will try to understand about it. For example, if the teacher wants us to make a sentence or talk about a picture, we're really happy to do so because we want to examine the picture more. And that's the way it grabs our attention. And when we exercise our brain, it helps us to remember lessons easily. For example, it's just like the picture of a kid who's trying to finish the exam. It's kind of funny and interesting, so it helps me to remember the phrasal verb with "get". [Post-Cycle Two student focus group, P2, 21:00]

6.5.3.3 *Memory*

There was clear evidence in Cycle Two data that students' memory were being impacted by the use of visual resources and the accompanying explicit visual literacy instruction.

- (Extract 119) ... we're learning by associating things together. So when we see these pictures, we can immediately get "Oh, what phrasal verbs work with these situations" and it can make us memorise things better than just reading and memorising. [Post-Cycle Two student focus group, P4, 54:22]
- (Extract 120) If that particular student is very good at associating pictures with words, I think it might help them a lot [with memory]. But if we're talking about some students who are not really good at this, I mean, it might help them as well, but not as much as the students in the first situation that I mentioned earlier. So I think it depend on the type of students as well. [Post-Cycle Two lecturer interview, 30:03]

During the second focus group, the same pictures used by the lecturer in the class one week earlier to teach "get" verbal phrases were used as prompts for students to recall the verbs they had learned and their meanings. The participants, with confidence, recalled the verbs and made sentences to describe the pictures with no apparent difficulty. Their ability to recall specific details of the student mini-presentations they had listened to earlier further asserts the function of visual resources in reinforcing the students' memory of the target language points and the ways they are used in context. The participants ascribed their good memory to the visual resources used in Cycle Two. P5 attempted to connect the three learning aspects by explaining that:

(Extract 121) This [Visual lesson] also improved our thinking, it grabbed our attention, it motivated us to think, it motivated us to learn because if it is more

entertaining, we're willing to participate. We also have to think a lot, and learn a lot, and when we think a lot, we also remember a lot about what we are learning, we focus more. It motivated us in that way because if it was boring, and we wouldn't have participated in it. [Post-Cycle Two student focus group, P5, 14:34]

Diarist 4 made a similar observation (See Extract 122) that having visual support like pictures and photos associated with the words being taught would aid her memory of the words, calling the method "learning picture dictionary." However, Diarist 4, like the other participants, did not delve into details regarding which specific lessons they could recall well and in what ways the visual materials used helped improve their memory of those lessons.

" get on my nerves" means annoy me. After learning those word I can you it in my conversation with for friends and family. Moreover, I can understand when people use phrassalvers get toward me white speaking. Honestly, phrasal vers with get are new to me. I have never loble up the meaning of it in dictionary. Teacher told us to do exercise number 2 phrasal vers set by using words in the stanted pox to match with words get". Then he showedus picture on slide which is the meaning to each words in the book. I find this method very helpful because I can remember it by picturing those scence in my head. Visual method really help with my me mory. I was like learning picture dictionary. Second session we learnt every day English.

(Extract 122) An extract from a Diarist 4's student diary entry about visual materials and memory

6.5.4 Improvement of learning outcomes

Cycle Two interventions were reported and observed to help improve learning outcomes by: (1) making students use the target language points more while doing learning activities and in class interaction; and (2) contributing to achievement of learning objectives, and promoting accuracy as the students were engaged in production-based class activities.

6.5.4.1 Increased use of the target language points

The lecturer and the students made clear that, through this cycle, ample opportunities were created for them to use the target language points. There was a notable increase in such practice as they were challenged with the visual interpretation activities of Cycle Two.

(Extract 123) In my observation as I walked around and listened to the mini presentation presenters and audience, not all of them, but most of them did use the target language points. [Post-Cycle Two lecturer interview, 13:46]

6.5.4.2 Achievement of the learning objectives

After independent practice, a quiz (Appendix 6.7) was administered to check on students' learning progress and the extent to which the learning objectives had been achieved.



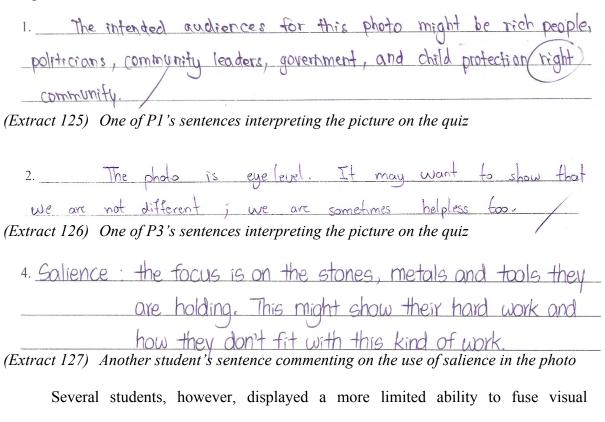
Figure 6.16. A photo used in the quiz to assess the students' visual analysis abilities and use of modal verbs

The quiz had two sections, with the first objectively testing the students' grammar knowledge of modal verbs and "get" phrasal verbs through gap-filling and multiple-choice exercises containing sentences but not extended coherent paragraphs. The second section measured the students' ability to apply the visual analysis techniques they had learned earlier by asking them to interpret a black and white photo, as seen in Figure 6.16, which shows three Cambodian children at work.

After having gone through some of the students' quiz scores, the lecturer concluded that Cycle Two interventions did help achieve the learning objectives, to a moderate extent.

(Extract 124) The objectives were to teach them how to use modal verbs, how to use phrasal verbs with "get" and certain vocabulary related to romantic relationship. I could say that again they [Cycle Two visual lessons] did help, but in terms of level of helping, I think it's a moderate amount, or just a bit below that... one of the main proofs is their [quiz] score, it is not really very high. Somehow, it's good, it's a good number, but it's not really high. [Post-Cycle Two lecturer interview, 36:24]

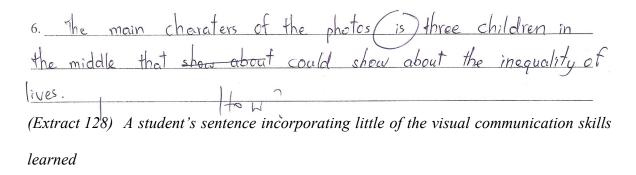
A sample of students' quiz responses¹⁵ shown in Extracts 125-127 serve as testimony that the visual lessons potentially contributed to the students' ability to use modal verbs correctly as they constructed sentences to interpret the picture. The dual objectives of teaching them to use modal verbs and visual interpretation techniques appeared to have been achieved to a good extent.



interpretation with language skills as they displayed correct use of a modal verb but fell

¹⁵ Also for reasons of authenticity, the students' quiz responses have been presented in the ways they were written as evidence of improvement in English language learning or lack of it after having been taught visual literacy explicitly.

short on the picture interpretation task, failing to properly apply the visual communication skills taught, as can be seen in Extract 128.



6.5.4.3 Accurate use of the target language points for communication

Having been equipped with the newly learned visual communication skills, the students observably and reportedly used the skills elaborately in practicing the target language points and in interpreting the visual content provided in the units and by the lecturer.

- (Extract 129) It is safe to say that, I'm talking about the level again, it's not too much [development], but the students started to use the target language points more and more, but [for such learning] we cannot improve overnight, or in just one day or two. [Post-Cycle Two lecturer interview, 38:25]
- (Extract 130) For picture analysis, he [the lecturer] also asked us to form sentences and asked us to use modal verbs, so it actually helped us to learn about grammar, like which modal verb to use in which situation [Post-Cycle Two student focus group, P3, 22:19]

6.5.4.4 Impact of Cycle Two on grammar and vocabulary learning

Both the focus group discussion and post-study survey documented various benefits Cycle Two interventions had on the students' grammar and vocabulary learning, practice, and application in communication-oriented activities.

(Extract 131) It also improves our way of describing things because sometimes the definition from a dictionary or from Google® does not work. But then when we see the picture, we have something in our mind. That's kind of having a picture in front of us so we can visualise and retrieve it, but if we just have the definition, somehow we know it, but we don't know how to use it, how to put it into a sentence. [Post-Cycle Two student focus group, P5, 21:52]

Cycle Two seems to have had a bit less impact on the students' grammar learning than it did on vocabulary learning. As indicated in Table 6.5, Two of the students reported for the first and only time in the questionnaire that the visual interventions did not help with their learning, and it was associated with learning English grammar. Only two of the respondents claimed to have learned new grammar aspects after doing the visual practice and production activities in this cycle. The three most notable benefits for grammar learning the students obtained from Cycle Two lessons were faster learning of the grammar points in the units and more opportunities for them to practice using those grammar points. Both options were selected 13 times each, while 12 students suggested that they benefited from the different ways grammar concepts were illustrated with the visual materials used in Cycle Two

Table 6.5. Effects of Cycle Two on grammar learning

	N	Percentage of responses	Percentage of cases
Did not help with grammar learning	2	4	8
Remember grammar longer	9	18	35
Learn grammar faster	13	26	50
Practice using grammar	13	26	50
See concrete illustration of grammar	12	24	46
Learn new grammar	2	4	8
Total	51	100	

On the other hand, Cycle Two had a strong facilitative impact on the students' vocabulary learning. The data in Table 6.6 suggest that, with each benefit being reported no fewer than 10 times and no more than 14 times, there was a relatively balanced distribution across suggested benefits. The students especially valued the fact that the visual lessons in this cycle provided a concrete illustration of the vocabulary being taught and generated opportunities for them to learn new vocabulary in addition to that in the units.

Table 6.6. Effects of Cycle Two on vocabulary learning

		Percentage of	Percentage
	N	responses	of cases
Remember vocabulary longer	12	20	46
Learn vocabulary faster	11	18	42
Practice using vocabulary	10	17	39
See concrete illustration of vocabulary	14	23	54
Learn new vocabulary	13	22	50
Total	60	100	

6.5.5 Development of critical thinking

Critical thinking is a skill which is emphasized and promoted in content-based subjects taught in the English Department (i.e., the site of this research). Both the students and lecturer, moreover, underscored the importance of critical thinking for Core English, as revealed in the lecturer's response below:

(Extract 132) I think it [critical thinking] is a good thing to do, and basically I just prepare critical thinking questions to let them think a little about those pictures and visuals. I think that's the basic thing that we need to do. Just prepare the questions for them, and we keep asking them, or ask and answer the questions with them. [Pre-Cycle Two lecturer interview, 24:40]

The impact of the Cycle Two intervention on the students' development of critical thinking is evident in the data generated through the post-cycle's student focus group and lecturer interview. The lecturer anticipated that the visual lessons taught in Cycle Two will enable them to think more critically by recognising the visual affordances they are exposed to every day beyond the "simple way".

(Extract 133) Probably, before, they looked at the visual around them every day just in a simple way, but after this, I hope, they will be able to think more critically, to be able to interpret the visual more effectively. [Post-Cycle Two lecturer interview, 44:20]

The students also mentioned an improvement in critical thinking after they were explicitly taught a number of visual analysis techniques in Cycle Two. One participant in the focus group session after the end of Cycle Two claimed to have learned skills that would

enable them to interpret an image beyond its surface meaning. Trying to guess the reasons an image creator presents the image in a certain way was one of the skills this participant thought to have acquired from Cycle Two and made him think more critically.

(Extract 134) At first, we were not critical. We just saw that "Oh, this picture is about" [P5: Quick answer] Yeah, a quick answer, like we talked about what the picture showed us. After the teacher showed us about those techniques, we're able to think differently, we think critically on, for example, shot distance. Oh, the angles, it's a better example. Like from above, it shows the subject in the picture is weaker. It shows us something like, "Oh, it really represents something". That's why they take photos in different angles. They have their reason. [Post-Cycle Two student focus group, P2, 45:23]

This sentiment was echoed by another focus group participant who credited the visual lessons in making them look closer into an image, rather than just giving out a "quick answer".

(Extract 135) It [Cycle Two] really improved our critical thinking when he [the lecturer] taught us about the technical terms because, like P2 said, before he introduced us about those things and asked us to seriously think about it, we just gave a quick answer, but after we learned all those terms, we started to look closer in that and bring out more what the teacher and the picture try to show us. [Post-Cycle Two student focus group, P5, 49:10]

The other students, by contrast, less directly attributed their abilities to think critically to the visual literacy training in Cycle Two, but did mention the association between the two factors, as can be seen in extracts from diary entries of two student diarists (See Extracts 136 and 137) when reflecting on the impact of Cycle Two on their learning.

(Extract 136) Visual interpretation guides us in writing a meaningful piece and we only need a picture. Other people might think, "Oh, it's just a simple photograph" but that happens when people don't like to apply critical thinking. That's when WE can help them understand how one photograph REALLY tells a thousand words (well, not literally). We don't have to be a media student to have this skill. [An extract from a Cycle-Two student diary, Diarist 1, 4 March 2016]

6.5.6 Overall impact of Cycle Two

Following the study's pedagogical interventions, the learners were asked to categorise themselves into types of learners – analytic, auditory, visual, tactile, or kinaesthetic. Fifteen (58%) of the students thought that they were analytic learners, while 13 (50%) of

Apparently, the photos have a very deep meaning we looked through all the gaangles, gaze, shot distance, color, soliene For explose, the first photo a man slept holding his diploma and teddy bear and his parents expression is obviously not happy with him because look at his background there is guitar and sport trophy he might be into music and sport but learning might not be histhing. He is holding teddy bear reason mean that although he is obviously old but he st is still very childish. All the photos were readly helpful yet very difficult because critical thinking is very challenging for me. If avevery our group came up with a lot of ideas to shared for to the class.

(Extract 137) An extract from a student diarist illustrating the impact of the Cycle Two interventions on critical thinking

them leaned toward the visual type. The total percentage for these two main types of learners added together surpassed 100% because, as explained earlier, the students were allowed to choose up to two categories for their learning disposition. The finding suggests that not every student simply became a visual learner after being exposed to a series of implicit and explicit visual lessons. However, these figures are encouraging and suggest latent potential for further development of visual literacy materials in the IFL's curriculum.

Table 6.7 suggests that Cycle Two produced quite a significant impact on students' learning as half of the students surveyed reported an increase in both visual communication skills and opportunities to practice English language lessons they had learned. Attention and motivation were also elevated by the training in Cycle Two of the research. However, nine students reported having understood more the value of the visual resources for their English language learning. A possible explanation is a number of the students had developed enough knowledge of the utility of visual affordances for their learning and thus did not attribute their acknowledgement of visual resources to the Cycle Two intervention, while another

Table 6.7. Overall impact of Cycle Two

		Percentage of	Percentage
	N	responses	of cases
Understand value of the visual cues more	9	16	35
Acquired visual communication skills	13	23	50
Became more motivated	11	19	42
Put more attention in learning	11	19	42
Had more opportunities to practice language skills	13	23	50
Total	57	100	

group still questioned the relevance and significance of visual materials even after the training.

The students were divided in their opinions as to whether enough visual support was provided for enrichment of their learning. Twenty-two (85%) of them reported that, after the study, they were able to explain well or very well structural elements such as camera angle, shot distance, and gaze in a visual text. Eleven (42%) of the students claimed they would very likely use the newly learned visual communication skills for their future learning, while the other 11 (42%) of them will reportedly be unlikely to use them. The other four were unsure. Nineteen (73%) of the students expressed interest in further visual training.

The students provided many responses to the open-ended question about what additional visual communication skills could be taught in the lessons following the study. However, a number of the responses were either irrelevant or not elaborate enough to be considered as suggestions for further improvement following the study. For example, one of the respondents requested "something related to the outside world," while another one emphasised "learning with other visual materials" without explicating what the visual materials would be and the rationale behind the request. Two other respondents simply said they wanted to learn the skills in more detail. Such responses are not specific or contextualised enough, and, therefore, will not be dealt further in this study.

Some of the more useful comments provided were for additional training in designing slides for presentation, as suggested by three students. This request corresponds with the students' presentation style and preference as all, except one, of them reported using PowerPoint slides as presentation props either all the time or for most of their presentations. Three other students would appreciate additional training in making a video and further learning and practice of the visual elements taught earlier. Students also suggested that the lecturer use videos to teach grammar concepts and more visuals to teach vocabulary. As one student stated:

"As visual communication skills help me to understand better, I wish to be taught additional visual communication skills on vocabulary and speaking as well. I think if visual communication skills are applied more on vocabulary, it will help me remember words longer, too."

Another student wished to take the training to another level by exploring the interplay between verbal and visual textual components, that is:

"To analyse the metaphoric meaning of images and understand how word play can change the meaning of the image in our heads"

The evidence collected in Cycle Two indicating that explicit visual learning promotes English language learning outcomes further validates the value of visual literacy instruction in English language learning contexts. In what ways, however, does explicit visual instruction help improve learning outcomes differently from the implicit visual teaching approach described and discussed in Cycle One of the study? The following section investigates the impact of the two instructional approaches and brings findings from previous studies into the discussion with an attempt to progress the argument in favour of visual literacy instruction or, rather, explicit visual teaching in English language learning in particular.

6.5.7 Discussion of Cycle Two findings

With the students' expressed interest in learning more about visual literacy and the lecturer's faith in the usefulness of teaching the students selected structural components of visual literacy, the Cycle Two intervention explicitly taught visual metalanguage in a series of eight connected 75-minute sessions.

Different aspects of visual metalanguage have been taught in a number of classroom learning contexts, ranging from art-based, to science, to language education (Callow, 2003, 2006; Papademetriou & Makri, 2015; Unsworth, 2006). Emphasised as one of the core components of literacy, visual analysis metalanguage is recognized in Australia in the New South Wales government's National Assessment Program – Literacy and Numeracy 2011 Teaching Strategies as a language which would enable learners to interpret and deconstruct images, and convey information (NSW Government, 2011).

As explicated earlier, the metalanguage taught in the study follows the "grammar of visual design" framework by Kress and van Leeuwen (2006). However, given the limited time for the action research study, only a selection of the key metalanguage was taught, and the teaching was based on the adapted version of multimodal visual literacy metalanguage proposed by da Silva Joyce (2014) for adult English as a Second Language learners, whose learning context suitably matches that of Cambodian student participants.

6.5.7.1 The participants' attitudes toward, understanding of, and application of visual learning

The lecturer viewed the challenge of teaching visual metalanguage as a form of personal and professional development. Although the curriculum currently implemented in the English Department, which offers English education programs for various purposes including English for Work Skills and English teacher training, does not officially mandate visual literacy among its faculty members, the lecturer talked on more than one occasion

during the pre- and post-teaching reflections of the necessity to teach more than just the language skills. This reflected the lecturer's awareness of what the National Council of Teachers of English and International Reading Association stipulated as part of the Standards of English Language Arts – English language instruction goes beyond the four macro skills of English to include viewing and representing visual information (NCTE/IRA, 2012). In a similar vein, the teachers investigated in María (2013), Mostafa (2010) and Robertson's (2007) studies acknowledged the necessity to teach visual literacy skills in English lessons. As in these previous studies, however, the lecturer was rather uncertain about the explicit teaching of visual meaning making resources – a consequence the lecturer and other teachers have attributed to the sparse training they had previously had in their teacher training programs.

A number of students, on the other hand, reported having been confused and distracted by the learning of visual metalanguage, for example, salience, framing, and placement. The literature also suggests that failure to comprehend the meaning of visual data can lead to the feelings of being inadequate and overwhelmed among students (Eilam, 2012). This finding might have surprised some of the students themselves as all of them revealed at the end of Cycle One how enthusiastic they were about the prospect of learning more about visual literacy. The distraction appears to have stemmed from two main reasons, the first of which was the technicality of the visual metalanguage itself. For these students, the presentation of new terms and concepts related to visual communication aspects would have required more than two sessions of 75-minute presentation – the duration allocated for the presentation of visual metalanguage in Cycle Two. This "time" challenge was also reported in Christodoulou and Damaskinidis's (2014) study. The second reason would lie in the instructional procedures themselves. Cycle Two began in the second week of the semester, and the lecturer had little time to discuss with the students the goals of the forthcoming

visual lessons and their relation to language learning. As a result, a disconnection arose between the goal of language learning and the visual lessons, and was reported by these students, who thought of the visual lessons in Cycle Two as complicated and unnecessary. Christodoulou and Damaskinidis (2014) asserted that lack of schema and theoretical concepts of visual resources in interaction with the other meaning-making modes in the communication spectrum were the reasons behind students' initial negative attitudes towards visual literacy lessons in their study. Other than the lack of emphasis on the verbal-visual literacy connection, it was also challenging for the lecturer to convince the students to accept the necessity to develop visual literacy in helping them develop competencies in a foreign language, especially for those who insist on following the conventional text-based approach in language learning – a finding shared by Christodoulou and Damaskinidis (2014).

The majority of the students, however, remained positive about visual literacy, even with the challenge arising from the explicit learning of visual metalanguage. A similar finding was reported by Unsworth (2006), Callow (2003, 2006), and (María, 2013).

6.5.7.2 Improvement of learning outcomes

In general, the impact of visual literacy instruction, both implicit and explicit, has been documented with encouraging evidence in studies conducted among non-language learning students at a pre-university level of education – a context which is completely different from that in the current study.

Stokes (2002), in a meta-study which reviewed literature up to the time of the study related to the use of visual elements in education, concluded that generally learning improved to varying degrees as learners were exposed to various forms of visual learning aids, and less experienced learners would likely benefit more from the facilitation offered by visual affordances.

Confirming Stokes' (2002) propositions, Gentzkow and Shapiro (2008) researched the effect of visual media on American preschool students as they grew into adolescence and found a marginally statistically significant impact of pre-school television viewing on students' general and reading scores in their study later in life. In the same year, Rotbain, Stavy, and Marbach-Ad (2008) found that using computer animations to explain abstract concepts in molecular biology college courses dramatically improved the participants' learning outcomes. Jakubowski (2013) investigated the impact of using illustrations in reading and oral storytelling on vocabulary learning among a group of middle school beginner Spanish students. The study's interventions produced improvement in short-term lexical retention, but less in the long-term one – a finding which appeared to contrast those suggested in the previous literature.

A number of other studies investigating explicit visual literacy teaching (Callow, 2003; Papademetriou & Makri, 2015; Unsworth, 2006) aim to validate the necessity to teach visual metalanguage, rather than to generate evidence supporting the proposition that explicit visual teaching contributes to an improvement of language learning outcomes. The current study's finding that direct instruction of visual literacy facilitated language learning is thus more closely related to later studies whose summaries are provided in the following paragraphs.

Galyas (2016), using an embedded experimental study design (Creswell, 2014), conducted a research study on the extent to which explicit visual literacy instruction helps participants analyse graphic representations found in their science course. The participants were two groups of seventh graders in an urban American school and consisted of both native English and non-native English students placed together in a bilingual immersion science course. The pre-test and post-test scores indicated a significant increase in science achievement tests among both groups of participants, especially the non-native English one.

Hosni's (2016) study among two groups of Omani university students majoring in economics and political science also suggests an improvement in comprehension and ability to recall lessons one week later among the experimental group who were exposed to infographics reading materials as opposed to the control group who received the traditional instruction with verbal texts alone. However, the study's small group sizes and use of objective multiple-choice and gap-filling assessment tools to measure comprehension and retention ability may have adversely affected the study's validity and reliability, and possible generalisation of the results.

A lack of literature on explicit visual literacy instruction and its impacts on language learning outcomes is a lacuna in the literature inviting more immediate future research given the necessity for students at all levels to acquire critical visual literacy skills, be it in the present study's English language learning context or those in the other English language learning institutions.

6.5.7.3 Impact of Cycle Two on critical thinking

Previous research showing a connection between direct visual literacy training and improved critical thinking (Lehman, 2015; Shirkhani & Fahim, 2011) adds credibility and authority to the findings of the current study. The student participants, however, appeared to display a limited understanding of what critical thinking entails as they appeared to refer to critical thinking "casually" and did not properly distinguish between lower-order thinking and higher-order critical thinking. They also stopped short of explaining in what ways the visual lessons in Cycle Two promoted critical thinking as in the case of the first student focus group participant below.

(Extract 138) I agree that visual aids help us a lot in learning. It can grab our attention, and it can boost our critical thinking skill. [Post-Cycle Two student focus group, P1, 01:20:00]

6.6 Conclusion

This chapter has presented and discussed an action research study which investigated the impact of two visual literacy training approaches on English language learning outcomes in two action research cycles. Non-participant classroom observation, lecturer one-on-one interview, student focus group discussion, and student diary were used to corroborate the study's data and findings. The first cycle used an implicit approach and taught visual literacy through a sample of guided questions to help the students develop a habit of unpacking different layers of meanings present in visual learning materials they are exposed to in their learning. The second cycle explored an explicit approach to visual literacy training. This cycle first used a presentation to explicitly teach the students selected visual metalanguage and structural components to familiarise them with the fundamental concepts in visual literacy, before providing them with guided and independent practice to help the students develop basic abilities to analyse a still image and explain their analyses to their peers in oral and written verbal modes.

The visual affordances used in the action research study, which included those introduced in the coursebook and those supplemented by the lecturer and the students themselves, were found to be rich, interactive, and conducive to language learning. In retrospect, the students were to a great extent susceptible to the implicit visual teaching in Cycle One, having reported an improvement in attention, engagement, memory, critical thinking, as well as vocabulary and grammar learning. The Cycle Two interventions, despite being more technical, more effort-inducing, and, initially, perhaps challenging for a small number of students, also produced a similar positive impact on the students' learning outcomes, supporting the general care for the inclusion of visual literacy instruction in the mainstream language study curricula. These findings are as significant contribution to the ELT literature and context to facilitate further research in the field.

Particularly, a theoretical justification for similar impact of visual literacy instruction can be found in da Silva's (2014) work with a group of adult migrant learners within the framework of Halliday's Systemic Functional Grammar applied in the context of Applied Linguistics. The project has been cited multiple times throughout the thesis and has shown some convincing evidence of learning improvement among those ESL migrant learners in terms of engagement in learning, acquisition of vocabulary and grammar in context, and better fluency in speaking and writing. Bristch's (2009) research with ESOL training teachers, in addition, focuses on teaching these pre-service teachers to develop English proficiency, visual literacy, and teaching techniques based on social interaction and co-construction of knowledge – the pillar of Vygotsky's socio-cultural theory of language learning. In Part Two, my thesis, partially framed by Vygotsky's Zone of Proximal Development and scaffolding, quite extensively discussed the role of interactions in language development as students are engaged in a visually stimulating activity in and out of the classrooms.

After showing evidence pointing to improvement in learning outcomes as a result of visual literacy instruction, in the next chapter, the thesis examines the pedagogical implications derived from the study's findings and proposes a working framework to promote visual literacy instruction in the English Department's curriculum, recommendations to help prepare lecturers for visual literacy instruction, mechanisms for teaching visual literacy to students, and procedures to assess the impact of visual literacy training. Accordingly, the next chapter will also explore the extent to which action research shows empirical evidence that visual literacy can improve language learning outcomes.

CHAPTER 7: IMPLICATIONS OF THE THESIS: A PEDAGOGICAL FRAMEWORK AND TWO APPROACHES FOR VISUAL LITERACY INSTRUCTION

7.1 Introduction

As previously presented in Chapter 6, the literature review of visual teaching and learning practices in the English Language Teaching world over the last three decades indicated that visual literacy has gradually crept into the English and visual arts curricula in general education in English speaking countries like the United States (Association of College and Research Libraries, 2011; Bleed, 2005; Robertson, 2007), United Kingdom (Burn & Nixon, 2005; Jewitt, 2008), and Australia (da Silva Joyce, 2014; NSW Government, 2011; Unsworth, 2006), and has taken manifold forms of instruction – both implicit and explicit. Such integration, however, remains peripheral and even sometimes invisible (Eilam, 2012) in educational contexts in which English holds a non-native status but is an international or global language – a context which is represented by Kachru's expanding circle countries (1985, p. 13).

It was speculated at the beginning of this thesis that visual teaching and learning would pedagogically hold an important place in education and could help ameliorate learning outcomes in the English language learning context of the current project — The Department of English at the Royal University of Phnom Penh. Part Two's action research and its findings have indeed confirmed that speculation.

Part One of the thesis provided a detailed description of the visual pedagogy practiced by four lecturers teaching four core subjects in the same year level in an undergraduate English language degree program. The findings from that part of the thesis laid the foundation for the action research in Part Two and support the implications drawn in this chapter. The following paragraphs highlight some relevant findings from Part One

which underpin the essence of visual literacy instruction and strongly argues for its full integration into the core curricula at the Department of English.

7.1.1 Recapping student views on visual literacy

As discussed previously in Chapter 4, among the student participants surveyed, especially those on social media, a vast majority are regular consumers of visual resources. They were a heterogeneous group of consumers who varied in levels of activeness, motivation, and methods in using visual resources for their learning and communication. They were overwhelmingly on the receiving end of visual communication and possessed limited skills, experience, and expertise as producers and distributors of visual representations. They agreed on the facilitative value of visual literacy for language learning, but their opinions were divided about its role in developing critical thinking. Those who were sceptical of the roles visual literacy plays in fostering critical thinking believed that critical thinking is mainly promoted through a high level of verbal literacy, and not so much by visual literacy. The students acknowledged in the group interviews the paramount functions of visual resources in helping sustain their learning interest and providing concrete illustrations of difficult concepts in their lessons. They also stated that the visual materials and activities play a mnemonic role in helping them improve their memory of the target language points and content knowledge taught in the program. However, not every visual representation in the coursebooks is useful, as some of them appear disconnected from the verbal text or even out of place altogether. A good number of the students were visually oriented and showed much interest in and potential for developing their visual literacy, yet there was no proper guidance in place for the students to capitalize on these budding learning capabilities which could develop into a skill that helps propel English language learning as well as lifelong learning beyond formal education and employment. The participants were

far from being digital natives and were in need of visual literacy instruction, as suggested earlier by Bittman, Rutherford, Brown, and Unsworth (2011) and Brumberger (2011).

7.1.2 Recapping lecturer views on visual literacy

Among the four subjects in the Bachelor's program investigated in Part One, visual literacy was taught implicitly in Global Studies, Literature Studies, and Core English. No direct reference was made to visual literacy, and visual resources contained in the learning materials collected were not taken full advantage of or were simply ignored. Writing Skills was the only subject which was observed to teach visual literacy explicitly. In this subject, students were taught to interpret graphic representations such as line graphs and bar charts.

All six lecturer group interview participants acknowledged the rapidly increasing pervasiveness of visual content in communication and education, and went on to suggest that the impact of this visual proliferation on education and English language learning is immense and almost inescapable. Highly influenced by their age, their own learning disposition, the nature of the subjects they were teaching, and their previous training experience, the lecturers used visual materials in different ways in their teaching. All agreed that visual literacy instruction would help facilitate English language learning, and students needed to be taught to make more efficient use of visual materials to support their learning. They agreed that visual literacy helps increase critical thinking but disagreed as to the extent it does so. They also agreed that students as well as they themselves needed additional training in visual literacy instruction but disagreed about the training trajectories for themselves and for their students. Four of the lecturers expressed a desire for explicit visual training, so that they themselves could provide explicit visual literacy instruction to their students. The other two lecturers favoured a more implicit approach, thinking that explicit visual literacy instruction should be reserved for those who specialise in visually dependent disciplines such as architecture, computer design, medical science, and biology.

7.1.3 Recapping visual materials in use in the Department of English

The learning materials collected, which included the coursebooks and additional resources introduced by the lecturers, were very rich in visual representations, especially for Core English and Global Studies. In the case of Core English, *New Headway Upper-Intermediate* student book was the coursebook, whereas a compilation of materials from different sources were used as the learning packs for the other three subjects. For reasons of affordability, reproduction of these learning materials was done in black and white, and consequently some of the visual materials became hard, if not impossible, to interpret. Only the Core English coursebook and some novels used for Literature Studies were available in full colour, yet not every student was using a colour copy of these materials as full-colour copies were reportedly "too expensive" for them. The use of full-colour materials, however, was on the increase as revealed in the interviews with the lecturers and students. The resources introduced by the lecturers were all full-colour unless they were printed versions copied in black and white.

7.1.4 Chapter outline

Informed by these findings from Parts One and Two, this chapter sets out a number of implications for teaching visual literacy. First, it argues for the necessity to teach visual literacy in the Department of English at the Royal University of Phnom Penh. Second, it presents a framework which could be used to guide the implicit and explicit teaching of visual literacy in the department or an English language learning context whose inherent characteristics are analogous to those of the department, of which there are many throughout South-East Asia. Third, the chapter explores critical issues to be considered when implementing the proposed visual literacy instruction framework so that the long-term impact can be achieved in terms of promoting visual literacy, first, implicit and then explicit.

Fifth, the chapter discusses the implications for promotion and teaching of visual literacy in bigger communities of practice in English language education contexts in Cambodia.

7.2 The need for visual teaching: Recapping evidence from Part Two

As noted by Carney and Levin (2002, pp. 7-8), the pedagogical goals of visual illustrations can be: (1) decorational, aiming to beautify a text and stimulate learners' interest; (2) representational, providing a visual illustration of a part or the whole of a verbal text; (3) organizational, showing a structural framework for a textual content; (4) interpretational, helping explain and clarify a complicated text; (5) transformational, having the mnemonic function to aid learners' memory of a verbal text's content. Understanding the importance of visual resources in learning, curriculum and material designers now include a vast number of visual resources in learning materials and activities for teachers and students to discuss such visual content as pictures, photos, and cartoons. In-training and pre-service educators are taught questioning techniques to help learners unravel the meanings of a visual resource placed adjacent to a verbal learning activity (Canning-Wilson, 2001; María, 2013), but that is far from enough for teachers to respond to the learning needs of 21st century learners.

Growing up in a visually saturated world, today's students are especially attracted to visual materials, and habitually use visual representations in their learning (Delello & McWhorter, 2014). Probably unknowingly, they have developed some tacit knowledge in consumption and production of visual resources themselves but lack metacognitive knowledge to talk about it as they may not have received any systematic, intentional instruction in visual literacy in their learning at a formal setting such as in schools. Learning to interpret and appreciate visual resources are important skills for students both in the classroom and in the workforce. This further reiterates the need for visual literacy instruction.

Strong evidence generated through the lecturer interview, classroom non-participant observations, student focus group discussion, and student diaries conducted in Part Two of the thesis indicated that implicit visual teaching improved learning attention, cognitive engagement, and memory. Both the lecturer and student participants stated that embedding visual materials and activities in learning reduces the likeliness that students divert their attention from their English language learning, moreover their attention span in learning is extended. They also reported that, as far as engagement is concerned, whereas a page of pure verbal text "turns them off", visual materials created a more interesting learning atmosphere in which boredom in learning was reduced. They engaged more cognitively in learning, were less tempted to do non-learning activities like checking their smart devices, and were more likely to process the language learning lessons deeply as visual cues help engage them in deep thinking. The explicit approach to visual literacy instruction produced a similar impact on the students' learning outcomes but appeared to increase cognitive load for a small number of students, making the language learning experience at times too challenging for them as they had to learn not just new English language aspects but also concepts in visual literacy. For the majority of the students, however, the metalanguage introduced through the explicit approach was useful as it helped improve their critical thinking when they interpreted visual materials.

In short, the visual literacy teaching interventions implemented in both cycles of the action research study boosted learning morale, and promoted participation and critical thinking. Learning outcomes were also reported and observed to improve as the visual approaches and materials used in the study helped the student participants learn vocabulary and grammar better and faster.

Cambodian students are allegedly not habitual critical thinkers (Heng, 2014; Nault, 2015; Pich, 2010), and a pedagogical intervention which fosters critical thinking could make

a significant impact for improvement of their language learning outcomes and their ability to think beyond the surface.

The key roles visual resources played in helping the lecturers achieve learning objectives and the student participants learn different features of English grammar and vocabulary suggest that the Department, lecturers, and students should invest more in learning materials and universally use full-colour coursebooks instead of the copied black and white ones so that the fullest learning potential inherent in visual materials can be taken advantage of. Such an investment would still be modest – a full colour coursebook can be purchased for \$12 (compared to \$3 for a photocopied black and white version).

In response to these propositions, English language learners such as those in the current study, especially when the majority of them will train to become English language teachers, should be provided with instructional procedures to help them become visually literate enough to benefit from and contribute to the latest developments in visual literacy concerning both language learning and social contexts.

To sum up, in this section I have argued that the evidence from Parts One and Two of the thesis strongly suggests that there is a gap in terms of visual learning between the student participants' learning behaviours, learning material affordances, teaching practices, and existing curriculum content. Visual literacy instruction, whether provided implicitly or explicitly, has much potential to improve language learning outcomes. Both the student and lecturer participants have expressed preferences for more rigorous visual literacy instruction so that the current program can meet learning needs more effectively. Visual literacy instruction is currently practiced on a marginal basis, and no proper mechanism has been set in place to bring visual literacy instruction from the periphery to the core of the curriculum. In the next section, I discuss the pedagogical implications of the thesis for the Department

of English at Royal University of Phnom Penh by first presenting a visual literacy instruction framework, and then examining key issues to address when implementing the proposed framework.

7.3 Pedagogical implications for visual instruction at the Department of English

This section presents and explains a new pedagogical framework to promote and teach visual literacy in the English language learning context in the Department of English at the Royal University of Phnom Penh. The framework has been derived through a combination of inputs from the thesis's theoretical frameworks and the research findings of both parts of the thesis. The framework provides guidelines for the successful implementation of two visual instructional approaches – implicit and explicit – which will be discussed in detail in Section 7.4.

This pedagogical framework can be used by theorists or practitioners, i.e. educators, teachers, students, curriculum developers, researchers, English language policy makers, and other community members who have acquired an interest in learning more about visual literacy and in promoting it either through research or direct teaching and learning practices. The issues and concerns in Section 7.3.2, which may serve as guiding principles for implementation of the framework, can be operationalised and applied to actual classroom teaching, while the sample tasks explored in Section 7.4 will give readers a concrete example of how the two visual literacy instructional approaches can be implemented in an actual language classroom.

It should be noted that beyond the context of the current project, the framework and approaches for visual literacy instruction have not been implemented, evaluated, or modified for improvement. The framework is not meant only to be taken "as-is" but can be expanded or adapted to suit the unique characteristics of individual English language learning situations and contexts. And importantly, this framework has been designed not to replace

language teaching approaches and methodologies already set in place but to complement them. Indeed, it can even be integrated with them to achieve both visual and verbal-print literacies. In this sense visual literacy serves as both means of and ends to language learning.

7.3.1 A proposed pedagogical framework for visual literacy instruction

As illustrated in Figure 7.1, and to reiterate the argument made throughout this thesis, English language students and teachers need to be taught visual literacy, and teachers need to

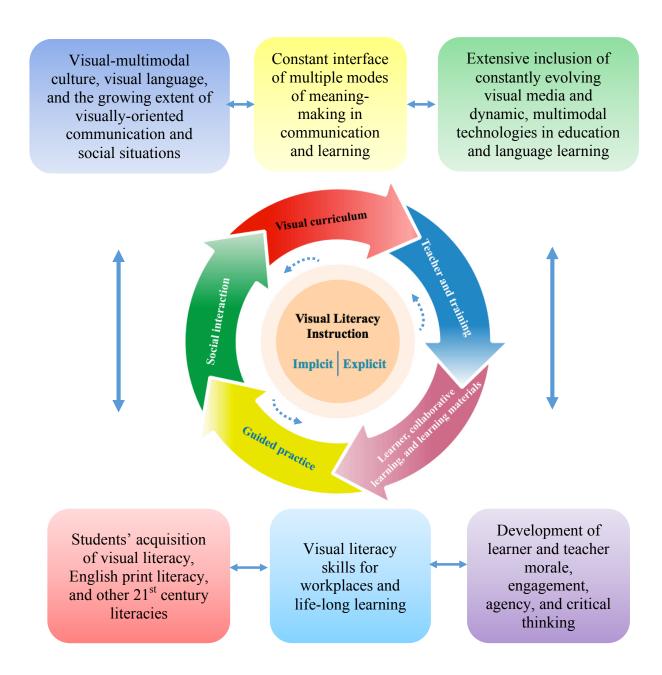


Figure 7.1. A proposed pedagogical framework for visual literacy instruction

learn to teach it in a systematic, practical way through multiple cycles of learning, teaching, observing, reflecting, and improving their instructional practices in order that the teachers can effectively address both language learning and visual literacy instruction agendas, and the students therefore can attain visual-verbal and other literacies as they progress through a language training program adopting this visual pedagogical framework.

The framework places **visual literacy instruction** at its core as a means to realising these literacy goals. The other immediate key contributing components include curriculum, teacher, learner, collaborative learning, learning material, guided practice, and social interaction (See Figure 2.3) — which all work together and influence one another in repeated, multidirectional cycles. Being the main driving force of the framework, visual literacy instruction can be implemented eitherimplicitly or explicitly. It plays a key role in developing and promoting visual-verbal and other literacies, and can be ameliorated in a number of ways, as discussed in Sections 7.3.2.1 and 7.3.2.2. Brumberger (2011), Felten (2008), Rourke and O'Connor (2009), among others, suggest there is an inadequacy of visual literacy and visual communication skills among the 21st century learners. Learners cannot be left to acquire visual literacy by themselves because communicating in a visually saturated environment does not equate to an efficient or adequate acquisition of visual literacy. They need to be taught rigorously and systematically with sufficient in-class and real-life practices, potentially through two approaches explained in Section 7.4, implicit and explicit.

This framework shows how successful language education in the 21st century needs to observe and tackle issues beyond classroom parameters, and account for the continuous whole of visual-multimodal culture, visual language, the growing extent of visually-oriented communication and social situations, advanced technologies and new visual media, which constantly interact with one another and collectively contribute to the 'visuality' of

communication and learning in contemporary society. This framework responds to the ever increasing use of visual imagery in every aspect of life, which suggests an end to the long uninterrupted reign of verbal texts (i.e., both oral and written) as the predominant means of social interactions. This shift from text to visual dominance in contemporary culture and society warrants a redesign of learning curricula and instruction to embody visual literacy and its associated skills.

In light of this paradigm shift, this framework proposes that a language learning curriculum more seriously embrace visual literacy learning components and transform itself into what is termed a "visual curriculum" in this thesis. It is labelled "visual curriculum" because, as particularly revealed in Part One, an insufficient emphasis has been placed on the visual components of the curriculum. A visual curriculum, despite the visuality its name suggests, is not a curriculum that teaches visual literacy skills exclusively. It is not necessarily a stand-alone entity but a structured system designed to run alongside the existing language education curriculum and teaches visual literacy skills in succession following a carefully planned timeframe and syllabus so that the running of the language education curriculum is not negatively affected. With visual-literacy-oriented components built into an existing language learning curriculum, an integrated curriculum is created, and development of both visual and verbal-print literacies can be targeted and achieved at the same time. Educators and researchers who use this framework in developing a visual curriculum will find that a rich plethora of visual technologies, materials and activities have already been included in current language learning programs. Such a curriculum will respond well to an environment analysis (Nation & Macalister, 2010) and ensure that the language learning program following this curriculum addresses the omnipresent visualmultimodal factors in the contemporary communication and education environments. This framework emphasises the strong presence of these visual resources and provides

mechanisms through its two accompanying instructional approaches to mobilise and use them to support language learning in a more meaningful way.

The framework promotes the teaching of visual literacy in both implicit and explicit ways and treats the teacher and more experienced and knowledgeable learners as valuable resources in a language class. They can play the role as the More Knowledgeable Ones (Vygotsky, 1978; Wertsch, 1985) and provide the much needed "scaffolding" (Bruner, 1978; Hammond & Gibbons, 2001; Wood et al., 1976) to those who are less knowledgeable and skilled in visual literacy through sustained, guided practice. In this manner, both learners and teachers learn and practice their visual literacy skills, receive advice and feedback for improvement, and then learn and practice further. Through this framework, teachers and learners will engage in collaborative learning, in which the roles between teachers and learners can be reversed, and learners with lower visual literacy are not disadvantaged but are supported to learn at their own pace through guided practice. Given the importance of learning materials development (Tomlinson, 2016), in addition to the coursebooks, the teacher and learners may design, adapt, or bring their own visual learning materials to class and lead a class activity using those materials, providing an opportunity for all learners and the teacher to contribute to the completion of an activity. Student visual presentations implemented in the action research in Part Two of this thesis are a good example of empowering learners to take charge of their own learning. Learners are encouraged to bring visual resources to the class, visually present them to their classmates, and they together learn a target language point in a collaborative learning environment.

Another important aspect of visual literacy instruction is social interaction, which can take place in physical forms in the class or other real social contexts, or on virtual platforms, such as social media and social networks (See Figure 2.3). Social interactions ensure that learners develop an ability to transfer the visual communication skills and

experience they have acquired through learning within this pedagogical framework to new communication contexts of their choice (Kalantzis & Cope, 2008) – an ability which is indispensable for the development of creativity, independence, and agency among language learners.

Through such learner- and learning-centred instruction, the teachers and learners will develop a good level of morale, engagement, motivation, and critical thinking in addition to the language skills targeted by a regular language learning curriculum. Learners will also acquire work-ready visual communication skills and competences which will be valuable for them to effectively fulfil their professional obligations, make a meaningful contribution to their workplaces, and continue their journey as life-long learners.

This section has explained what this new pedagogical framework for visual literacy instruction entails, the learning objectives it aims to achieve, and briefly the mechanisms to achieve them. The following section further discusses issues and concerns to ensure a successful implementation of the framework.

7.3.2 Issues and concerns to address when implementing the framework

For the framework to succeed, a number of issues and concerns should be carefully considered, and the implementation of the framework should be enacted with the fulfilment of certain conditions, including, but not limited to, those discussed in the following sections.

7.3.2.1 Time constraints and institutional support

First, like other new skills, fluency in visual literacy, despite our excessive exposure to visual materials around us, takes time and commitment to develop. Faced with an already cluttered list of teaching and assessment tasks and perpetual time pressure, the lecturer participants in the current project, who showed serious interest in visual literacy instruction, voiced a concern and doubt as to whether they would have time to incorporate visual literacy

instruction in their teaching such that their teaching of the compulsory curriculum contents would not be negatively affected. Moreover, the fact that visual literacy is not included in the current syllabuses and curriculum makes it seem even less necessary.

However, as shown in the action research in Part Two of the thesis, the Core English lecturer managed to teach visual literacy in both cycles without omitting the pre-planned syllabus contents. Classes were even observed to start late and end early. A regular session, which was scheduled to last for 90 minutes, typically only ran for approximately 75 minutes. The students collectively arrived late for class and expected to be dismissed early. Visual materials, as indicated earlier, have the power to attract, sustain learning interest, motivate, and engage learners in serious thinking. If implemented effectively, visual literacy instruction can potentially help solve the punctuality issue, utilising what is currently lost at the start and finish times. Teachers will have more time in each session to focus on the visual aspects of learning, and the students, for their part, may actually enjoy learning in a longer session.

Another issue pertaining to time pressure is the teachers' reported inability to distance themselves from their seemingly endless teaching responsibilities so that they can attend professional development workshops or training courses in visual literacy. This issue remains unresolved and continues to plague teachers on an ongoing basis. There is no easy solution and resolving it requires more than training initiatives and the teachers themselves. Institutional support, in this case, plays a pivotal role in ensuring that time is allocated for regular in-service visual literacy training activities during which teachers can focus on acquiring visual literacy and learning to teach it to their students. However, my experience working at the Department of English for over ten years suggests that, even with such institutional support, formal in-service training such as workshops and seminars do not

always work and produce the desired impact on professional development plans. The impact on actual classroom behaviour, if any, is often uninspired and, thus, short-lived. By contrast, a number of lecturers regularly meet up as a social group over the weekends and at times discuss teaching issues they encounter during the week. It is through such a group that visual literacy training initiatives may succeed if the formal workshops and seminars are unsuccessful. Informal training in visual literacy instruction will be discussed in the following section.

7.3.2.2 Teacher training and peer observation

This pedagogical framework emphasises the need for teachers to be visually literate themselves. As indicated in the findings of Part Two of the thesis, teachers can improve their visual literacy by teaching it and engage themselves in collaborative learning with the students. They can also attend formal training programs to develop their visual literacy and acquire knowledge and experience of methodologies and approaches to teaching it. However, as the following sub-section maintains, (informal) peer observation is one effective strategy to improve both visual literacy and visual literacy instruction among language teachers. It is cost-effective, can be practiced without the teachers having to take a break from their teaching, and can potentially produce long-term positive impact on their teaching practices.

As Eilam (2012) and Rogers (2002, 3003) note, observing successful experiences of colleagues and peers can have more impact on one's professional practice than reading about theory and research. Such success stories are concrete and could be far-reaching, connecting many teachers first through word of mouth and then through peer observation itself. It is not just its long-lasting influence that makes this kind of informal, casual learning a potentially valuable approach to allow visual literacy training to actually work. Logistically, informal peer observation is easy to implement provided that mutual trust and empathy have been forged between two visual literacy enthusiasts. For example, one novice teacher and one

expert teacher could pair up as the observation could and should be reciprocal. The observation itself may be done for just a portion of a session, for example, for 30 minutes, during which a visual learning activity is being conducted, allowing the observer to observe visual teaching in the unique context of that particular class. With a proper post-observation reflection and discussion, both the observed and observing teachers can identify ways to further improve the visual literacy instruction for each of their classes.

7.3.2.3 Existing visual knowledge and collaborative learning

Visual literacy learners as well as teachers bring to the training different levels of knowledge and experience in visual literacy, and this learner/teacher characteristic has to be seriously considered when conducting visual literacy training as there may exist a wide discrepancy in visual ability levels among the training participants. Such a lacuna can be overcome through collaborative learning by creating opportunities for those with superior visual literacy skills to help guide the less experienced ones. At the same time, sufficient challenges and new visual lessons should be provided to the more knowledgeable learners/teachers for them to feel the training not only reinforces their pre-existing knowledge but also opens new ground for them to learn new ideas, allowing them to connect their existing knowledge with the new visual literacy concepts and practices. According to the constructivist theory of learning (Can, 2009; Fosnot, 2005; Hoover, 1996; Kirschner, Sweller, & Clark, 2006; Mvududu & Thiel-Burgess, 2012; Yilmaz, 2008), such a connection is indispensable for visual literacy instruction to produce a long-lasting impact and thus competent and fluent visual literacy practitioners.

This section has presented a framework for visual literacy instruction and critical issues to consider when the framework is used in actual teaching. The next section explains and exemplifies two visual literacy teaching approaches based on the proposed framework

above – one is for implicit visual instruction and the other is for explicit visual instruction.

7.4 Approaches to visual literacy instruction

To survey some of the current visual literacy training offered in various learning contexts, I used Google® search engine to locate courses and programs teaching visual literacy for various purposes. Because of the broadness of visual literacy as an ever expanding concept, my online search using "university course teaching visual literacy" as the search terms found a myriad of projects and training courses in visual literacy. A number of projects – some are accessible to the public, while a selected few are private and not shared on the public domain – aim to promote and/teach visual literacy for different purposes and contexts. These training programs can come in the form of a web page (e.g., the online instructional resources for teaching visual literacy on the Michigan State University website) or blog page which discuss the importance of visual literacy for education and work, arguing (even defending) the need to learn more visual literacy, and briefly discuss strategies and resource collection for teaching visual literacy. Other programs are more systematised and have been developed as university courses to teach visual literacy, including those which are directly related to this thesis: visual arts (e.g., Aesthetics and visual literacy at the Australian Catholic University in Australia), media studies and communication (e.g., Visual literacy for digital media at the RMIT University in Australia), educational technology, K-12 education (e.g., Strategies for teaching visual literacy to elementary/middle school children at the University of Wisconsin-Whitewater in the USA), and art history (e.g., Art and Visual Literacy at the Metropolitan State University of Denver in the USA).

Another institutionally funded project is also of particular relevance; however, it was run by a team of visual arts experts, not by English teachers. The University of Maryland's visual literacy toolbox, for example, is a comprehensive resource pack containing theoretical explanations, visual teaching approaches, and a rich collection of questions language

teachers can sample and use in their teaching. Another similar project is being implemented by the Toledo Museum of Arts in Ohio, which, as the name suggests, is art-oriented.

Other works of a similar nature but done on a larger scale were carried out by Eilam (2012) and Blummer (2015) to survey educational and scholastic efforts to promote and teach visual literacy. Both authors searched through the leading databases and Google® search engine, using certain search words/phrases keyed in separately and together such as visual literacy, communication, rhetoric, higher education, academic, colleges, universities, instruction, teach, and education, as well as visual literacy courses/training, preservice programs, in-service programs, visual representation, curriculum/a, and workshops. Eilam (2012) focused on the teaching of visual literacy in teacher education within the frameworks of educational technology, teaching of disciplinary knowledge, in-service programs, taught between early 2000s and early 2010s. Eilam concludes from the small number of courses teaching visual literacy surveyed in her Internet search that visual literacy instruction was an existing lacuna in teacher education programs and that teachers were not sufficiently assisted to develop visual literacy themselves and were not trained to help develop their students' visual literacy. Blummer (2015), on the other hand, categorised her review of visual literacy initiatives into five themes, offered across higher education institutions: (1) the use of instructional visual literacy scaffolds; (2) faculty's creation of activities and assignments to promote students' abilities to interpret and create visual images; (3) lectures and readings promoting visual design principles; (4) the development of programs and courses centred on visual communication; (5) research initiatives that sought to identify and improve individuals' skills in communicating visually. Among a range of courses, programs, workshops, and other initiatives oriented toward visual literacy promotion or instruction, only one instance related to the teaching of visual resources in English language teaching was mentioned – Shin and Cimasko's (2008) multimodal assignment for a group of 14 ESL

learners to integrate linguistic, audio, visual, and spatial modes of representations to create argumentative essays in a freshman composition in an American university.

In terms of publications, a limited number of books and research articles have touched upon visual literacy instruction, often as a sub-area under multimodality. da Silva Joyce (2014) provides an instructional framework and approaches for teaching multimodal literacy to adult migrants learning English as a second language, while Serafini (2013) tackles visual literacy, media literacy, and multiliteracies through curricular framework and pedagogical approaches for English language and visual arts in North American primary and secondary education.

A lack of English language courses teaching visual literacy either implicitly or explicitly, easily identified by my Google® searches, and an under-representation of such courses and publications documented in previous collections of institutional efforts involving visual literacy instruction such as those by (Eilam, 2012) and Blummer (2015), points to the value of efforts such as those in the current study to promote and teach visual literacy skills as a direct response to the visual development of education, communication, and employment in contemporary society.

Sections 7.4.1 and 7.4.2 present two visual literacy teaching approaches – implicit and explicit, both of which can be carried out in four stages: (1) teacher presentation, (2) teacher-student and student-student collaborative learning, (3) guided practice, and (4) application. In **teacher presentation**, the students are shown and scaffolded through a teaching demonstration conducted by the teacher to expose learners to new visual concepts, questions, or skills in a systematised way to help learners build foundational knowledge of visual literacy. In the **collaborative learning** stage, the learners collaborate with one another and with the teacher, and practice the visual knowledge or skills they have learned. Through this stage, the learners and teacher explore the visual knowledge, concepts, or skills through

practice in pairs or groups and identify the areas for which they need additional lessons or guidance. In the **guided practice** stage, additional scaffolding is sought by the learners themselves or offered by the teacher to ensure deeper understanding of the target visual concepts or skills in preparation for the **application** stage. This autonomy-building stage encourages learners to apply the newly learned knowledge, concepts, or skills to in-class individual practice or in real-life social interactions without any prompt or guidance. If after all the stages have been implemented the learners still need guidance, some, or even all, of the stages can be revisited depending on learning needs.

7.4.1 Approach to implicit visual instruction

Guided by the proposed framework, the first visual literacy instruction approach is implicit, and aims to teach students a system of visual abilities to interpret visual media they come across in their learning and real-life communication.

In many of the lessons I observed, the lecturer and student participants treated visual components in learning materials as a decorational feature to break the monotonous flow of verbal text. The contribution of visual affordances to supporting the learning of target language points was acknowledged in a restricted way and was at times overlooked or ignored.

In this particular example of a rich visual text (see Figure 7.2), there are photos of a man and two male adolescents placed in two bubbles, one above the other, bearing the logos of companies which had contracted them for body advertising were. As shown in Figure 7.2, the background behind the bubbles are two high-angle shots of what appears to be Times Square in New York, showing the conventional advertising method using large screens on a busy intersection like Times Square. The juxtaposition of the two methods could be utilised to ask students to compare the two advertisement methods and deepen their thinking about the new phenomenon of body advertising, an activity which is not discussed in detail in the

adjacent verbal text. Without any instruction in the book or guidance from the teacher, the students might just skip the juxtaposition and miss the opportunity to compare body advertising to the conventional type as discussed above. In one of the lessons on this topic that I observed, the students were asked to discuss these visual cues using the basic questions provided in the book (also shown in Figure 7.2). The lecturer did not provide any additional prompts or guide in helping the students interpret and take advantage of this visual element. The implicit visual literacy teaching approach presented in this section will enable students and teachers to achieve just that.

Look at the pictures.

What is 'body advertising'? Which parts of the body listed below do you think are most suitable for this kind of advertising?

- head
- face
- eyelids
- forehead
- hands
- · chest
- thighs
 soles of the feet

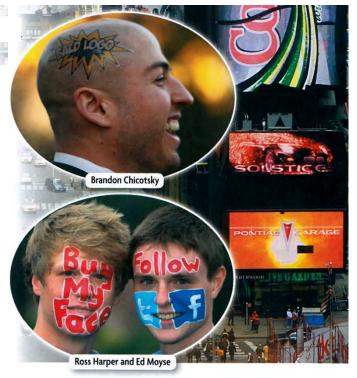


Figure 7.2. A prompt for a visual activity in the New Headway Upper-Intermediate coursebook © Oxford University Press 2014

With this approach, the ultimate goal is to enable learners to internalise a system of image interpretation methods and techniques which they can automatically retrieve and have at their disposal to use as they are presented with visual materials in their learning and real-life communication. The teachers and students should be able to interpret beyond the superficial, denotative layer of meaning, and dig deep for the connotative hidden messages

(Barthes, 1977; van Leeuwen, 2004). The skills will help them learn about visual literacy implicitly themselves even outside of their classrooms as they continue on their lifelong learning journey.

The approach is suitable for teachers and learners interested in improving their visual literacy but are not keen enough to devote time to learning the technical, explicit aspects of visual representations. This implicit teaching framework can be integrated into the existing curriculum and syllabus contents, and does not require much planning and extra effort to implement, and thus is not time consuming – a factor many teachers, including those in the current study, were very wary of. Introducing implicit teaching to an existing curriculum would likely face little resistance (Knight, 2009; Terhart, 2013; Zimmerman, 2006) even from lecturers who are not willing to change their teaching routines or risk losing their expert status being fearful that incorporating visual literacy instruction will render their knowledge and experience redundant, requiring them to "unlearn" and "relearn" many new lessons. It would nevertheless allow them to extend their skills at a time of their own choosing.

7.4.1.1 The proposed package for implicit teaching of visual materials

The analysis of a unit of *New Headway Upper Intermediate* student book presented in Chapter 6 confirms the visual richness of this learning resource. Neither the book nor the teacher, as concluded in my study, provide sufficient instruction or guidance for the students to make practical use of the omnipresent visual representations in the book. The proposed approach will improve the students' learning outcomes, help them use the target vocabulary and grammar structures, learn new ones, enhance learning experiences, which helps with memory and recall, and enable them to establish networks between what they knew previously about the topic and what they just learned through meaningful practice in the context generated by the visual cues – a connection which, in the constructivist paradigm

(Can, 2009; Fosnot, 2005; Hoover, 1996; Mvududu & Thiel-Burgess, 2012; Yilmaz, 2008) is vital for language learning.

7.4.1.2 Questions to ask about visual materials (Implicit teaching)

Implicit teaching of visual literacy relies on the skilful use of a set of questions which can be first given to the students to keep and use on their own as guiding questions when they approach a visual cue. As explained earlier, the teacher is recommended to demonstrate to students first how to answer the questions. Afterwards, the students go through the progression of guided practice in pairs and/or groups with the questions shown, and then without the questions. Ultimately, the students are expected to develop an ability to ask and answer such questions subconsciously, independently, and spontaneously when they come across visual imagery in real life. Table 7.1 shows a selection of such questions. See Appendix 7.1 for more questions.

Table 7.1. Sample questions to ask about an image when teaching visual literacy implicitly

Visual aspects	Questions to guide students' interpretation of visual resources (image, in this case)
Subject matter	What/who is being shown in the image?What is going on in this image?What (do you see in the image which) makes you say that?What more about the image can you find out?
Visual design	What about the image captures your attention the most?What is being focused on?
Audience	 Who is the image probably created for? Where are you positioned as a viewer (above, below, or straight on)? In what ways does your position help you interpret the image

Creator's intended message	What is the purpose of this image?In what other ways can the image be used?
Copyright	- Has the image been used in the right way, legally?
Authenticity	Has the image been altered in any way?If so, how? How do you know?
Source of image	- Where does this image come from?
Visual-verb text relation	What is the function of the image?Does the image reveal any information not discussed in the text?In what other ways does the image complement the text?
Context	- Where do you expect to find such an image?
Response to the text	How does the visual text make you feel?What is your initial reaction to the image? Has your reaction changed after a careful interpretation of the image?

7.4.2 The approach to explicit teaching of visual materials

Eilam (2012) argues that to produce long-lasting impact on learners' development in visual literacy, any visual literacy instruction and corresponding curriculum reform need to be intentional, explicit, and organised – a view shared by da Silva Joyce (2014) and Kress and van Leeuwen (2006), whose frameworks for visual literacy instruction lay foundations for the explicit visual teaching in this thesis. The proposed package (See Table 7.2) aims to promote high order thinking, critical thinking, and metacognitive skills to critique the impactful visual representations learners are exposed to in curriculum and actual social interactions. It helps teachers and learners tap the full potential of visual affordances for language education and extend the systematised knowledge of visual literacy to new learning situations and social contexts.

The explicit package differs from the implicit one in that metalanguage used to analyse visual structural components is taught and promoted based on the rationale that the metalanguage has the potential to increase learners' metacognitive skills which enable them to manage and expand their visual literacy beyond what is taught in the curriculum. This visual teaching will be conducted on a regular basis throughout a course of instruction, with visual analysis techniques gradually introduced and practiced adequately before new ones are introduced. Through the four stages explained at the end of Section 7.4, this explicit approach adopts the procedures of the teaching and learning cycle (da Silva Joyce & Feez, 2012; NSW Department of School Education, 1992) by moving from the explicit teacher presentation of visual analysis techniques in the first step to the student individual application in the final step. Along the way, students are assisted with scaffolding input and activities through collaborative learning between teachers and students, and students and students in pair/group discussion.

Figure 7.3 is an example of materials which can be used to teach visual literacy

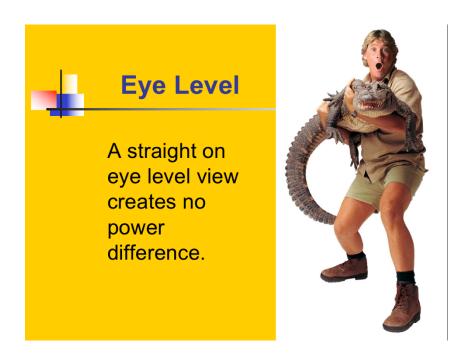


Figure 7.3. A PowerPoint slide to teach structural components of an image – the "eye level" angle in this case.

explicitly by first starting with a PowerPoint presentation, and then pair/group practice before learners are encouraged to apply their visual literacy skills individually with little or no scaffolding from peers and teachers.

In addition to the visual analysis techniques described above, depending on the learning needs and course objectives, explicit visual literacy instruction may include training in visual material production skills such as PowerPoint slide design, poster design, stick figure doodling, digital story, and dissemination of visual materials, i.e., the skills which were reported in the action research study in Part Two to be useful for the students' language learning, lifelong learning, and future job prospects. The visual material production training may invite opportunities for more collaborative learning as students with superior knowledge and skills could be encouraged to play a more active role, contributing more, and even leading the training – a suggestion proposed by the lecturer participants in the current project.

Table 7.2 presents a selection of visual analysis techniques and tips for explicit visual literacy instruction based on a series of lessons implemented in Part Two's action research. See Appendix 7.2 for a more elaborate table and explanation.

Table 7.2. Suggested package for explicit visual literacy instruction

Visual analysis techniques	Teaching tips
The three layers of meanings: Representational, interactive, and compositional (Kress & van Leeuwen, 2006)	 The metalanguage of the three layers of meanings in visual resources was not taught in the action research study conducted for this thesis due to the lecturer's and students' unfamiliarity with the three concepts and the short duration to implement the study. With the teaching spread throughout a program, the concepts can be introduced to the students gradually with abundant examples and practice, helping reduce the cognitive load for the students who have to learn the concepts and apply them to actual visual analysis in both classroom practice and real world communication.

	- The concepts are grounded in Halliday's theory of systemic functional linguistics and will help promote students' critical thinking in verbal text analyses as the three layers of meanings also exist for verbal text (Halliday used different terms – ideational for representational, interpersonal for interactional, and textual for compositional.)
Representational level of meaning	How the image represents reality - What events are being shown? - What characters are involved? - Why are such characters used?
Interactive level of meaning	 How the image interacts with the viewer Gaze: Demand and offer Angles: High, low, and eye level Shot distance: Long, medium, and close-up Colour: How colours convey moods, tones, and emotions in the image. What colours are the most dominant in the image? Do you think the colours have been altered?
Compositional level of meaning	 How the visual structural elements in the image are integrated Salience: The objects or aspects which capture the audience's attention the most. In what ways is "salience" achieved in the image? Placement of the subject matter: Centre or on the margins Framing: Through the use of vectors to delimit a boundary, the use of colours and shapes to mark continuity/discontinuity of a subject matter in the image, or simply through the use of white space
Source of the image	Students are shown online links to the images used and asked to search for associated images by themselves as a practice.
Ethical consideration	Copyright issues and acknowledgement of reuse and distribution of an image are to be explored here, raising students' awareness about the ethical standards in using visual resources – an aspect often overlooked in visual literacy instruction.

Sections 7.3 and 7.4 have introduced a pedagogical framework and provided explanations and examples of implicit and explicit approaches for teaching visual literacy.

In the next section, I discuss implications for visual literacy instruction beyond the institutional context of my study to the broader English language teaching context in Cambodia.

7.5 Implications for wider English Language Teaching communities in Cambodia

7.5.1 Visual literacy communities of practice

Success in visual literacy instruction in the Department of English will depend on another fundamental factor, that is the establishment and sustainability of a visual literacy Community of Practice (CoP). Wenger (1998) defines a CoP as a group of people who communicate with each other (mutual engagement) and develop ways and resources (shared repertoire) for reaching a common goal (joint enterprise) (as cited in Agrifoglio, 2015). Later, Wenger et al. (2002) defined CoPs as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an on-going basis" (p. 4). To Amin and Roberts (2008, p. 353), a CoP is "a driver of learning and knowledge generation". A CoP gives birth to and fosters continual engagement and collaboration among the members, and encourages both informal and formal education (Lewis, Koston, Quartley, & Adsit, 2011). To cultivate a CoP, Wenger et al. (2002, pp. 31-40) recommend that three essential structural components are established:

- Domain of knowledge: A set of issues that bring members together and a common sense of identity
- Community: What is known as the "social fabric of learning" the platform for the stakeholders to interact and share knowledge based on mutual respect and trust, using both intellect and social skills
- Practice: "A set of frameworks, ideas, tools, information, styles, language, stories, and documents that community members share."

The guiding principle for a CoP in visual literacy at the Department of English is to ensure that it brings sufficient excitement in the forms of new, useful learning experience, engages members in continuous, interactive discussion on issues vis-à-vis their areas of interest, and does not override the collective contribution and suggestions for improvement in favour of certain members – new and old, active and less active.

In this shared learning paradigm, there could be a student visual literacy CoP which involves initiatives and collaboration among the students who have a common interest and possibly with the teacher who is willing to support the community's establishment and development. Since group study has become a requirement, a norm, and a common practice in most, if not all, of the learning situations, students are not completely new to the concept and implementation of a CoP, and thus are likely to benefit much from this practical community of shared learning.

The teacher visual literacy CoP may start with recruitment of interested members from nearby language education institutions. Members are expected to contribute to the community activities at different levels. As displayed in Figure 7.4, central to the administration, management, and leadership of the community are the core members, which in this case would be the researcher and other founding members of the community who

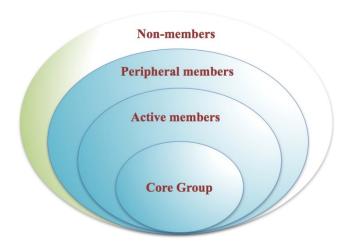


Figure 7.4. The visual literacy community of practice model, adapted from (Wenger et al., 2002)

oversee the ongoing operational matters of the community, ensuring that the community remains alive and active. Others may start as peripheral members who prefer to "keep themselves to the sideline" (Wenger et al., 2002, p. 56). As much as they would quietly and sometimes passively observe rather than actively participate in the community activities by contributing their inputs and interacting with the other members, these peripheral members are crucial to the success of the community in the long run. These members over time may take on a more active role and become what Wenger et al. (2002) call "active members" and even core members should the community activities match their interest and benefit their personal and professional development. As in the case of Keuk's (2015) proposed CoP model, the researcher and other lecturers with relatively high visual literacy, as the core members, will coordinate the community activities, for example, by organizing workshops and seminars to promote visual literacy awareness and calling for expressions of interest from more potential visual literacy practitioners so that a tentative community can be set up as soon as the initial workshops are completed. The subsequent workshops, which can and should be led by the other visual literacy practitioners, have the dual aims to provide the participants with tacit and explicit knowledge of key visual literacy concepts and initiate the groundwork for a setup of a sustainable visual literacy CoP by identifying potential members' interest areas, determine the administrative mechanisms to run the CoP on a longer term basis, and initiate methods to encourage continuous sharing of knowledge and experience among the members.

The success of such a visual literacy CoP also depends largely on another external factor – visual literacy teacher training, which is discussed in the next session.

7.5.2 Visual literacy teacher training

The proposed visual literacy framework and accompanying training packages may be incorporated in a teacher training program like that in the Department of English at the Royal University of Phnom Penh. Currently, the most visual training the program offers with regard to the use and development of teaching materials is the picture-interpreting techniques using a number of superficial questions, mainly to develop interest in learning and to activate existing schemata. This thesis has argued the case and has discussed evidence indicating that visual literacy is essential for both language learners and teachers, including those who are enrolled in a pre-service program. The undergraduate teacher training and MA in TESOL programs in the Department of English are feasible platforms to integrate visual literacy into core learning curricula and their inherent components, and ensure that the impact of the training starts with teachers and teachers-to-be, one of the most important agents of change in bringing visual literacy to the front and centre along with other literacies for the 21st century.

The training can also be provided as in-service courses (Nation & Macalister, 2010), providing technical visual analysis skills and teaching methods to those who have had some teaching experience and are keen on improving their teaching practices through visual literacy instruction. Nation and Macalister (2010) usefully explain how such training can be planned as both short- and long-term in-service courses and what mechanisms should be implemented to ensure that change in learning content and teaching approaches though this visual curriculum innovation is well received.

7.6 Conclusion

In this chapter, I have discussed how the findings of my research can have practical

implications for the English language teaching and learning in the Department of English at the Royal University of Phnom Penh. I presented my argument, based on the thesis' findings, that the English language learner and lecturer participants thought favourably of visual literacy and its facilitation for language learning. They also expressed a preference to have additional visual teaching and learning incorporated into their current and future programs. These findings led me to develop a pedagogical framework and two approaches to visual literacy instruction—implicit and explicit—which can be implemented in the learning context in the department. The chapter also discusses the study's implications for wider communities of practice in Cambodia with the purpose to promote visual literacy at different levels among various English language practitioners in the country. The next chapter concludes the thesis. It summarises the findings of the thesis and discusses the limitations of the study and raises suggestions for further research in visual literacy instruction within English language learning contexts.

CHAPTER 8: CONCLUSION

8.1 Introduction

This thesis set out to investigate visual literacy instruction in a Bachelor's program at a leading public university in Cambodia, where students major in English for the workplace or train to become English teachers for both public and private high schools in Cambodia. The thesis has been presented in two parts. Part One investigated the ways visual teaching was practised at the research site, while Part Two used action research to investigate the impact of two visual literacy instructional approaches on English language learning outcomes among a group of students in that context.

Chapter 1 of the thesis set the scene, established a research focus, and contextualised the study by introducing readers to the background and rationale for the study, statement of the problem, and aims of the thesis. Chapter 1 also argued for the delimitation and significance of the study, presented an overview of the thesis, and listed research questions the thesis set out to answer.

Chapters 2, 3, and 4 mainly described and discussed Part One of the thesis. Chapter 2 reviewed important literature on the history and development of visual literacy as both a concept and discipline, discussed the ways visual representations are treated in dominant ELT approaches and methods, explored the facilitative roles of visual materials, and reviewed selected literature to identify gaps and pressing issues visual literacy research was yet to address. Chapter 2 also explained the theoretical frameworks informing the thesis, presented a conceptual framework to show various components of this thesis, and reiterated the research questions Part One set out to answer. Chapter 3 discussed the research paradigm of the thesis and explained the research designs for both parts of the thesis by describing the participants, research instruments, data collection procedures, and data analysis methods

used for both parts of the thesis. Chapter 4 presented the findings and discussed them in relation to related literature, and provided a prelude to Part Two's action research.

Chapters 5 and 6 dealt with Part Two of the thesis. Chapter 5 focused on the presence of visual literacy instruction in mainstream curricula for primary and secondary education in three major English-speaking countries and a generation of studies and discussion pieces focusing on visual literacy in the ELT context. Chapter 5 also discussed the origins, the epistemology and theoretical foundations of action research, and its suitability for addressing research questions in this thesis. Chapter 5, furthermore, stated the research questions for Part Two's action research and introduced readers to the next chapter, Chapter 6, which presented and discussed Part Two's action research findings in relation to the existing literature on visual literacy instruction in the ELT context.

Chapter 7 dealt with the implications for both parts of the thesis, presenting a pedagogical framework which can be used to guide the teaching of visual literacy through two teaching approaches – implicit and explicit. The chapter also proposed a visual literacy community of practice model in order to sustain visual literacy instruction over the long term.

In this final chapter, Chapter 8, I review the key findings of the thesis and their overall contributions to the field of visual literacy research and pedagogy. To do that, I first revisit the research questions and highlight the major findings drawn from both parts of the thesis which have answered the questions, showing that the thesis has achieved the three aims stated in Section 1.5.1 in Chapter 1. Then, I emphasise the methodological and theoretical contributions of the thesis and demonstrate the implications of the findings for visual literacy instruction in the realm of English language learning. Third, I discuss the constraints and limitations of the thesis before recommending issues and focus areas to

address in future visual literacy instruction research in ELT contexts. I then conclude the chapter and draw overall conclusions for the thesis itself.

8.2 Summary of the thesis' findings

To summarise the key findings of the thesis, I now revisit the research questions previously presented in Section 1.4 in Chapter 1. Research questions 1-5 were mainly dealt with in Part One's case study, while questions 6-8 were investigated in Part Two's action research.

Research question 1: What is the current visual teaching practice at the Department of English?

The findings of the case study and its four sub-cases in Part One presented in Section 4.1 in Chapter 4 revealed that a rich collection of visual materials was readily available in the coursebooks used in the Department of English language education program and elsewhere (Bezemer & Kress, 2009; Carney & Levin, 2002; LaSpina, 1998; Roohani & Sharifi, 2015). However, the issue of the image clarity of some visual materials, the participants' lack of attention to those visual resources, and the unsystematised teaching approach (except for the Writing Skills subject) narrowly limited the functions of those rich visual-multimodal representations, depriving them of their versatility and facilitative value for language learning, as reviewed in Section 2.5 in Chapter 2.

For budget reasons, a good number of students and lecturers used black and white versions of the coursebooks even when the full colour version was available (Sections 4.5.1 and 4.6.7). Black and white photocopying significantly reduced the quality of visual materials and even made them unappealing and, at times, uninterpretable as the original full colour images became an illegible mess of black ink and white space. A high representation of visual content was also observed in supplemental materials used by the lecturer and

student participants – multimodal-visual aids such as posters manually made by the students, maps, still images, and videos projected through an LCD.

Despite this richness, the participants had an overall tendency to under-use visual resources. Exceptions were certain participants who made discernible efforts to use such materials, with some of them reporting that being involved in the case study made them more aware and observant of the usefulness of visual resources and they voluntarily made efforts to incorporate more of those materials in their learning and teaching.

In short, the participants had mixed attitudes towards the visual materials and current visual teaching practices, but were generally positive about the potential of visual resources for language learning. They also generally attributed an improvement in critical thinking to the use of visual cues but did not agree on the extent to which visual literacy promoted critical thinking.

Research question 2: What visual communication skills do the participants claim to have developed?

Findings corroborated from document analysis, survey questionnaire, non-participant classroom observation, lecturer one-on-one interview, and group interview with six lecturers and four groups of second-year students in the program suggest that, overall, the participants developed a good awareness of the prevalence of visual media and technologies and were involved to varying degrees in both consumption and distribution of visual resources. While the student participants engaged with visual materials more commonly through social media, the lecturer participants were more comfortable with conventional channels such as print materials and sketching on classroom whiteboards. The participants' visual literacy was not developed enough for tertiary learners (Brumberger, 2011; Felten, 2008; Matusitz, 2005), as stipulated in the literature (Association of College and Research Libraries, 2011; Bleed, 2005; Christodoulou & Damaskinidis, 2014; Cope &

Kalantzis, 2015; Eilam, 2012) for 21st century learners to benefit from and contribute to the development of the latest dynamic, visual-multimodal visual media. The participants more sceptical of visual materials perceived that they were learning English, a lingua franca, not how to interpret and use visual materials. The participants reported varying levels of competence in visual material production skills, and generally agreed production was the area they were weakest in. My classroom observation data further confirmed this finding.

Research question 3: What visual communication skills are considered necessary and should be taught to the participants?

The majority of the participants expressed a desire for additional training in visual literacy (Sections 4.5.6, 4.6.12, and 4.7.8) (Britsch, 2009; Robertson, 2007; Rourke & O'Connor, 2009). They agreed that visual literacy teaching, when implemented properly, has significant potential to facilitate language learning but disagreed on the training trajectories. The skills thought to be necessary and important also varied from subject to subject and group to group, depending on the students and lecturers' personal, learning, and professional development needs, as presented in Section 4.8.2.3.

Research question 4: What components does a definition of visual literacy English language learning in Cambodian higher education entail?

To answer this question, visual literacy standards set by the Association of Research and College Libraries (ARCL) for higher education (Association of College and Research Libraries, 2011) (See Section 2.6.2 in Chapter 2) – which formed the premise for the standard definition of visual literacy adopted in this thesis – were first shown to the participants in Part One. Then, group interviews with the student and lecturer participants were conducted separately with an attempt to derive a consensus for a visual literacy definition for language learners. The result was opinions were divided. The majority of the participants conceded that the ARCL standards may not be attainable in an English training

program such as the one under investigation. Instead, they proposed a simpler and more specific definition entailing just certain interpretation and consumption aspects of the ARCL definition for language learners, as discussed previously in Section 4.8.2.4. The other abilities embodied in the ARCL standards were deemed to be more suitable for those who specialise in disciplines associated with technical skills of image production and manipulation, such as those working in the fields of engineering, architecture, visual arts, and design. Despite these shared understandings, the participants in the current study did not agree on a uniform definition of visual literacy for English language learners in Cambodia.

Research question 5: What ways can be used to effectively promote visual literacy

Research question 5: What ways can be used to effectively promote visual literacy among Cambodian university students?

The participants agreed that the range and quantity of visual resources readily available in the coursebooks and those additional materials introduced by the lecturer participants were sufficient. However, the quality and relevance could be improved, and both students and lecturers recommended putting more efforts in using those resources more systematically so that the resources could fulfil their roles to support language learning in the ways they were designed to do. The participants' opinions were divided regarding proposed approaches to promoting visual literacy in language training curricula in Cambodian higher education. Some participants argued for an explicit approach to teaching visual literacy running alongside the existing language teaching methodology and/or approach on the same level, while the other participants opted for an implicit approach, suggesting that the teaching of visual communication skills should be implicit and subsumed under the current curriculum and teaching approach(es). All the participants asserted that only when clear planning and systematised visual literacy instructional approaches were in place could the teaching of visual literacy produce significant, positive impact on language

learning in the long term. Such practices and approaches were non-existent in Part One's case study.

Toward the end of Part One's data collection, a lecturer at the Department of English, who did not participate in the case study due to his unavailability at that time, expressed an interest in visual literacy instruction and sought a collaboration with the researcher to use visual literacy instruction as potential teaching interventions to address his students' language learning challenges and improve his teaching practices. Our discussions ultimately led to an action research study which has been documented in Part Two of this thesis. It involved the researcher as a non-participant observer of the lecturer teaching a core subject in the program to a class of students he was teaching at the research site. The interventions were incorporated into the lecturer's regular teaching behaviours and practices, and efforts were made to ensure that the teaching of the normal curriculum content was not disrupted. Two instructional approaches to visual literacy were developed, and these approaches were implemented in two cycles of study – Cycle One involved the implicit approach, while Cycle Two taught visual literacy explicitly. The teaching in both cycles followed an infusion of principles and procedures embedded in the Teaching and Learning Cycle (da Silva Joyce, 2014; da Silva Joyce & Feez, 2012) and multiliteracies approaches (Kalantzis & Cope, 2008). As previously discussed in Section 2.7 in Chapter 2, Vygotsky's seminal concepts such as the Zone of Proximal Development, scaffolding, and More Knowledgeable Ones were also translated into learning activities such as sustained guided practice, collaborative student visual presentations, and social interactions to help students personalise the newly acquired visual analysis skills and transfer them to real-life contexts.

Research question 6: To what extent does the implicit teaching of visual literacy promote English language learning?

In Cycle One of Part Two's action research, a group of students were taught to use a series of questions to probe a visual representation in learning and real-life communication more effectively, responsibly, and ethically. This implicit visual literacy instructional approach was reported and observed to improve attitudes towards, understanding of, and application of visual literacy in their language learning. Students' attention, engagement, motivation, and critical thinking, vocabulary and grammar learning were also promoted positively as revealed in the data triangulated through the use of six research instruments – document analyses, non-participant classroom observations, interviews, focus group discussions, student diaries, and a survey.

Research question 7: To what extent does the explicit teaching of visual literacy promote English language learning?

Cycle Two used an explicit approach to teach visual literacy to the same group of students. In this cycle, the students were taught fundamental metalanguage, such as the use of angles, colours, salience, framing, and shot distance to interpret Kress and van Leeuwen's (2006) three layers of meanings created by visual representations (i.e. ideational, interpersonal, and textual). This explicit teaching approach aimed to develop learners' abilities to interpret meanings of visual cues as well as to discuss how visual structural components such as angles, salience, and colour, and so on, can be combined to achieve the three levels of meanings embedded in visual materials they came across in learning and in real-life communication. This explicit approach produced similar positive impact on the students' language learning in such areas as memory, critical thinking, vocabulary learning, and grammar learning. The teaching of metalanguage and some visual materials, however, was reported to confuse and distract two focus group students (Allen, 2011) although my class observation and their performances on a quiz administered toward the end of Cycle Two pointed out that those students performed relatively well with visual analysis skills and

language learning. The lecturer and other focus group students believed that the two students' lack of understanding about Cycle Two's pedagogical goals made the students feel negative and resist the interventions. They counter-argued that some effort and additional explanation of the benefits of Cycle Two's explicit interventions would offset those negative experiences and help the two students acquire skills which could be used even beyond their language learning.

Research question 8: Where both approaches of visual literacy instruction facilitate English language learning, what pedagogical framework can be used to promote visual literacy among Cambodian English language learners and teachers in the long term?

Data from non-participant observation, lecturer interview, student focus group, and student diary indicated that the two visual literacy instruction approaches had true potential in improving the student participants' learning outcomes as they were observed to (1) engage more in learning, and (2) learn grammar and vocabulary more effectively as the visual approaches helped them with memory and concretization of the key vocabulary and grammar points taught in the program and those incidentally acquired while doing class activities and homework. The student participants also reported an amelioration in critical thinking, attributing their abilities to unearth deep meanings of a verbal-visual text beyond the surface to the use of visual literacy skills taught in both cycles of the action research.

Following the insights drawn from both of its parts, this thesis has developed a new pedagogical framework which can be used to guide the implementation of the two instructional approaches to teaching visual literacy in the target ELT context, as previously explained in Section 7.4. This thesis has also proposed a Community of Practice model in Section 7.5 to help promote visual literacy more widely in ELT communities across Cambodia and to help ensure that visual literacy instruction, through the proposed

framework and approaches, produces long-lasting impact on students' language learning and lecturers' personal and professional practices.

By answering these eight research questions, this thesis has achieved the three aims set out in Chapter 1. The research presented in this thesis has provided convincing evidence that visual literacy has a fundamental role to play in English language learning. Other than fulfilling the well-documented functions of attraction, motivation, and memory enhancement, visual literacy instruction, when properly and systematically implemented, has been shown to improve critical thinking and language learning outcomes. By first surveying and then observing the current visual teaching practice in the Department of English at the Royal University of Phnom Penh, this thesis has shown through an action research study that visual literacy instruction helps promote language learning. Success in language learning depends on many other contributing, interactive factors such as the teachers and their teaching methods, learning materials, motivation, learners' characteristics, students' effort, and opportunities to use the target language for authentic communication purposes. Visual literacy instruction has been shown to contribute significantly to the improvement of these factors and thus increase the chance for success in language learning. Given the rather obvious view of the multimodal route language education is taking and will be taking, visual literacy instruction is recommended as a potential approach which the teachers and students should embrace to support language learning and acquire as a work and life skill. Visual literacy should be promoted and its instruction should be incorporated into core curricula through the methods and strategies proposed in Chapter 7 of this thesis.

Visual literacy, however, is not a panacea for all issues and challenges arising from language learning, and this thesis does not in any way discount or diminish the role of verbal literacy. Instead, it argues that visual literacy complements and can be integrated with verbal (print) literacy and other 21st century literacies so that English language teachers and learners

develop knowledge, skills, and experience which are proportionate to the highly visual orientation of the social and educational development we are currently witnessing, embracing, and encouraging. With the heavy consumption of visual materials, digital media and communication technologies in today's classrooms, visual literacy helps teachers and learners make optimal use of learning resources and turn their visual practices into opportunities to help them learn a language and practice using it in useful ways which mirror the latest social developments occurring in their communities and personal lives and at their workplaces.

8.3 Contributions and implications of the thesis

The next section of this chapter presents major implications and contributions this thesis has made to theories and practices in the field of visual literacy.

8.3.1 Methodological contributions

This thesis has made the following methodological contributions. First, it has shown through its data collection and findings that collaborative action research is a feasible approach to building research capacity and professional development for "busy and novice" lecturer researchers such as the lecturer in Part Two. Action research is reflective and collaborative (Burns, 1999; Kemmis & McTaggart, 1988) and can be implemented without the researchers having to abandon their other professional practices. Action research has been demonstrated here to be a potential solution to the enduring challenge of establishing a research culture in a developing country such as Cambodia (S. H. Moore, 2011). An uptake of research activities such as action research by local practitioners in the field helps establish a promising path to a sustained research tradition, a functional community of practice, self-initiated professional development, and a practice-to-theory trajectory of knowledge creation in Cambodian ELT – an increasingly booming industry in the country and not yet sufficiently researched by local theorists and practitioners (Keuk, 2015).

Second, in a similar vein, this thesis has successfully demonstrated that action research is a promising methodological approach to visual literacy research – a significant contribution not previously made in the visual literacy literature. Action research empowers the teachers and students to closely observe their roles, reflect on their strengths and weaknesses, and develop their agency to further develop their learning and teaching capacities (Burns, 2010; Craig, 2009; Kemmis et al., 2014; K. Richards, 2003). Action research potentially works because, as this thesis has shown, the action researcher produces a bi-directional input to inform practice and contribute to the application and further development of visual literacy theory (Johnson, 2008), enabling the researchers and collaborators to solve and/or improve their practices in visual literacy and at the same time develop their visual literacy along the way as the research is implemented. In other words, action research closes the gap between theory and practice in visual literacy. Given that the theoretical formulation for visual literacy remains a pivotal, yet-to-be-resolved controversy and there is a dire need to develop visual literacy for contemporary society, action research holds an important place as a new methodological design for visual literacy research.

8.3.2 Theoretical contributions

This thesis has promoted the free expression of participants' voices, an observation of a research phenomenon from different perspectives of the practitioners themselves, and an engagement of research participants as agents of change for their own practices. Language learning improvement, as shown in this thesis, can be effectively investigated in the qualitative paradigm, and does not necessarily need to involve quantitative tests and assessments.

In terms of theoretical contributions, my project has joined a host of other studies in probing the operationalising of the concept and construct of visual literacy in the context of English as Foreign Language learning. The lack of consensus in defining visual literacy in this project further confirms the complexity of visual literacy as both a concept and discipline, and suggests that the quest is far from over, calling for further studies of a similar nature. The thesis has also revived the roles of an educator/teacher as a more knowledgeable person and his/her facilitation role in the form of a sustained "scaffolding" and guided practice in support of Cambodian students' English language learning. Vygotsky's Zone of Proximal Development, as a core aspect of socioconstructivist theory of learning and a teaching principle, holds much potential for the sustained development of Cambodian ELT learners, educators, curricula, and Cambodian education system as a whole.

In addition, I see this body of work as a continuity building on previous efforts and initiatives in addressing the current and near future fast-evolving communication landscape and its resulting fluid, dynamic, multimodal learning embraced by the current generation of ever more diverse learners. This thesis can be seen as having broken new ground to reveal a path which opens questions for further investigations, extending the scope and application of visual literacy promotion and instruction into new research contexts, which I will discuss in the next section.

Lastly, this thesis has also attempted to develop a definition of visual literacy which is reported to be suitable for language learners – contextualised and applicable for a local learning context – although such a clear definition is yet to be forged.

8.3.3 Pedagogical implications of the thesis

Visual resources proliferate on multiple fronts in English language teaching and learning contexts, yet there has been relatively limited effort from policymakers, educational leaders, administrators, teachers, and students themselves to acquire the necessary skills in visual literacy for learners to navigate, critique, use, and produce visual resources for their

learning and real world communication. Visual literacy along with multimodal instruction as a whole has been marginalised in the English language teaching world (Early et al., 2015).

As a direct response to help fill this gap in the literature, this thesis has developed through its case study in Part One and action research in Part Two a pedagogical framework and two approaches for visual literacy instruction in English language learning, as explicated and discussed respectively in Sections 7.3 and 7.4 in Chapter 7. The framework promotes the teaching of visual literacy. The first visual literacy instructional approach is implicit and teaches analysis skills through a number of question and prompts – questions learners can learn and later on internalise so that they can be retrieved for immediate use when approaching visual resources. The second approach is explicit and teaches visual literacy metalanguage. Both approaches have their own facilitative values and can be implemented to improve language learning in different areas.

8.4 Constraints and limitations of the study

This study has several limitations which I will now address in the following sections in terms of the two different parts of the thesis. I will also discuss the limitations of the thesis overall.

8.4.1 Constraints and limitations of Part One

This thesis was implemented and written within the constraints and limitations which I will discuss below. First, in Part One of the thesis, there was an unexpected challenge that placed a limitation on collecting the best quality data available. My original plan to conduct focus group discussions with the student participants did not work out as planned, and these had to be reported as group interviews instead. This happened because despite my encouragement for the participants to take the lead in the discussion and share opinions on each other's comments, many of the participants preferred to wait for their turns and avoid interrupting each other, significantly reducing

the group dynamic and interaction, which would have contributed even more interesting findings to Part One of the thesis. A few of the participants rarely contributed to the discussion, only providing short answers without elaboration when prompted by the moderator to take the floor. The student participants' insistence to speak in English even when their English was notably limited and my own limited experience as a focus group discussion moderator were also likely contributing factors.

Second, the scope of the study necessarily constrained what could reasonably be investigated and completed in the time available for a PhD study. As with all case study research, the study in Part One is case specific and its data and findings were limited to one year level, rather than being generalizable to other levels as well. Nevertheless, the inclusion of the four key subjects taught at the research site helped to increase the depth and breadth of the investigation and ensured that the data and findings had a fairly wide representation of the learning context at the research site.

Last, the investigation in Part One of the thesis was made in accordance with what participants were prepared to commit to in terms of time and effort. This meant, for instance, taking account of lecturer participants' comfort level, cooperation, and willingness to contribute certain data to this thesis. For example, at the request of a few lecturer participants, I did not observe some teaching as I had originally planned to. Such additional class observation would have allowed a more coherent investigation of the visual pedagogy landscape at the research site.

8.4.2 Constraints and limitations of Part Two

First, the action research in Part Two was limited to just two cycles of interventions, although this is considered appropriate for action research projects (Burns, 2010). The visual literacy instructional framework and approaches explained in Chapter 8 were proposed on the basis of the research findings in these two cycles. The extent of

the impact of the framework and approaches on English language learning outcomes requires further research beyond the scope of this study.

Second, there was a modification of research questions for Part Two of the thesis because of the practical realities of the class and lessons taught. I had planned to observe the impact of teaching graphic organisers and visual tools to aid students' reading and listening comprehension, but the lecturer participant's choice to emphasise the teaching of grammar and vocabulary during the action research and the nature of the lessons themselves changed my research focus to investigation of visual teaching on English vocabulary and grammar learning instead.

Another constraint happened during my non-participant class observations in which I was restricted in my physical mobility in the classroom. I made conscientious efforts to minimize the impact of my presence as an observer on the students' learning progress and efforts. This inhibition limited my mobility, my use of a digital camera, and my ability to document the visual teaching and learning in semiotic, multimodal forms, for example, by taking a photograph of a student visual presentation from different angles. During much of the observation, I confined myself to sitting at the back of the room, while the students were sitting in the middle of the room, facing the whiteboard in the front of the class. In many instances, I was able to observe the learning activities and classroom interactions only from afar behind the students' backs.

In Part Two, while my original hope was to implement a comprehensive investigation of visual literacy instruction, involving a teaching of the core visual analysis methods and techniques explained and exemplified in Kress and van Leeuwen (2006) and da Silva Joyce (2014), the actual investigations had to be limited to the interests of the lecturer participant, since these were his motivations for wanting to do an action research

project in his own classroom. Thus, the action research focus was on the teaching of those methods and techniques the lecturer participant was familiar with and confident in using.

Overall, the research in this thesis was constrained by its own design, being a case study in Part One and an action research study. The case study involved only one research site, while the action research study investigated the visual teaching practices in just one class taught by one lecturer only. The research results could be different if any of these factors varied. In addition, there may be other constraints and limitations in the thesis which may be reflective of my limited knowledge and experience as a novice researcher, for example, despite the triangulation through the use of multiple research instruments, my abilities to observe phenomena which are truly representative of the impact of visual teaching interventions in both cycles of the action research may have been limited.

8.5 Recommendations for future research

The contextualisation of action research means the findings and implications corroborated and proposed in this thesis are specific to the class and its students/lecturer under investigation. A modification or even replication of the thesis' research agenda and other related ones to be investigated in other English language classes at the target research site or other learning contexts which share similar features and characteristics will further enhance our understanding of multimodal-visual learning among language learners in Cambodia and other ELT contexts as they navigate between learning, work, and other social environments in a transitional situation like that in urban centres in Cambodia.

Future research could also benefit from an implementation of the proposed framework/approaches to visual literacy instruction in order that their actual impact on

language learning outcomes can be documented empirically, and study implications can be used to inform visual teaching in new language learning contexts.

Another important area future studies could probe would be the other visual analysis methods and techniques not investigated in this thesis. Visual literacy is a vast area of study, and to be visually literate requires simultaneous practice and training in various aspects of visual perception, thinking, and language.

In addition, operationalisation of the term "visual literacy" will continue to have a strong presence on the visual literacy research agenda and, despite the controversies surrounding it and as shown by the literature reviews and the findings in this thesis, research in this area is as important as it was when the field first emerged forty years ago. Future research in visual literacy will benefit from an attempt to define the term to be applied in specific learning and communication contexts.

And as discussed previously in Chapters 5 and 6, graphic organisers such as mind maps, timelines, flowcharts, compare/contrast matrix, etc. have been predominantly researched in teaching reading and quite extensively in teaching writing and listening. There is still very little literature on the use of such graphic organisers for teaching English vocabulary and grammar – a vital area future research can explore and investigate in great depth.

8.6 Conclusion

This thesis has explored the visual teaching practices in an EFL higher education context in Cambodia. It implemented an action research study to assess the impact of two visual literacy instructional approaches on a group of Cambodian students' English language learning and, based on the assessed impacts, proposed a pedagogical framework,

two approaches for teaching visual literacy, and a community of practice model to promote visual literacy development in a context like ELT communities in Cambodia. Social interaction and communication environments, currently dominated by visual media and digital technologies, continue to develop and influence our learning and ways of life, and so do the components of what it means to be literate. Books, in their conventional pagebound, print-based form, will continue to play significant roles in education and language learning. However, language education has incorporated and will continue to embrace new learning visual-multimodal platforms and resources. In light of the changing parameters of literacy, or rather literacies, and students' preferred visual-multimodal learning dispositions, and the growing possibility that students will be at a disadvantage in their personal and professional spaces if deprived of visual literacy skills, visual literacy instruction embodies great potential to make a positive impact on Cambodian students' English language learning and other educational contexts over the long term. An integrated approach incorporating visual literacy and other literacies for 21st century learners will enable Cambodian English language teachers, educators, curriculum developers, and policy makers to address educational challenges and help develop Cambodian learners to become independent and flexible social members who will be able to fully participate in and contribute to the development of the 21st century's global village.

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Appendices

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Appendix 3.1: Part One ethics approval

15/02/2017

Macquarie University Student Email and Calendar Mail - RE: HS Ethics Application - Approved (5201300875)(Con/Met)



BOPHAN KHAN

bophan.khan@students.mq.edu.au>

RE: HS Ethics Application - Approved (5201300875)(Con/Met)

1 message

Fhs Ethics <fhs.ethics@mq.edu.au>

Thu, Dec 12, 2013 at 10:41 AM

To: Dr Stephen Moore <stephen.moore@mq.edu.au>

Cc: Dr John Knox <john.knox@mq.edu.au>, Mr Bophan Khan <bophan.khan@students.mq.edu.au>

Dear Dr Moore.

Re: "Deconstructing Visual Literacy: A Case Study of Visual Teaching and Learning Practice in Cambodian EFL Higher Education"(5201300875)

Thank you for your recent correspondence. Your response has addressed the issues raised by the Faculty of Human Sciences Human Research Ethics Sub-Committee and approval has been granted, effective 12th December 2013. This email constitutes ethical approval only.

This research meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:

http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e72.pdf.

The following personnel are authorised to conduct this research:

Bophan Khan Dr John Knox Dr Stephen Moore

Please note the following standard requirements of approval:

- 1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
- 2. Approval will be for a period of five (5) years subject to the provision of annual reports.

Progress Report 1 Due: 12th December 2014 Progress Report 2 Due: 12th December 2015 Progress Report 3 Due: 12th December 2016 Progress Report 4 Due: 12th December 2017 Final Report Due: 12th December 2018

NB. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:

 $\label{lem:http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms$

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Sub-Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

4. All amendments to the project must be reviewed and approved by the Sub-Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/forms

- 5. Please notify the Sub-Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.
- 6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

http://www.mg.edu.au/policy

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human_research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of approval to an external organisation as evidence that you have approval, please do not hesitate to contact the Ethics Secretariat at the address below.

Please retain a copy of this email as this is your official notification of ethics approval.

Yours sincerely,

Dr Peter Roger Chair Faculty of Human Sciences Ethics Review Sub-Committee Human Research Ethics Committee

Faculty of Human Sciences - Ethics Research Office Level 3, Research HUB, Building C5C Macquarie University NSW 2109

Ph: +61 2 9850 4197 Fax: +61 2 9850 4465

Email: fhs.ethics@mq.edu.au

http://www.research.mg.edu.au/

Appendix 3.1: Part Two ethics approval

16/02/2017

Macquarie University Student Email and Calendar Mail - RE: HS Ethics Application - Approved (5201500912)(Con/Met)



BOPHAN KHAN

 bophan.khan@students.mq.edu.au>

RE: HS Ethics Application - Approved (5201500912)(Con/Met)

7 messages

Fhs Ethics <fhs.ethics@mq.edu.au>

Thu. Dec 10, 2015 at 11:06 AM

To: Dr Stephen Moore <stephen.moore@mq.edu.au>

Cc: Dr John Knox <john.knox@mg.edu.au>, Mr Bophan Khan <bophan.khan@students.mg.edu.au>

Dear Dr Moore.

Re: "Deconstructing Visual Literacy: A Case Study of Visual Teaching and Learning Practice in Cambodian EFL Higher Education"(5201500912)

Thank you very much for your response. Your response has addressed the issues raised by the Faculty of Human Sciences Human Research Ethics Sub-Committee and approval has been granted, effective 10th December 2015. This email constitutes ethical approval only.

This research meets the requirements of the National Statement on Ethical Conduct in Human Research (2007). The National Statement is available at the following web site:

 $http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/e72.pdf.$

The following personnel are authorised to conduct this research:

Dr John Knox Dr Stephen Moore Mr Bophan Khan

Please note the following standard requirements of approval:

- 1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
- 2. Approval will be for a period of five (5) years subject to the provision of annual reports.

Progress Report 1 Due: 10th December 2016 Progress Report 2 Due: 10th December 2017 Progress Report 3 Due: 10th December 2018 Progress Report 4 Due: 10th December 2019 Final Report Due: 10th December 2020

NB. If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.

Progress reports and Final Reports are available at the following website:

http://www.research.mq.edu.au/current_research_staff/human_research_ethics/application_resources

3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Sub-Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).

4. All amendments to the project must be reviewed and approved by the Sub-Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/current_research_staff/human_research_ethics/managing_approved_research_projects

- 5. Please notify the Sub-Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.
- 6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

http://www.mq.edu.au/policy

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human research ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of approval to an external organisation as evidence that you have approval, please do not hesitate to contact the Ethics Secretariat at the address below.

Please retain a copy of this email as this is your official notification of ethics approval.

Yours sincerely,

Dr Anthony Miller
Chair
Faculty of Human Sciences
Human Research Ethics Sub-Committee

Faculty of Human Sciences - Ethics Research Office Level 3, Research HUB, Building C5C Macquarie University NSW 2109

Ph: +61 2 9850 4197 Email: fhs.ethics@mq.edu.au http://www.research.mq.edu.au/

BOPHAN KHAN

bophan.khan@students.mq.edu.au>To: llaria Teuffer <ilaria.teuffer@mq.edu.au>

Fri, Dec 11, 2015 at 10:42 AM

[Quoted text hidden]
-Bophan Khan
PhD Student
Department of Linguistics
Faculty of Human Sciences
MACQUARIE UNIVERSITY
NSW 2109
AUSTRALIA

 $https://mail.google.com/mail/u/0/?ui=2\&ik=63843266b3\&view=pt\&q=ethics\%20application\&qs=true\&search=query\&th=151893654e254a60\&siml=151893654...\ \ 2/5$

Appendix 3.2: Correspondence with the head of the Department of English at RUPP

16/02/2017

Macquarie University Student Email and Calendar Mail - Seeking your consent to conduct an action research study



BOPHAN KHAN

bophan.khan@students.mq.edu.au>

Seeking your consent to conduct an action research study

3 messages

BOPHAN KHAN

 bophan.khan@students.mq.edu.au>
To: mab tith <mabtith@gmail.com>

Tue, Oct 27, 2015 at 9:34 PM

Dear Mr Mab Tith.

How are you? Greetings from Macquarie University, Sydney, Australia!

I am writing to seek your consent for me to conduct an action research study at your department, which directly connects to the previous study also conducted at your department between February and July 2014.

This new study aims to investigate the impact of two interventions in visual teaching methods on a group of students at the English Department. The findings of the study will be used to develop a teaching pack which potentially help Core English lecturers teach the subject more effectively by using visual resources to support students' learning in a more principled and beneficial way.

Mr Lungdy Prak, a Core English lecturer, has agreed to collaborate with me and participate in the study. He will also help recruit students in one of his Year-two Core English classes as the study's student participants. Identity and personal, sensitive information of the participants will be kept confidential, and the participants who wish to withdraw themselves from the study will be able to do so any time.

The study will employ survey, one-on-one interview, focus group discussion, student diary, and non-participant classroom observation as data collection methods. The key data to be collected include qualitative responses, explanations and observed activities of the participants regarding their visual teaching and learning practice as revealed by the data collection protocol identified above.

The study is expected to commence in late November or early December 2015 and finish in early February 2016. The researcher will take precautionary measures to ensure that there will be minimal interruption to the regular running of the participants' lessons.

I highly appreciate your time and consideration of the proposed study plan and look forward to your response soon.

Warm regards,

Bophan Khan (Mr)
PhD candidate
Department of Linguistics
Macquarie University
bophan.khan@students.mq.edu.au
+61406310437

Mab Tith <mabtith@gmail.com>

Wed, Oct 28, 2015 at 6:49 PM

To: BOPHAN KHAN
bophan.khan@students.mq.edu.au>

Dear Mr. Khan Bophan,

With reference to your email to request my consent for you to undertake an action research study at the Department of English, Institute of Foreign Languages, Royal University of Phnom Penh, which directly connects to your previous study also undertaken at the Department between February and July 2014, I am please to let you know that you can undertake this proposed action research with one lecturer, Mr. Prak Lungdy, provided that you comply with all ethics regulations required and issued by Macquarie University Human Research Ethics Committee, Macquarie University.

It is your responsibility to obtain consent from this target participant for data collection for your project.

Truly, Tith Mab Head, Department of English Institute of Foreign Languages [Quoted text hidden]

https://mail.google.com/mail/u/0/?ui=2&ik=63843266b3&view=pt&q=mab%20tith&qs=true&search=query&th=150a8dd4da25614a&siml=150a8dd4da25614a... 1/2

BOPHAN KHAN
bophan.khan@students.mq.edu.au> To: Mab Tith <mabtith@gmail.com>

Wed, Oct 28, 2015 at 8:06 PM

Dear Mab Tith,

Thank you, indeed, for your positive response. I am going to submit an ethics application to the Macquarie University Research Ethics Sub-committees and will notify you when the application is approved.

I look forward to meeting with you and working with Mr Lungdy Prak in the coming months.

Warm regards,

Bophan

[Quoted text hidden]

Bophan Khan PhD Student Department of Linguistics Faculty of Human Sciences MACQUARIE UNIVERSITY NSW 2109 **AUSTRALIA**



Expression of Interest (Lecturer Questionnaire)

Dear potential participants:

You are invited to participate in a research project which aims to investigate visual teaching and learning practices in Cambodian EFL Higher Education.

The project is recruiting participants who:

- are Cambodian nationals;
- teach a year 2 study unit in the Bachelor's Program at the Department of English, Institute of Foreign Languages, Royal University of Phnom Penh, Cambodia;
- are interested in developing knowledge, experience, and abilities in using visual resources for pedagogical purposes.

Participation in the project will involve completing a survey questionnaire, which will take about 20 minutes. Participants will receive a small souvenir from Australia as a token of gratitude.

If you are willing to participate in this project, please print your name, sign and provide either your contact telephone number or email address in the space below. Then, please hand this form to Mr. Bophan Khan in person, or place it in the envelope provided in the Teachers' office at your institution.

If you would like more information about the participation and the project, please contact Mr. Bophan Khan by telephone at +855-12 721 931 or by email at bophan.khan@students.mg.edu.au.

Name:	Telephone:	
Sion:	Email Address	



Department of Linguistics Faculty of Human Sciences MACQUARIE UNIVERSITY NSW 2109

Phone: +855 (0)12 721 931

Fax: +855 (0)23 884 154 Email: bophan.khan@students.mq.edu.au

Chief Investigator's / Supervisor's Name: Stephen H. Moore

Chief Investigator's / Supervisor's Title: Dr

Participant Information and Consent Form

Name of Project: Deconstructing Visual Literacy: A Case Study of Visual Teaching and

Learning Practice in Cambodian EFL Higher Education

You are invited to participate in a study of **visual teaching and learning practice in Cambodian EFL Higher Education**. The purpose of the study is to define Visual Literacy, investigate the ways visual resources are used for English language learning purposes, and make recommendations for syllabus and curriculum development at the English Department of the Institute of Foreign Languages at Royal University of Phnom Penh, Cambodia.

The study is being conducted by:

- Dr Stephen H. Moore, Department of Linguistics, Macquarie University +61-2-9850-8742 stephen.moore@mg.edu.au
- Dr John Knox, Department of Linguistics, Macquarie University +61-2-9850-8729 john.knox@mq.edu.au
- Mr Bophan Khan, English Department, Royal University of Phnom Penh +855-12 721 931 bophan.khan@students.mg.edu.au

The project is being conducted to meet the requirements of a PhD in Linguistics under the supervision of Dr Stephen H. Moore (+61-2-9850-8742, stephen.moore@mq.edu.au) of the Department of Linguistics at Macquarie University.

If you decide to participate in the project, you will be asked to attend two focus group sessions to be conducted in May and June 2014. Each focus group session will take approximately 90 minutes The discussion will be moderated by one of the researchers and will involve six participants. The participants will be encouraged to comment on one another's answers on the ways visual resources are used in teaching English at the English Department and how the practice can be improved. Audio-recording will be used to assist the observer with recording and analysis of data in order to have an accurate record of what is said. Participants will receive a lunch voucher as a token of gratitude. The researchers do not foresee any risk or harm participation in the project could cause.

... - - - 324

Any information or personal details gathered in the course of the study are confidential, except as required by law. No individual will be identified in any publication of the results. Only the researchers will have access to the data. A summary of the results of the data can be made available to you on request by email at bophan.khan@students.mq.edu.au.

Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.

questions I have asked have been	_, have read and understand the information above and any answered to my satisfaction. I agree to participate in this draw from further participation in the research at any time given a copy of this form to keep.
Participant's Name: (Block letters)	
Participant's Signature:	Date:
Investigator's Name:(Block letters)	
Investigator's Signature:	Date:

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

(INVESTIGATOR'S COPY)



Expression of Interest (Student Focus Group)

Dear potential participants:

You are invited to participate in an action research study which aims to investigate **visual** literacy teaching methods and strategies in English Language Learning in Cambodia. If you agree to participate, you will attend two focus group discussion sessions.

The focus group discussion aims to:

- explore knowledge, skills, and experience Cambodian EFL students have as a result of being exposed to different visual literacy teaching methods and strategies;
- seek recommendations for development of the Bachelor of Education program at the English Department with regard to Visual Literacy.

Each focus group session will take approximately 90 minutes. The first session will likely be conducted in the last week of January 2016 and the second in the first week of March 2016. The discussion will be moderated by the researcher and will involve six participants. Audio-recording will be used to obtain an accurate recording of what is said and assist the researcher with data analysis.

Each participant will receive USD 20 as a token of gratitude to be provided at the end of the second session.

If you are willing to participate in this project, please print your name, sign and provide either your contact telephone number or email address in the space below. Then, please hand this form to your class monitor at your convenient time.

You will not face any disadvantage or penalty if you choose not to participate in the study. The data collection will only be conducted among the participating students; therefore, you can remain in the class as usual while the study is being conducted. The researcher will observe the class activities from the back of the room, and a voice recorder will be put near the participating students only.

Data collected from may be used in subsequent conference presentations and/or publications in academic journals or edited book volumes, but identity of the participants will not be disclosed.

Name:	Telephone:	
Sign:	Email Address:	

Appendix 3.6: Part Two Information and Consent Form

Department of Linguistics Faculty of Human Sciences MACQUARIE UNIVERSITY NSW 2109



Email: stephen.moore@mq.edu.au

Chief Investigator's / Supervisor's Name and Title: Dr Stephen H. Moore

Participant Information and Consent Form (Student Participants)

Learning Practice in Cambodian EFL Higher Education

You are invited to participate in a study about **visual literacy teaching methods and strategies** in English Language Learning in Cambodia. The study aims to implement two interventions in using visual resources to support students' language learning and then observe what direct and indirect impact the interventions could potentially have on the students' learning.

The study is being conducted by:

- Dr Stephen H. Moore, Department of Linguistics, Macquarie University +61-2-9850-8742 stephen.moore@mq.edu.au
- Dr John Knox, Department of Linguistics, Macquarie University +61-2-9850-8729 john.knox@mq.edu.au
- Mr Bophan Khan, English Department, Royal University of Phnom Penh +855-12 721 931 bophan.khan@students.mq.edu.au

Please tick the following boxes to indicate your consent in participating in the study.

The project is being conducted to meet the requirements of a PhD in Linguistics under the supervision of Dr Stephen H. Moore (+61-2-9850-8742, stephen.moore@mq.edu.au) of the Department of Linguistics at Macquarie University.

Classroom observation
If you decide to participate, Mr Bophan Khan will conduct a non-participant observation of you
learning and may use observation notes and a voice recorder to record your interaction in your class
at the English Department for five non-consecutive weeks sometime between November 2015 and
January 2016. The observation will not seek personal information from the participants, but aim to
collect descriptive data on learning practice in relation to Visual Literacy at the English Department
The observer will not participate in the class activities and will make every effort possible to
minimize the effect of his presence on lesson delivery and your learning. Audio-recording will be
used to obtain an accurate record of what is said

Each participant will receive a memento as a token of gratitude at the end of the observation.

Student focus group			
If you decide to participate, you will be asked to attend two focus group sessions to be conducted in December 2015 and January 2016. Each focus group session will take approximately 90 minutes. The discussion will be moderated by one of the researchers and will involve six participants. The participants will be encouraged to discuss issues related to the use of visual resources in learning English at the English Department and how the practice can be improved. Audio-recording will be used to obtain an accurate record of what is said.			
Each participant will receive USD 20 as a token of gratitude at the end of the second session.			
Student diary			
If you decide to participate, you will be asked to keep a diary for two non-consecutive weeks — one week during Cycle One and another week during Cycle Two of the study. Every day during these two weeks, you are encouraged to write in the diary at least one entry about your English language learning experiences in your Core English class, such as about types of visual resources you encounter and what you think about them, to what extent those visual resources help you learn English, the challenges you face in using visual resources in learning English, etc. A more detailed guideline on how to keep a diary will be provided. The researcher will obtain a copy of your diary twice — the first time after Cycle One ends and the second after Cycle Two.			
Each participant will receive USD 20 as a token of gratitude at the end of the second session.			
The researchers do not foresee any risk or harm participation in the activities above could cause. Any information or personal details gathered in the course of the study are confidential, except as required by law. No individual will be identified in any publication of the results. Only the researchers will have access to the data. A summary of the results of the data will be emailed to you through the email group which will be created after you and other participants have agreed to participate in the study.			
Participation in this study is entirely voluntary: you are not obliged to participate and if you decide to participate, you are free to withdraw at any time without having to give a reason and without consequence.			
I,, have read and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.			
Participant's Name: (Block letters)			
Participant's Signature: Date:			
Investigator's Name: (Block letters)			
Investigator's Signature: Date:			

The ethical aspects of this study have been approved by the Macquarie University Human Research Ethics Committee. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Director, Research Ethics (telephone (02) 9850 7854; email ethics@mq.edu.au). Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

(INVESTIGATOR/PARTICIPANT'S COPY)

Appendix 4.1: Part One lecturer group interview questions

2nd Lecturer Group Interview (23rd June 2016)

- Greetings
- Reminding participants of the study objectives and interview procedures

Introductory question

- 1. In teaching at the English Department, what visual resources (pictures, photos, graphs, diagrams, video, multimodal text, etc.) do you come across most often?
- 2. In what ways is visual literacy important to you, personally and professionally?

Transition question

3. I have been talking to four groups of second year students at the English Department, IFL, and, unanimously, they have expressed a strong desire to be more visually literate. To what extent do you agree that English Department students should be more visually literate?

Key questions

- 4. Do you think visual literacy should be promoted more in the Bachelor's programs at the English Department?
- 5. Do you think visual literacy should be promoted to the same level of importance as that of verbal literacy in general education?
- 6. To what extent do you think visual literacy promotes critical thinking?
- 7. What should be an appropriate definition of visual literacy for the English language learning context in Cambodia? [The ACRL's (2011) definition of visual literacy will be shown again, and the participants will be asked to come up with their own version of visual literacy definition.]
- 8. What challenges do you face in using visual resources in your teaching at the English Department?
- 9. All things considered, what skills related to visual literacy should be taught to students at the English Department?
- 10. What changes in relation to visual literacy would you like to be included in the next curriculum revision at the English Department?
- 11. Will you be interested in pursuing further training in teaching visual literacy? If yes, what kind of training will be most useful to you?

Ending questions

- 12. Do you have any other comment to add before we wrap up the discussion?
- 13. Wrapping up and thanking the participants

Appendix 4.2: Part One student group interview questions

2nd WS Student Group Interview (6 July 2014)

- Greetings
- Reminding participants of the discussion procedures
- Making participants feel comfortable

Introductory questions

- 1. What do you like about the Writing Skills subject?
- 2. I have been in your WS classes for some time now, and have observed that your WS lecturer teaches you how to interpret line graphs. What have you learnt about line graph interpretation?

Transition questions

3. What do you like about the ways your lecturers, not just for the LS subject but the other three as well, use visual resources in their teaching at the English Department?

Key questions

- 4. Let's talk about the materials you produced for your learning at the English Department. We will start with your PowerPoint slides, and then the visual representations you produced as learning notes. Could you explain how you produced them? What criteria did you use to select different visual components? In what ways did these visuals support your learning?
- 5. Do you think there should be more visual components in learning materials and activities at the English Department?
- 6. To what extent do you agree Visual Literacy promotes critical thinking?
- 7. Now back to line graph interpretation, do you appreciate it that you are being taught this skill? How confident are you in interpreting line graphs after the lessons?
- 8. Will you be able to make line graphs by yourself?
- 9. To what extent do you agree that you should be more visually literate?
- 10. All things considered, will you be interested in pursuing further training in using visual resources for learning and communication purposes? If yes, what kind of training will be most useful to you?
- 11. What other skills related to Visual Literacy should be taught in a language program like the Bachelor's Program you are enrolled in at the English Department?
- 12. Summary of the discussion

Final questions

- 13. Do you have any other comments to add before we wrap up the discussion?
- 14. Wrapping up and thanking the participants

Appendix 4.3: Part One lecturer individual interview questions

Post-teaching Interview questions with the CE Lecturer (14 July 2014)

Thank you so much for the time today and your kind permission in allowing me to observe a series of your meaningful sessions. I have been really impressed. As for the interview now, I am going to ask you a number of questions related to the use of visual recourses/visual cues in your teaching. The interview will take about 30 minutes, and will be done in a friendly manner. Alright, shall we start then?

- 1. What did you enjoy about teaching Core English?
- 2. What major challenges did you face in teaching those lessons I observed?
- 3. You used a number of visual resources such as maps, photos, pictures (through LCD projections), etc. in some of your sessions and skipped visual components in some others. What made you decide to do so?
- 4. To what extent did the visual cues [all of them, not just the ones you focused on] help achieve your learning objectives? What evidence can you point out to support your view? (Ex, How the West was won)
- 5. To what extent do you think visual resources help promote critical thinking?
- 6. What challenges do you face in using visual cues in your teaching?
- 7. What challenges do you think the students faced in handling the graphics/visual imagery?
- 8. What visual skills do you think your students need to develop?
- 9. You have expressed an interest in further formal training in handling graphics/visual cues for pedagogical purposes? How important do you such training is for you to teach more efficiently?

Appendix 4.4: Part One lecturer questionnaire

QUESTIONNAIRE

Dear potential participants:

Thank you for volunteering to complete the questionnaire for my research project on visual teaching and learning practice in Cambodian EFL Higher Education.

Your honest answers will make meaningful contribution to the project findings and long-term improvement of EFL teaching practice at the English Department of the Institute of Foreign Languages at Royal University of Phnom Penh. I can assure you that the information you provide here will be treated in the strictest confidence and only the researcher and his supervisors will have access to the information.

The questionnaire has 30 questions and will take around 25 minutes to complete. Please write answers and tick response boxes where appropriate with a blue or black pen. If you have a question about any of the questions, please contact Mr. Bophan Khan at bophan.khan@students.mq.edu.au or +855-12 721 931.

After completing it, please hand this form to Mr. Bophan Khan in person, or place it in the envelope provided in the Teachers' office in the IFL.

Thank you for your cooperation.

The questionnaire begins on the next page.

Please write answers and tick response boxes where appropriate with a blue or black pen. 1. Name: 2. What is your gender? ☐ Male ☐ Female 3. What is your age? ☐ 18**-**25 \Box 26-30 ☐ 31-35 Above 35 4. What is the highest level of education you have completed? Graduate Diploma MEd/MA ☐ PhD ☐ BEd/BA 5. What 2nd year unit(s)/course(s) have you been teaching at the English Department? (More than one answer can be selected) Core English ☐ Global Studies ☐ Writing Skills ☐ Literature Studies 6. How long have you been teaching the unit(s)/course(s)? 1 semester or less 2-4 semesters Longer than 4 semesters 7. Which among the following visualization methods do you come across most often in your teaching? (Please select only four answers at most) ☐ Timeline ☐ Table ☐ Pie chart ☐ Flow chart ☐ Organizational chart ☐ Bar chart ☐ Histogram ☐ Line graph ☐ Scatter plot/Scatter graph Map ☐ Mind map ☐ Cluster ☐ Drawing Concentric circles ☐ Picture ☐ Cartoon ☐ None of the above 8. Which among the following visualization methods do you use most often in your teaching? (Please select only four answers at most) ☐ Timeline ☐ Table ☐ Pie chart ☐ Flow chart ☐ Organizational chart ☐ Bar chart ☐ Histogram ☐ Line graph ☐ Scatter plot/Scatter graph Map Map ☐ Mind map ☐ Cluster ☐ Drawing Concentric circles ☐ Picture ☐ Cartoon ☐ None of the above 9. Which among the following visualization methods are you most comfortable with in using? (Please select only four answers at most) ☐ Timeline ☐ Table ☐ Pie chart ☐ Flow chart ☐ Organizational chart ☐ Bar chart ☐ Histogram ☐ Line graph ☐ Scatter plot/Scatter graph ☐ Mind map ☐ Cluster ☐ Concentric circles Map ☐ Drawing ☐ Picture ☐ Cartoon ☐ None of the above 10. Which among the following visualization methods are you most comfortable with in producing? (Please select only four answers at most) ☐ Timeline ☐ Table ☐ Flow chart ☐ Organizational chart ☐ Pie chart ☐ Bar chart ☐ Histogram ☐ Line graph ☐ Scatter plot/Scatter graph ☐ Mind map ☐ Cluster Drawing Concentric circles Map Picture Cartoon None of the above 2 | Page

11.		ink you can explain such Hue, Contrast, Saturatio ☐ Well		
12.	Prior to participating Yes	g in this project, have yo	ou heard about the term	"Visual Literacy"?
13.	 13. What does the term "Visual Literacy" mean to you? ☐ Ability to understand visual representations of information, including still images, videos, and dynamic online materials ☐ Ability to interpret visual representations of information, including still images, videos, and dynamic online materials ☐ Ability to use visual representations of information, including still images, videos, and dynamic online materials ☐ All of the above 			
14.	What do you think i ☐ High	is your Visual Literacy lo	evel of understanding?	
15.	How much training visualization methodology and lot	(both formal and inform ds? ☐ Some	al) do you have in inte	rpreting None at all
16.	How much training methods? ☐A lot	(both formal and inform ☐ Some	nal) do you have in prod	ducing visualization None at all
17.	How much training methods for pedago ☐A lot	(both formal and inform gical purposes? ☐ Some	al) do you have in usir	ng visualization ☐ None at all
18.	How often do you q ☐ All the time	uestion if a picture you a	are using in your teach	ing is altered? ☐ Never
19.	How often do you s ☐ All the time	pend time trying to gues	s the meaning of a pict	ure?
20.	How often do you q intended for? All the time	uestion the context (pur	pose, audience, and evo	ent) the picture is
21.	How often do you q ☐ All the time	uestion where and when	the picture is taken?	☐ Never

22.	How often do you t ☐ All the time	use a digital/phone camer Often	ra?	Never
23.	Do you edit the ima	ages you take with a digit	tal/phone camera?	
24.	Do you share the in Instagram, or Twitt Yes	nages you take on a socia er? No	al networking site like	Facebook,
25.	Do you upload the	images as a narration of a	a story?	
26.	How often do you t ☐ All the time	use PowerPoint slides?	Rarely	☐ Never
27.	How often do you o ☐ All the time	lesign your own PowerPo ☐ Often	oint slides? ☐ Rarely	☐ Never
28.	How often do you i ☐ All the time	nclude images in your sl	ides? □ Rarely	☐ Never
29.	Would you be inter ☐ Yes	ested in pursuing further	training in teaching V	isual Literacy?
30.	30. What kind of training would be helpful for you? Please write your answer below.			
	This is the end of the questionnaire. Thank you.			

4 | P a g e

Appendix 6.1: Part Two lecturer's statement of interest

18 October 2015 Phnom Penh, Cambodia

To Whom It May Concern:

Statement of Interest

I, Mr Lundy Prak, would like to express an interest in participating in Mr Bophan Khan's research project which investigates the teaching and learning practice of visual literacy at Royal University of Phnom Penh.

The project relates closely to my interest in finding ways to improve my current teaching practice through a more principled way of using visual and multimodal resources to support my students' English language learning.

To participate, I plan to collaborate with Mr Bophan Khan to implement an action research study in an English language class which I have been teaching at Royal University of Phnom Penh. The class has 30 students who are in the second year in a four-year bachelor's degree program.

The study will involve Mr Khan as a co-researcher. I will implement the teaching, and Mr Khan will collect the study data through a number of research instruments. Together we plan to observe two cycles of explicit teaching of visual literacy. The study could last for three months, starting in December 2015 and ending in February 2016. The multiple research instruments include classroom observation, interview, and student survey. With the triangulated data, the study will determine to what extent a series of visual literacy lessons influence the target student group's English language learning.

The coursebook and learning materials used in my current context contains many visual resources. However, there has not been sufficient training in how to make the best use of such resources, and many lecturers almost completely exclude them from their teaching. As a case study, this action research could generate significant impact on teaching development at my institution by illustrating how visual skills could be taught to English language learners in a class like mine.

Yours faithfully,

Lundy Prak (Mr) Lecturer of English

Royal University of Phnom Penh

+85570696022

lungdy_prak@yahoo.com

Appendix 6.2: Part Two lecturer interview questions

Post-Cycle Two lecturer interview questions

- 1. What did you enjoy about teaching Core English in the last two weeks or so?
- 2. What lesson or technique in Cycle Two did you find most challenging? What did you do to overcome the challenges?
- 3. What specific issues in Cycles Two hindered you from implementing the interventions smoothly as planned?
- 4. Students said in their first focus group that they would be interested in learning more visual skills. Probably, as a response to that, if I may put it this way, you taught them a number of visual analysis tools and techniques. You started with a PPT presentation, modelled an analysis, and then provided them with guided and independent practice. How receptive were the students to this series of lessons? (Can you point to any evidence to support your observation?)
- 5. The students did a Stop-and-check on the use of modal verbs and picture interpretation two of the core components of the lessons in Cycle Two. How well did the students perform for the Stop-and-check? To what extent did the Cycle Two intervention contribute to their learning, do you think?
- 6. In Cycle Two, the students' mini presentation from Cycle One was brought back with some modification. In what ways did the modification help students learn the language points better? What other future changes should be made if the mini presentation is to be used again?
- 7. In what ways did the visuals help your students with (1) motivation (2) attention (3) memory of vocabulary and grammar in learning CE lessons? Any evidence can you suggest?
- 8. I noticed that when the students were asked to interpret pictures, they used modal verbs to express varying degrees of certainty, because there were asked to do that as practice of the target language point, but when they talk in actual communication, they don't use those modal verbs as much. Can you explain why?
- 9. To what extent did the intervention in Cycle Two help achieve your teaching objectives?
- 10. All things considered, how effective have the interventions in both cycles been in helping your students learn the target language points more effectively?
- 11. What long-term impact do you think the interventions in this action research will produce? What impact do you plan to keep observing?
- 12. Following these two cycles of interventions, what further changes do you plan to make to your visual teaching to help students learn even more effectively?
- 13. Using our study as a basis, what potential teaching model would you recommend for other lecturers who are also interested in teaching visual skills to students at the English Department?
- 14. What can be done on the parts of (1) the lecturers, (2) administrators, (3) curriculum developer(s), and (4) the department's leadership/management in order to ensure that the interventions can be implemented successfully?

Appendix 6.3: Part Two student focus group prompts



The following are the prompts which were used to help moderate the student focus group discussion about key issues related to visual language learning identified in the study after Cycle Two of Part Two's action research.

2nd Student Focus Group Discussion (After Cycle Two)

- Greetings
- Reminding participants of the discussion procedures
- Allowing participants to ask any questions they have before starting the discussion

Opening question (to make participants comfortable)

1. What do you find useful and enjoyable about learning Core English (CE) in the last two weeks?

Introductory question

2. You learned about phrasal verbs with "get". What are some of the phrasal verbs you learned? (Can you explain what they mean?)

Key questions

- 3. I am going to show a number of pictures which your lecturer used to teach phrasal verbs with "get". You can take turns recalling which phrasal verbs match the pictures. For example, what can we say about this picture?
- 4. The students' mini presentation was done just once this time. P3 presented about wedding traditions in Afghanistan and another student presented about wedding traditions in Vietnam. What can you remember about these two wedding traditions? (In what ways did the visuals help you remember such details?
- 5. In what ways did the visuals help with your (1) motivation (2) attention (3) memory of vocabulary and grammar in learning CE lessons?
- 6. I noticed that when you were asked to interpret pictures, you used modal verbs to express varying degrees of certainty, because you were asked to do that, but when you talk in actual communication, you don't use those modal verbs as much. Can you explain that?
- 7. In what ways did the lessons in the past two weeks help promote your (1) critical thinking (2) Confidence to express your opinions in English?

- 8. Your lecturer taught you a number of visual text analysis tools and techniques. For example, gaze, salience, intended audience, shot distance, etc. How did you find those lessons? (In what ways did those tools and techniques help you (1) learn English (2) prepare you for future learning and communication?)
- 9. What challenges did you face in learning how to interpret a visual text? (And how did you address the challenges?)

Ending questions

- 10. Looking back, how successful do you think your learning has been since your CE lecturer started using more visuals in teaching? (What roles did visual lessons and activities play in helping you succeed in your learning?)
- 11. All things considered, what would you recommend for your lecturer so that he can use visual resources more effectively to support your learning? (Would you like your lecturer to continue teaching more visual skills?)
- 12. In terms of learning visual skills, what should be changed about the Core English syllabus? (Please explain.)
- 13. Summary of the discussion

Final questions

- 14. Do you have any other comments to add before we wrap up the discussion?
- 15. Wrapping up and thanking the participants

Appendix 6.4: Part Two solicited student diary prompt



Prompt for Student Diary

Dear Student Diary participants,

The following are the prompts which can be used to guide you in writing your learning diary entries.

To keep a diary, you are encouraged to write at least **one entry per day** about your learning in your **Core English** lessons for **two non-consecutive weeks** – one week during Cycle One and the other week during Cycle Two of the study.

Cycle One: 4 – 15 January 2016
 Cycle Two: 15 – 26 February 2016

- Your diary entries should include:
 - o reflection on what you learn during and after your Core English lessons;
 - o summary of your lecturer's teaching materials and methods;
 - discussion on to what extent visual resources/activities used in the lessons help you learn English and challenges you face in learning your Core English lessons plus how you plan to address the challenges in the next lessons.
- Please feel free to discuss any other issue of your personal interest in relation to your language learning in the Core English classes.
- Where applicable, please try to illustrate your discussion with an example.
- Please make sure to write complete, understandable sentences. Informal, everyday English can be used.
- Each entry should be about half an A4 page long.
- For recollection purposes, please make sure to record the date for each entry.
- You can either type or handwrite it.

Although you have been asked to keep a diary for only two weeks, you are encouraged to continue writing even after the study ends. The researcher will obtain a copy of your diary twice – the first time after Cycle One ends and the second after Cycle Two.

Thank you.

Appendix 6.5: Part Two observation protocol sample



Classroom Observation Protocol

Lecturer: PLD Time: 9:38 – 10:54

Unit of study: Unit 4 (p 36) Date: 22 December 2015

	T
Descriptive notes	Reflective/Interpretive notes
Apparent learning objectives • Vocabulary: Saying the opposite	 A rather quiet way to start the class Lesson covered a bit too little. More could have been done.
Classroom setting	
Two rows of female students in the front Half reversed L-shape row of male students on the right of the class + One back row of male students at the back 24 students	 Typical IFL classroom Easily disturbed by noises from outside Various work arrangements
The other class makes so much noise, roars of laughter and cheers for the first half of the lesson	
Learning activities in a chronological order	
 Pair work to discuss which among the two sentences is better and got the students to explain their choice. T checked the answer and explained it. Check the opposite of the adjectives listed in shaded box at the top left on page 36. Group work to do the exercise 1, p 36: Students assigned to find antonyms for different words. Checked the answers. Answers stuck on the wall on different parts of the class. Students went around to check/copy the answers. (They must have loved it) Pronunciation practice: Audio+Speakers to teach stresses Example in L1 At one point, instruction in Khmer Did Exercise 2 in pairs. Listened to check the answers. Students practiced the dialogues in pairs. Exercises 4 and 5 as homework 	 Taught pronunciation: Honest (One student mispronounced the word), Hour Wrote the answers on the board (im-, dis-, ir-, il-, etc.) and underlined them The teaching is rather coursebook-driven. The teacher should have taken notes of the students' answers. Picked those with frequent pronunciation problems. The class laughed at their pronunciation and they don't seem to mind.

Roles and types of visual imagery discussed So far, none The only image briefly discussed was on page 36. UNDECIDED - Smart phone dictionary over paper Students used their mobile phone to dictionaries. How rich is the smart phone help/dictionary/thesaurus/ Google dictionary? Enlarged answers posted on the walls. Students went around and copy the answers into their book T. also used a Macbook + speakers to play pronunciation of the words Visual skills focused Card game (Planned, but not implemented) Teacher's approach to handling visual imagery - Used handouts/cards containing text Students' approach to handling visual imagery - No issue understanding the cards Challenges faced by the lecturer in handling visual imagery and solutions - No observed issues Challenges faced by the students in handling visual imagery and solutions

- Black and white coursebook	Clarity issues. Students who used the B&W book checked their friends' colour book.
Learning benefits of the visuals	
 Enlarged answers posted on the walls for checking answers Motivation and interest in the lesson 	Not much as no significant resource/activity was used
Points to further investigate	
 Why the visual was skipped Impact of the B&W coursebook, which the CE lec pointed out 	
Others	
 No creative activity, visuals in the coursebook generally overlooked Followed the book, and the arrangement of the activities pretty closely Students appeared rather unimpressed and expected a bit more. Students liked teasing each other and were not shy to speak in front of the class. 	

Appendix 6.6: Classroom observation transcription sample

CE Classroom Observation Transcript (24/2/2016 2nd Session)

CE Lec = Lecturer participant, Stu = Student participant, SP = Student participant who participated in the focus group discussion

Start Time	ime End Time Transcript					
00.0	03:48.1 ((At three minutes, forty seconds))	((The class returned after the break)) ((The Lec was preparing to start the class/One student had to leave for another university and came to talk to the Lec about it))				
03:48.1	04:41.9	OK, everyone, so we come back, right, after the break, and before we continue, let me ask somebody about the first session a little bit. SP3, you came the first session? [SP3: No, I was absent] How about Stu 1? Did you come the first session? Yes, about the presentation	CE Lec and SP3			
04:41.9	05:01.7	= In the first session, we learned to analyse the picture, the angle, offer. It is the offer or demand. Then, and about the colour	Stu 1			
05:01.7	05:10.8	= No, no, wait. You're talking about offer and demand. Is it about [Other students: Gaze] angle or gaze or what?	CE Lec and Students			
05:10.8	05:11.7	Gaze	Students			
05:11.7	05:23.9	GAZE, right? [Students: Yes] What else? (.)	CE Lec			
05:23.9	05:40.5	Angle and the shot, shot distance. Like long distance for environment, medium shot for mid distance and close-up	Stu 1			
05:40.5	06:05.8	OK. What else? ((The CE Lec appeared to be checking his phone)) I'm sorry I have to take a call a little bit.	CE Lec			
06:05.8	06:45.7	((Students chatted among themselves while the CE lec was on the phone outside the room))				
06:45.7	07:54.5	OK, EVERYONE, so again, we talk just briefly. We're talking about gaze, we have demand [Diarist 3: We have offer] We have angle [Students: High angle, low angle, eye level] OK, shot distance [Students: Long shot, whole figure shot, medium shot, and close-up] Yeah (5.1) And also colour, right? Yeah, different colour it can build up different kind of mood, OK? Like this one, OK? Let's now talk about the elements again. The elements in the image that are integrated, right, combined. The first one here is again [Students: Salience] Salience refers to the feature in the visual which attracts the				
		viewer's attention the most. That's what we call "Salience". In Khmer, what do we call, salience?				
08:16.6	08:19.1	= ភាពនាត់នាញ ((Khmer translation for "salience"))	Students			

08:19.1	08:49.6	Yeah? ភាពភាគាញ? ((Students continued to chat	CE Lec
		among themselves about the translation)) For example, like this one, as you guys can see, the most attractive point, maybe the first time you see this picture, probably, the umbrella. Right? Yeah	
08:49.6	09:52.1	So in here, they use the colour to make the umbrella, what we call, stand out that when you look at the picture, you will see, you will focus on the umbrella first. So first, you can use the colour, like the previous picture. You can use the colour, you can make the rest of the photo black and white, and you can keep only that point that you want to stand out. OK? The size as well [Students: Focus] I think you know what we call "In focus and out of focus." Blurred [Students: Blurred] I think you guys are familiar with Instagram [Students: Yes] Yes, when you want to just show your, your new watch that you have just bought, and you blur out the rest. Right? That's what we call [Students: Salience] Yeah, salience	
09:52.1	10:13.6	Distance [Students: Focus] and also combination of colour, size, focus, and distance. And now we have one photo to analyse again. [Students: Oh/ Shrek] Shrek, right? [Students: That looks like Stu 5] ((The class laughed))	CE Lec and Students
10:13.6	10:22.5	So what part of the image is the most salient?	CE Lec
10:22.5	10:39.8	Salient? The fire/The green one [CE Lec: The green one? Why?] Because it's big/it's in the centre [The distance]. It's like close-up	Students
10:39.8	10:44.6	The distance, close-up? [Students: It's medium] Yeah	CE Lec and Students
10:44.6	10:47.9	And the other thing is it's wider and a bit higher ((than)) the other three (2)	Stu 2
10:47.9	11:29.8	OK, your friend is correct. It's, this is the BIGGEST, Shrek is the biggest, he's in the centre. And if you guys talking about the, the closeness, he's the closest to us. He is front, you see. He's in the front, front and centre. Yeah, SP1, do you agr(h)ee with Stu 2? [Students: Yea(h)h, yea(h)h ((CE Lec was trying to play matchmaker and the class laughed))	CE Lec and Students
11:29.8	11:45.9	OK, and do you know why the dragon is not blurred out? Do you know why? Because as you know that, probably they want us to focus on Shrek and maybe the dragon	CE Lec
11:45.9	11:52.3	= The dragon is also part of the movie	Stu 3
11:52.3	11:58.8	= Also part of the movie. Yeah, very good ((Students clapped))	CE Lec and Students
11:58.8	12:32.0	Because we have, like, the good guys, the good characters, and we have the, like, the kind of villain [Students: Yeah] the bad characters. So that has been [Students: Salience] Salience, OK. Colour, size, focus, distance, and combination of these. And now, let's move to the next one.	CE Lec and Students

		Can you guess what is it? Do you still remember? We have what is it? (1.3)	,
12:32.0	12:33.6	Placement	Diarist 2
12:33.6	12:42.2	The next one is? [Diarist 2: Placement] Placement, very good ((Students clapped))	CE Lec and Diarist 2
12:42.5	13:45.7	OK, the placement. The subjects placed in the centre are primary or most important, like Shrek poster earlier, right? He is placed, he was placed in the centre of the picture. The subjects in the margins are secondary and less important. Again, you guys can see, OK? They are also important, but compared to Shrek, Shrek is more important. The main character [Students: Protagonist] Right, protagonist (21.5)	
13:45.7	14:23.8	As you guys can see (5) Actually, it's the real, the real photo. It was taken after the war ended, but I, I don't remember whether it's World War 1 or 2, but this photo has, was taken when the army returned home, something like that. A very famous one. OK, and after placement, what do we have?	CE Lec
14:23.8	14:24.8	Framing	Students
14:24.8	16:56.3	Framing. Yeah, very good. So what do we mean by framing? So you guys can read it a little bit. ((A loud thud)) Is this a sign? The elements in the layout can be <combined, connected,="" disconnected,="" each="" from="" marked="" off="" or="" other="">. If elements are cut off from one another, they are <strongly framed="">. Do you understand that? [Students: No/For example?] This one, do you understand? [Students: Oh, frame] The title is? [Students: Tsunami] And they framed only a picture of like the woman lying down on the beach, something like that [Students: Dead body] So probably [Students: Dead body] Dead body? Probably [Students: Fi(h)sh/No] Fish? ((Students laughed)) No, I don't think so. So here, framing can be achieved by borders, continuity, discontinuity of colour and shape, by white space [Students: By white space] And this one, we will talk more when we start the listening, OK? ((The students chatted among themselves as the CE remained silent)) (7.6)</strongly></combined,>	Students
16:56.3	20:06.4	Alright, everyone. So now we will try to come back to our poster again () the model analysis again. This one. And I encourage you guys to go to the Facebook group. I think I asked Diarist 3 to post to the group [Students: Yes] You can go to the group, and you can download the photo. And you can just view it, and also the presentation slide. And then, you can read more by yourself. But now, I need you guys to focus on this ((CE Lec showed an ad using an LCD projector)) and ask yourself about the questions that we have learned today, about angles, about (.) what is it? [Students: Frame/Gaze] SHOT DISTANCE, all the stuff	CE Lec and Students

		that we've learned today. Try to talk as much as possible with your friends, partners (2) and after that, we will wrap	
		up this presentation. ((Students discussed the advertisement))	
20:06.4	20:32.5	((CE Lec interrupted the students' discussion to remind them of the techniques to discuss)) OK, again, everyone. When you guys discuss about the advertisement/poster, I just want to review the techniques we have discussed already. So, GAZE, ANGLES, SHOT DISTANCE, COLOUR, SALIENCE, PLACEMENT, and FRAMING. So you can talk a lot about these with your partner. When you finish, we will talk more. Alright? = Teacher, what is the placement? I confused with framing.	CE Lec Stu 3
20:58.0	21:05.9	SP1, do you still remember place(h)ment? ((Students laughed at the matchmaking intent of the lecturer)) Placement, do you still remember?	CE Lec
21:05.9	21:17.1	Placement is we place characters in the picture, <where and="" somewhere="" why,=""> (.) in the centre or in the margin</where>	SP1
21:17.1	24:30.5	Primary, secondary. OK? You place the subject in the photo or picture. OK, thank you, SP1. ((Students continued to discuss the advertisement))	CE Lec
24:30.5	28:12.5	You want me to zoom in like this, or just put it like the previous one? Yeah? [Students: Zoom in/Just like this] If you really zoom in, you will see. ((Students discussed the advertisement))	CE Lec and Students
28:12.5	28:48.9	I noticed you guys have finished, that's why you laugh a lot. So, so we should start checking it now, OK? This one we talk already, about that. And now just move to the first one, gaze [Students: Yes, gaze] So can anyone share us your opinion or your partner's opinion about gaze? Anyone? Stu 4, yeah, OK	
28:48.9	29:33.3	(2) Just. Gaze, we have two, two types. It is, they are demand and offer. And DEMAND is for, when the subject looks directly to us, and offer when the subject looks away	Stu 4
29:33.3	29:45.2	Um Hmm. OK, thank you for telling us ag(h)ain ((The class laughed and clapped)) but right now, we're now talking about the poster [Students: Oh] In terms of gaze, yeah, OK	CE Lec and Students
29:45.2	29:54.2	= The picture is an offer. The subject look away.	Stu 4
29:54.2	30:19.3	Hmm. Offer. OK, thank you. What else? SP3, you want to say something? ((SP3 appeared lost and the class laughed))	CE Lec
30:19.3	30:36.0	((The other students told SP3 they were discussing gaze)) We cannot see the kid, right? >Yeah, we cannot see the kid's face< She's turning her back to us. That's why we cannot see her face. It's like it's an offer.	SP3 and other students
30:36.0	30:55.2	Right, right now, let, let's imagine that we are the viewer, we are the viewers, and now we see it like this, OK? So for sure, we are higher than, we are [Students: Taller than]	CE Lec and Students

		TALLER THAN THE KID, right? [SP3: Yes] So we look down like that. So now we see the explanation. OK?	
31:02.2	32:19.7	((The CE Lec showed the model analysis)) The image offers <the a="" above="" and="" are="" as="" behind="" behind,="" child,="" contemplation="" elements="" for="" like="" might="" parent,="" parents,="" placed="" scene="" see="" so="" the="" us,="" viewer,="" we="" with=""> [Students: Scene] Yeah, what is going to happen if the child is close, is very near the window like that, so what, what is going to happen? We as the children ((parents)), we see the scene. Alright? (6.5) OK, and this one, event being shown everyday incident which can happen when a child comes close to a window, but it's still what we call 'unattended'. What does it mean "unattended"? [Students: Unattended, the parents are careless] Yeah, you can say maybe the parents are still careless, are not really careful about that even though we all know it could lead to some kind of problem, danger, OK. And who or what is involved? A child, flyscreen, awning. Do you know the word 'awning'?</the>	Students
32:19.7	32:37.6	(3) Yes [CE Lec: What does it mean? Stu 5, you said YES, so you must know] It's the front of the house. VERANDA	CE Lec and Stu 5
32:37.6	32:41.2	No/ Check again/Check again, we will know, OK? ()	CE Lec and Students
32:41.2	33:12.0	Red car and street [Students: Red car] And how about angles? [SP6: Angle] SP6, tell us about angle. You don't have to, to tell us about >low angle, high angle again< Just tell us about the poster. This one, in term of angle	CE Lec and SP6
33:12.0	33:22.3	Like we are powerful than the kid [Students: We all already know] It's a high angle.	SP6
33:22.3	33:23.6	OK, which means?	CE Lec
33:23.6	33:28.6	((Students chatted among themselves)) The viewer looks down/ The viewer is like a parent.	Students
33:28.6	33:29.5	= Like you said earlier	CE Lec
33:29.5	33:41.2	(2) They are like parent, and the viewer is more powerful than the kid.	SP6
33:41.2	34:30.0	= OK, so we check together whether >you are right or not < So yea:h, you have the right key word "powerful". So the image suggests > a relationship of power through a high angle placed in the viewer in a powerful position as parents who can prevent the fall. So you can (.) you can prevent this from happening. You are the parents, OK? Suggested in the text. Like it is within your reach. Do you know the word 'within your reach'? Like you can reach out and then pull your kid away from the window, something like that, very close.	
34:30.0	37:03.6	There are two levels of distance in the image. A personal distance is established between the viewer like us with the child, with the sense that the viewer like a parent could reach out and take the child's hand away from the screen.	CE Lec

	1	W 1 4 DOWED 11 1 1 1	
		We have the POWER, we are able to do that as a parent. And beyond this <is a="" and="" awning="" below="" danger="" distance="" lies="" public="" street="" the="" to="" where="">. So if we do not use our power to, to take our kid away, maybe the danger is up ahead, in front of them, the kid. OK? When you come to think of it, the picture is very good, right? It's very interesting. How about colour? [Students: Red] Here, how about colour? [Students: Red] What does it mean "red car"? [Students: Danger] Fancy car? [Students: Redness always represents danger, alert, blood] So, so check together. Here, the car is red, suggesting it is something probably [Students: dangerous] OK, good, good point. And the FLYSCREEN AND BACKGROUND OF THE STREET below are dark, while the child is wearing >a bright-coloured dress<. If you remember () white, white dress. Because the viewer can notice the child quickly, and think how dangerous the situation is. The child is in a white dress</is>	
		((The students chatted among themselves about the analysis)) (10)	
37:03.8 38:59.4	39:42.4	How about the next one? () We're talking about the SALIENCE. So I just show you, OK? The child is large in size, and she is, he or she is focused and foregrounded . And the viewer's attention is immediately <drawn ((students="" ()="" <the="" about="" among="" and="" at="" because="" bigger="" can="" child="" dangerous="" debating="" got="" have="" i="" important="" is="" left="" like="" like,="" line,="" line.="" mean,="" mean?="" most="" ok?="" on="" part="" place="" placement,="" position="" right?="" same="" see.="" the="" themselves))="" they="" thing.="" this="" to="" we="" were="" what="" window?.="" write,="" yeah,="" you="">, the picture, and then they have the message on the right. OK. And the less important messages and info and logos are at the bottom, the less important. The child is placed next to the flyscreen, which is close to the awning, the car, and the street, suggesting how close the child is to danger. (4) How about framing? () There are three main frames in the photo. The main messages, and the secondary message, and additional info with the image in the largest frame occupy most of the space on the page. (8) I want to go back a little bit, this one. OK? What do we mean by three frames?</drawn>	CE Lec and Students
39:42.4	39:48.5	Frames? One, two, and three. Three frames	Students
39:49.3	40:12.8	And which is the bigger, the biggest one? It takes like over	CE Lec
		60% of the whole image already. (15)	
40:12.8	41:32.0	OK, so I think that should be all for, for it. Yeah, OK, and I hope you guys learn something new today, which doesn't mean that it's the end of the class. We still, we still ((Students grumbled)) OK, one last thing before we go home, OK? ((The LCD was put away, and the class was prepared for the next activity))	CE Lec and Students

41:32.0	42:23.9	OK, EVERYONE, so like I said, we >have to move on a	CE Lec
		little bit before we go home So I need you guys to come	and
		back to the book and turn to page 57. We're gonna continue	
		the lesson. Did you like this topic? ((Most students: Yes; A	
		few others: No))	
42:23.9	42:37.2	OK, everyone, so I need you to work with, with your	CE Lec
		friends again to, first of all, discuss about the four, four	
		photos here ((in the book)), OK? About the wedding. OK	
42:37.2	46:19.5	((Students discussed the photos))	
46:19.5	46:45.8	OK, everyone, thank you. Now I give you guys some hints.	CE Lec
		We have four pictures, and we have four types of wedding	
		or marriage, OK? So I need you guys to match each photo	
		with the name, the type of the marriage. For example, the	
		first one	
46:45.8	46:49.5	= Teacher, what does the WHITE MARRIAGE, wedding	Stu 6
		mean?	
46:49.5	46:58.6	You guess first. I will tell you later. Yes, the first one here.	CE Lec
		What is it, everyone?	
46:58.6	47:05.4	The white wedding [CE Lec: The first one? Are you sure?]	Students
47:05.4	47:06.8	(3) Yes, How about the second one?	CE Lec
47:06.8	47:10.4	The second one is DESTINATION WEDDING	Students
47:10.4	47:12.5	Destination wedding. And the third one?	CE Lec
47:12.5	47:15.0	ARRANGED MARRIAGE	Students
47:15.0	47:16.8	How about the fourth one?	CE Lec
47:16.8	47:18.7	Theme/A theme wedding	Students
47:18.7	47:47.4	A theme wedding. Do you agree? ((A few students	CE Lec
		disagreed)) Do you have the same idea? ((Students	and
		discussed among themselves))	Students
47:47.4	48:10.7	Why is this an arranged marriage? Because as you know	CE Lec,
		that they are [Students: Prince and princess] royal family,	SP5, and
		so they are arranged. Their marriage was arranged by the	Students
		king, prince [SP5: No, it's not arranged. Kate is his friend]	
48:10.7	48:58.9	= And the second one, you are right. [Students: Destination	CE Lec
		wedding] The weddings to be taking place in a, some kind	and
		of resort. Yeah, in this case, like a beach, maybe the island.	Students
		And the third one, [Students: A theme/white wedding]	
		White wedding. White wedding is the traditional kind of	
		wedding that happen for the Christian, Christian people.	
		[Students: Oh] The bride normally wear a white dress like	
		that, and normally they go the church and exchange the	
	10.00	vows, and something like that.	
48:58.9	49:00.2	= But actually they do love each other.	Stu 6
49:00.2	49:12.6	Look at her face ((And then students discussed very	SP5 and
		noisily)) It's like an arranged marriage [It's not an arranged	Students
		marriage] (3)	
49:17.1	50:09.3	White wedding, it can be arranged or maybe not . It can be,	
		but just know that this is the kind of the typical white	and
		wedding. And the last one is called [Students: A theme	Students
		wedding THEME WEDDING. You know the theme,	

		everyone? [Students: Yes] In this case? [Students: Hello	
		Kitty] Hello Kitty. Yeah, the theme is Hello Kitty. Some	
		people, they even adapt Star Wars, Lord of the Rings	
		((Students laughed)) But in the future, Deadpool as well.	
		Maybe SP3's wed(h)ding, Deadpool ((Students continued to	
		fuzz over the theme wedding topic))	
50:09.3	50:31.4	OK, OK, OK. Yeah, that's ENOUGH. And now, we're	CE Lec
		gonna move on to (2) to talk more about this, everyone.	
		[Students: Arranged marriage/I love it] So what should be	
		the good reason? What should be the bad reason?	
50:31.4	50:38.4	= We don't expect much from each other.	Stu 5
50:38.4	51:09.0	[CE Lec: Which is good?] Yeah: Because it's like there's a	Stu 5, CE
		lot of expectation, and then you can fail it. You make your	Lec and
		partner DISAPPOINTED, but if there's, there's less	Stu 7
		expectation. It's a good reason. Yeah, when it's arranged, it	
		gets approved by the parents [CE Lec: Both parents, both	
		sides] and we're in an arranged marriage, is [Stu 7: So you	
		support it?] I'm just expressing my opinion here. (3)	
51:09.0	51:14.7	OK, good side, from the inside. Any good reason before we	CE Lec
		talk about bad ones?	
51:14.7	51:23.7	= Good reason [Students: Good reason for arranged	Stu 5 and
		marriage?] I think it would be better for both families to get	Students
		closer, good family relationship	
51:23.6	56:37.3	((The class continued to discuss the pros and cons of	
		arranged marriage))	
56:07.3	56:38.5	And now, we will focus on one woman. Her name is	CE Lec
		Pratima Kejriwal from India, I guess, who has an arranged	and
			Students
		you think she's happy? [Students: Yes, she's happy/ I don't	
		know/Maybe just a fake smile]	
56:38.5	01:17:18.8		CE Lec
		to close your book and <try important<="" of="" some="" td="" think="" to=""><td></td></try>	
		questions you want to know about her>, OK? So what are	
		some of the questions that you want to ask about her life or	
		maybe about her? Maybe, the first question is how old ,	
		how old was she [Students: Yes] when she got married?	
57:13.5	57:14.6	= Was it, was it hard to take it in?	Stu 5
57:14.6	57:17.5	Was it hard to? [SP5: Take it in] take in it? [SP5: Yeah]	Stu 5 and
67.11.0	7.17.5	was to hard to. [STD. Take to hi] water in to. [STD. Team]	CE Lec
57:17.5	57:18.1	To take in what?	Stu 4
57:18.1	57:10.1	News, the news of arranged marriage (2)	Stu 5
57:18.1	57:25.8	What else? What are the questions that you want to ask	CE Lec
31.22.3	37.23.6	her?	CE LCC
57:25.8	58:45.2	((The class continued to brainstorm the questions))	
58:45.2	59:19.0		CE Lec
30.43.2	37.17.0	So now we're gonna listen and you guys still close your	CE Lec
		book. OK? CLOSE YOUR BOOK NOW, everyone.	
		Please. OK, [Students: Close your book] close your book.	
50.10.0	01.04.21.0	And listen carefully to the, about her.	
59:19.0	01:04:31.9	((The audio clip was played once from start to finish))	<u> </u>

01:04:31.9 01:05:21.1	OK, so that's it. OK, so now, you will know why she's smiling. OK, so you guys can open your book. OK, COME BACK TO THE BOOK, OK? We will listen for one more time, but this time, we will answer the questions in exercise 5. OK? So you guys can read the questions a little bit. Stu 6, can you read the questions, please. Just read, NOT ANSWER, OK?	CE Lec
01:05:21.1 01:05:47.6	((Stu 6 read the questions))	
01:05:47.6 01:07:22.1	OK. Thank you. And if you guys remember the interview, you can just note down the answer a little bit. We will listen for one more time, and after we finish, we will check for the answers. ((Time was given for the students to go over the questions again)) OK, I think everybody is ready. Shall we wait for the other two ((Who went to the restroom))? We wait a bit.	CE Lec
01:07:22.1 01:08:36.1		
	OK, let's start now, everyone ((The tapescript was played for the second time from start to finish))	CE Lec
	OK, since we, the time is quite short. We don't have time to check it, but don't worry. You guys can go back to the tapescript and find answer by yourself. OK, yeah, at home, or at somewhere, I don't know. In the cinema () but right now, do you guys still remember the visual mini presentation ? [Students: Yes] We still have it, but this time, we need only two volunteers, not four [Students: Tomorrow?] For Friday , Friday class (2) And the topic, the theme is marriage customs around the world [Students: Oh] You just pick up one ((Students discussed among themselves)) ((SP3 volunteered to do it)) SP3, and one more should female, right? [Students: Yeah] (6.7) Another one, female, please, volunteer, marriage custom around the world (7.3) ((Stu 7 volunteered))	and Students
01:15:28.8 01:15:38.0	So you guys, you guys can bring the video clip, picture, photos, and be ready to be asked by the class.	CE Lec
01:15:38.0 01:15:38.9	= And we have the same topic?	SP3
01:15:38.9 01:15:39.9	Not the same	Students
01:15:39.9 01:17:17.6	= Not the same. For you, you take the same big topic but different traditions. [SP3: So we should not take just one tradition] For example, you ((SP3)) take marriage customs in India, and Stu 7, you take marriage customs in China. ((Students discussed the presentation among themselves)) SP3 and Stu 7, I need to talk to you a little bit. [Class dismissed]	CE Lec

Stop-and-Check

Interpreting a visual text: Study the photo below carefully, and then write six sentences for at least five different visual features you have learned. Each sentence must contain a modal verb, e.g., must, should, could, might, etc.



http://www.danwhite.org/Photography/Pictures/picstones.jpg

 Write your sentences here.

 1.

 2.

 3.

 4.

 5.

 6.



Part Two's Action Research: Student Participant Questionnaire

Dear participants:

Thank you for volunteering to complete the questionnaire for our research study on **visual** skill teaching methods and strategies in English Language Learning in Cambodia. Each participant will receive a memento as a token of gratitude after completing the questionnaire.

Your honest answers will make meaningful contribution to the study findings and long-term improvement of English language teaching practice at the English Department of the Institute of Foreign Languages (IFL) at Royal University of Phnom Penh. We, the researchers, assure you that the information you provide here will be treated with the strictest confidence, and only the researchers will have access to the information.

The questionnaire has 27 questions and will take around 30 minutes to complete. Please write answers and tick response boxes clearly with a blue or black pen. Please make sure to answer all the questions. Your class monitor will distribute the questionnaire, collect it back, and put it in a sealed envelope.

If you have a question about the questionnaire and/or the study, please contact Mr Bophan Khan by email at bophan.khan@students.mq.edu.au.

Thank you for your cooperation.

The questionnaire begins on the next page.

Part Two's Action Research: Student Participant Questionnaire

Please write answers and tick response boxes clearly with a blue or black pen. 1. What is your gender? Male Female 2. What is your age? Please write a number (e.g., 19): 3. Are you pursuing another degree program besides the one at IFL? Yes (Please answer another question below) No (Please go to Question 4) What do you specialise in for the other program? (e.g. Finance) 4. How long have you been learning English? Less than 4 years 4-6 years Longer than 6 years 5. Which of the following most suitably describes the kind of language learner you are? Please tick up to TWO responses. Analytic (Learning best by analysing detail components of a language like grammar rules, prefixes, phonetic symbols, etc.) Auditory (Learning best through listening) Visual (Learning best through visuals) Tactile (Learning best through touching) Kinaesthetic (Learning best through actions) 6. How often do you use a digital/phone camera? Every day Only use it on holiday About once or twice a week Never 7. Do you edit the images you take? Yes 8. Do you share the images you take on a social networking site like Facebook, Instagram, or Twitter? Yes \square No 9. How often do you use PowerPoint slides? All the time For most of my presentations Only after the other presentation materials do not work Never 10. How often do you design your own PowerPoint slides? All the time When I have much time to prepare I avoid it whenever I can. Never 11. Which version of the New Headway coursebook are you using? Original, full-colour Copied, colour Copied, black and white 12. Before the study, how much training (both formal and informal) did you have in using visual resources for learning, for example, learning to connect visual materials in the book to the accompanying texts? ☐ No training at all ☐ Very much Much Not so much

13. How would you rate the visual components (pictures, maps, diagrams, etc.) in the New Headway coursebook? Please circle an appropriate response – 1 means the worst and 6 means the best.

	Worst					Best
Clarity	1	2	3	4	5	6
Attractiveness	1	2	3	4	5	6
Relevance to the texts	1	2	3	4	5	6
Usefulness in supporting your learning	1	2	3	4	5	6
Balance between texts and visual components	1	2	3	4	5	6

14. Your lecturer explained grammar lessons by using diagrams like tables, timeline graphs. In what ways did these diagrams help you in your learning? The diagram (You may tick more than one option, except after ticking the first one.)	
 □ Did NOT help with my learning at all (Do NOT tick any other option.) □ Made the grammar lessons fun to learn □ Simplified the grammar points □ Helped me remember the grammar points longer □ Helped me understand the grammar points faster. 	
15. What can be improved about the use of diagrams in learning grammar?	
In the first series of visual lessons (at the end of Semester 1), your lecturer used a nuvisual materials, for example, a cooking video by Jamie Oliver for Thai curry and pifight between flight passengers and Air Asia hostesses. You were asked questions the you understand those visual materials, but you were not taught any visual skill.	ictures of a

fight between flight passengers and Air Asia hostesses. You were asked questions that helped you understand those visual materials, but you were not taught any visual skill.

16. In what ways did visual materials and activities like these help you learn **vocabulary**?

Such visual materials and activities:	
(You may tick more than one option, except after ticking the first one.)	
Did NOT help with my learning at all (Do NOT tick any other option.)	
Helped me remember vocabulary in the units longer	
Helped me learn vocabulary in the units faster	
☐ Gave me opportunities to practice using vocabulary in the units	
☐ Gave me opportunities to see concrete illustration of vocabulary	
Helped me learn new vocabulary outside of the units.	

17.	. In what ways did visual materials and activities like these help you learn grammar (e.g., future tenses, expressions of quantity, etc.)? Such visual materials and activities: (You may tick more than one option, except after ticking the first one.)
	□ Did NOT help with my learning at all (Do NOT tick any other option.) □ Helped me remember grammar in the units longer □ Helped me learn grammar in the units faster □ Gave me opportunities to practice using grammar in the units □ Gave me opportunities to see concrete illustration of grammar □ Helped me learn new grammar outside of the units.
18.	. Overall , in what ways did the visual materials and activities like these benefit you and your learning? Such visual materials and activities: (You may tick more than one option, except after ticking the first one.)
	☐ Did NOT help with my learning at all (Do NOT tick any other option.) Reason:
	Helped me understand better the value of visual materials for my learning Taught me visual skills that I can use to interpret visuals for my learning Made me become more motivated in learning Made me pay more attention in learning Gave me opportunities to practice speaking, listening, reading and/or writing skills.
nui dis	the second series of visual lessons (at the beginning of Semester 2), you were taught a mber of visual interpretation skills, including gaze, camera angle, salience, and shot stance. Your lecturer explained these skills with a PowerPoint presentation plus examples d then provided you with a number of images for you to practice using those skills. There is also a quiz about them.
19.	. In what ways did the visual materials and activities like these help you learn vocabulary ? Such visual materials and activities: (You may tick more than one option, except after ticking the first one.)
	☐ Did NOT help with my learning at all (Do NOT tick any other option.) ☐ Helped me remember vocabulary in the units longer ☐ Helped me learn vocabulary in the units faster ☐ Gave me opportunities to practice using vocabulary in the units ☐ Gave me opportunities to see concrete illustration of vocabulary ☐ Helped me learn new vocabulary outside of the units.
20.	. In what ways did the visual materials and activities like these help you learn grammar (e.g., modal verbs)? Such visual materials and activities: (You may tick more than one option, except after ticking the first one.)
	☐ Did NOT help with my learning at all (Do NOT tick any other option.) ☐ Helped me remember grammar in the units longer ☐ Helped me learn grammar in the units faster ☐ Gave me opportunities to practice using grammar in the units ☐ Gave me opportunities to see concrete illustration of grammar ☐ Helped me learn new grammar outside of the units.

21. Overall , in what ways did the visual materials and activities like these benefit you and learning? Such visual materials and activities: (You may tick more than one option, except after ticking the first one.)			
	 □ Did NOT help with my learning at all (Do NOT tick any other option.) Reason: □ Helped me understand better the value of visual materials for my learning □ Taught me visual skills that I can use to interpret visuals for my learning □ Made me become more motivated in learning □ Made me pay more attention in learning □ Gave me opportunities to practice speaking, listening, reading and/or writing skills. 		
22	After the study, how well do you think you can explain such visual elements as Camera angle, Colour, Salience, Gaze, Shot distance, etc.? Well Not so well No idea at all		
23	. How likely are you to use these visual skills for your future learning? Unlikely Unsure		
24	A number of volunteer students were selected to give visual presentations related to the themes of the units in the coursbook, e.g., presentations about inspirational teenagers, food around the world, etc. In what ways did these students' mini visual presentations help with your learning? The presentations: (You may tick more than one option, except after ticking the first one.) Did NOT help with my learning at all. (Do NOT tick any other option.) Reason:		
	 ☐ Made me become more motivated in learning. ☐ Improved my memory of the lessons I had learned. ☐ Gave me opportunities to explore the themes in the units further. ☐ Gave me opportunities to practice speaking, listening, reading and/or writing skills. 		
25	Do you think enough visual support (still images, videos, etc.) is provided for your learning. Enough (Please go to Question 26) Not enough and more should be added		
	What additional visual support should be provided for your learning?		
26	. Will you be interested in pursuing further training in visual skills? Yes (Please go to Question 27) No (No need to answer Question 27)		
27	. What additional visual skills do you wish to be taught in the future Core English lessons? Please write your answer below.		

This is the end of the questionnaire. Thank you.

Appendix 7.1: Questions to teach in **implicit** visual literacy instruction

Visual aspects	Questions to guide students' interpretation of visual resources (image, in this case)
Subject matter	 What type of visual imagery/content is it? What/who is being shown in the image? Can you point out any contextual clues of the subject matter, e.g., race, sex, age, social class, clothing, climate, time, etc.? What is going on in this image? What is the relationship between the subject matters in the image? What (do you see in the image which) makes you say that? What more about the image can you find out?
Visual design	 What about the image captures your attention the most: colour, shade, shape, line, or space? What lighting is apparent in the image? In what ways does lighting contribute to the meaning of the image? What is being focused on? Which part of the image appears closest to you? What is significant about it? For what reason(s) was the image designed in this way?
Audience	 Who is the image probably created for? Where are you positioned as a viewer (above, below, or straight on)? In what ways does your position help you interpret the image? What impact on the audience does the image creator hope to achieve?
Creator's intended message	 What do you think is the purpose of the image? In what other ways can the image be used? What should be omitted or added to the image? Which component of the image helps you identify the creator's intended message the most?
Context	 Where do you expect to find such an image? In what ways will the image change its meaning when it is displayed in a different context, for example, when it is digitalised and shared on social media?

Response to the text	 How does the image make you feel? What is your initial reaction to the image? Has your reaction changed after a careful interpretation of the image? Is the image related to or does it remind you of anything you have seen in the past?
Authenticity	Has the image been altered in any way?If so, how? How do you know?To what extent is this image a representation of reality?
Source of image	Where does this image come from?Does the source change your interpretation of the image?
Visual-verb text relation	 What is the function/role of the image? (See Carney & Levin, 2002, for the five roles of a picture) Does the image reveal any information not discussed in the text? In what other ways does the image complement the text?

Appendix 7.2: Visual skills to teach in **explicit** visual literacy instruction

(See da Silva Joyce, 2014, for more practical guide)

Visual analysis techniques	Teaching tips
The three layers of meanings: Representational, interactive, and compositional (Kress & van Leeuwen, 2006)	 The metalanguage of the three layers of meanings in visual resources was not taught in the action research study conducted for this thesis due to the lecturer's and students' unfamiliarity with the three concepts and the short duration to implement the study. With the teaching spread throughout a program, the concepts can be introduced to the students gradually with abundant examples and practice, helping reduce the cognitive load for the students who have to learn the concepts and apply them to actual visual analysis in both classroom practice and real world communication. The concepts are grounded in Halliday's theory of systemic functional linguistics and will help promote students' critical thinking in verbal text analyses as the three layers of meanings also exist for verbal text (Halliday used different terms – ideational for representational, interpersonal for interactional, and textual for compositional.)
Representational level of meaning	 How the image represents reality What type of image is it? What events are being shown? What characters are involved? Why are such characters used? Where was the image taken? When was the image taken? How was the image taken? In what ways is the image/is the image not a representation of reality?
Interactive level of meaning	 How the image interacts with the viewer Gaze: Demand and offer Angles: High, low, eye level, or oblique (Dutch) Shot distance: Long, medium, close-up, or facial Colour: How colours convey moods, tones, and emotions in the image. What colours are the most

	dominant in the image? Do you think the colours have been altered? - Background objects: Level of background detail
Compositional level of meaning	 How the visual structural elements in the image are integrated Salience: The objects or aspects which capture the audience's attention the most. In what ways is "salience" achieved in the image? Placement of the subject matter: Left is known or given; right is new; centre is important; or margin is less important. Framing: Through the use of vectors to delimit a boundary, the use of colours and shapes to mark continuity/discontinuity of a subject matter in the image, or simply through the use of white space
Source of the image	Students are shown sources/online links to the images used and asked to search for associated images by themselves as a practice.
Ethical considerations	Copyright issues and acknowledgement of reuse and distribution of an image are to be explored here, raising students' awareness about the ethical standards in using visual resources – an aspect often overlooked in visual literacy instruction.

Appendix 7.3: Useful resources for teaching visual literacy

The following are web resources, books, and print publications which offer useful guidance for the teaching and learning of visual literacy through practical ideas and learning activities. Those resources which do not specifically focus on English language learning can be adapted and used for visual literacy instruction in an English language class.

A collection of websites

https://www.tesol.org/docs/default-source/new-resource-library/analyzing-visual-texts.pdf?sfvrsn=0

Guide and handout for analysing a visual text for English language learners

 $\underline{https://owl.english.purdue.edu/owl/owlprint/725/}$

Guide for writing a visual analysis essay

https://www.matrix.edu.au/techniques-for-analysing-a-visual-text/

https://www.det.nsw.edu.au/eppcontent/glossary/app/resource/factsheet/4115.pdf

Techniques to help with visual text analysis for high school students in New South Wales, Australia

https://www.edutopia.org/blog/ccia-10-visual-literacy-strategies-todd-finley

A summary of different ideas/strategies for teaching visual literacy with a focus on visual thinking strategies

https://www.literacyta.com/literacy-skills/analyzing-visuals

A comprehensive website containing resources from lesson plans to assessment procedures for teaching of visual analysis skills (requiring a paid subscription)

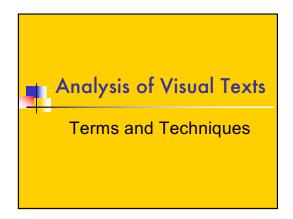
Practical books on teaching visual literacy and multimodal literacy

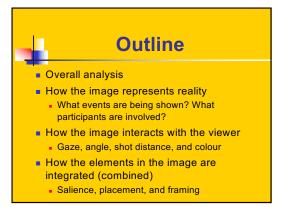
- da Silva Joyce, H. (2014). Multimodal and visual literacy in the adult language and literacy classroom. Sydney, NSW: NSW AMES.
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- Serafini, F. (2013). Reading the visual: An introduction to teaching multimodal literacy. New York: Teachers College Press.

Practical books on the use of visual-modal resources to support language learning

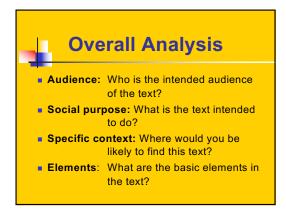
- Lonergan, J. (1984). *Video in language teaching*. Cambridge: Cambridge University Press.
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- Goldstein, B., & Driver, P. (2015). *Language learning with digital video*. Cambridge: Cambridge University Press.

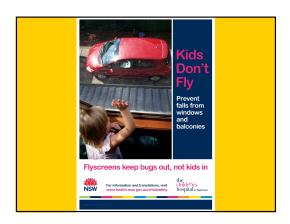
Appendix 7.4: The PowerPoint slides used by the lecturer to teach visual literacy explicitly in Cycle Two of the action research

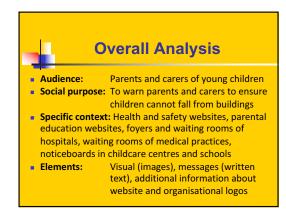


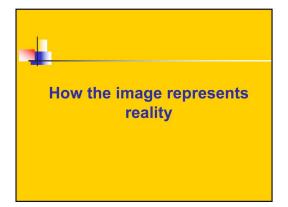








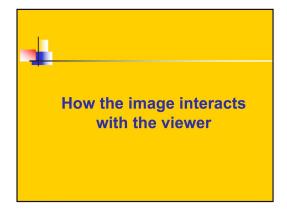


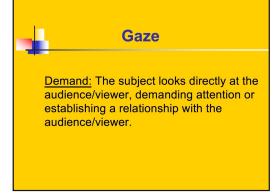




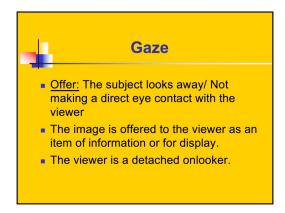


- An actual royal wedding on 29 April 2011, the exchange of vows ceremony at the Westminster Abbey in London
- Prince William, Princess Kate, the Archbishop of Canterbury (Rowan Williams), and congregation (families and friends, foreign royals, and diplomats)

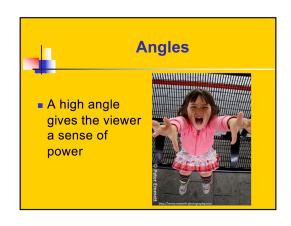


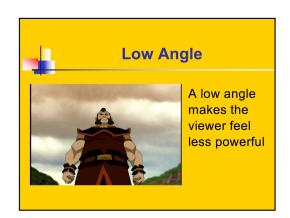




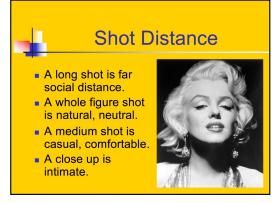


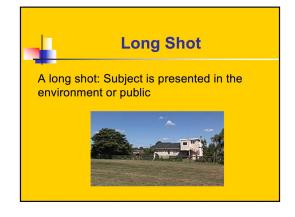


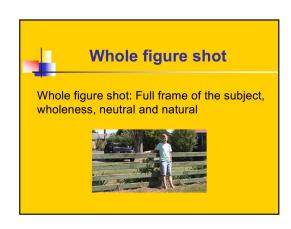


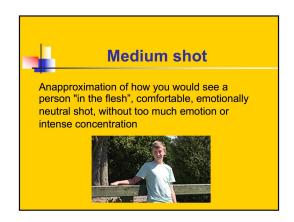


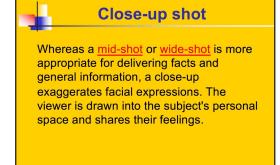


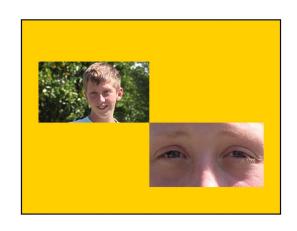












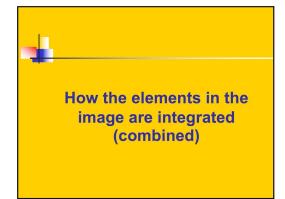


Colour

- Colours can make us feel cheerful or gloomy, peaceful or excited.
- Yellow: Cheerful, happy, warm,
- Orange: Warmth, enthusiasm, ambition, fun
- Red: Passion, heat, blood, danger, excitement, energy
- Black: Evil, death, rebellion, power

- Blue: Peace, coolness, tranquility, harmony, protection
- White: Purity, chastity
- Green: Growth, success, vegetation, health, life, generosity
- Brown: Stability, comfort, friendship, reliability
- Purple: Wealth, royalty, passion, wisdom, respect, mystery
- Grey: Neutral, classic, quiet, dull











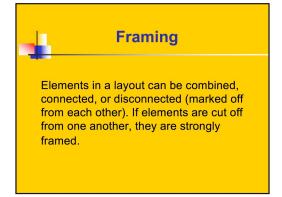
Salience can be made through

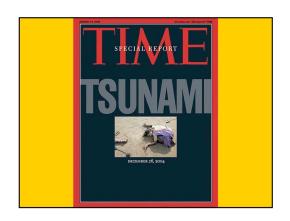
- Colour
- Size
- Focus
- Distance
- A combination of these things

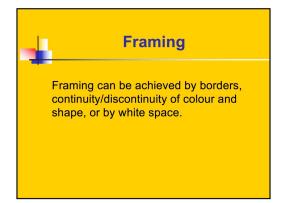


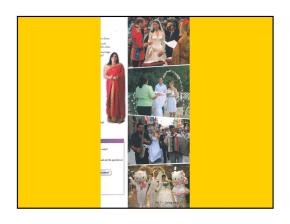






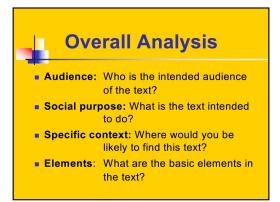


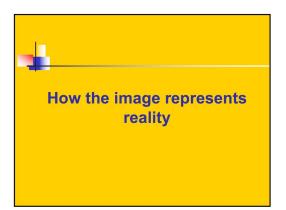




Model Analysis



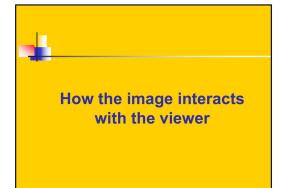








- Even being shown: Everyday incident which can happen when a child comes close to a window and is unattended.
- What/who is involved: A child, flyscreen, awning, red car, and street





Angle

The image suggests a relationship of power through a high angle, placing the viewer in the powerful position of parent who can prevent the fall, mentioned in the text.



Shot distance

- There is an interesting establishment of two levels of distance in the image.
- A personal distance is established between the viewer and the child with a sense that the viewer, like a parent, could reach out and take the child's hand away from the screen. Beyond this is the public distance to the awning and street below where the dangers lie.



Colour

- The car is red, suggesting it is something probably dangerous.
- The flyscreen and background of the street below are dark, while the child is wearing a bright-coloured dress. The viewer can notice the child quickly and think how dangerous the situation is.



How the elements in the image are integrated (combined)



Salience

- The child appears large in size as he/she is focused and foregrounded.
- The viewer's attention is immediately drawn to the child and her dangerous position at the window.



Placement

- The image is on the left. The main messages are then presented in the top right. The less important messages and information, and logos are at the bottom.
- In the image, the child is placed next to the flyscreen, which is close to the awning, the car and the street, suggesting how close the child is to danger.



Framing

There are three main frames in the poster separating the image, the main messages and the secondary message and additional information, with the image in the largest frame occupying most of the space on the page.



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