

References

- Abelson, P. (1996) "Declining Enrolments in Economics: Australian Experience", *Royal Economic Society Newsletter*, 95, 19-20.
- Åkerlind, G. S. (2005a) Phenomenographic methods: A case illustration. In John A. Bowden and Pam Green, (Eds). *Doing Developmental Phenomenography*. Melbourne: RMIT University Press, Qualitative research methods series.
- Åkerlind, G. S. (2005b) Variation and commonality in phenomenographic research methods. *Higher Education Research & Development*, Vol. 24, No. 4, November 2005, pp. 321–334
- Altman, H. B. (1989) Syllabus shares 'what the teacher wants', *The Teaching Professor*, 3, 1–2.
- Altman, H. B. and Cashin, W. E. (1992) *Writing a syllabus*, Idea Paper (Manhattan, KS, Center for Faculty Education and Development) Eric Document Reproduction Service No. 395 539.
- Angelo, T. and Cross, K. (1993) *Classroom Assessment Techniques: A Handbook for College Teachers* 2nd edition. San Francisco, CA: Jossey-Bass Publishers.
- Argüelles, A. and Gonczi, A. (Eds) (2000) *Competency Based Education and Training: A world perspective*. Mexico: Noriega Editores.
- Artigue, M. (1999) The teaching and learning of mathematics at the university level. *Notices of the AMS*, 46(11), 1377-1385.
- ASCD (2005) *For the success of each learner: 2004 Year in review*, Association for Supervision and Curriculum Development Annual Report, April.
- Ashton, D. and Sung, J. 2001 *Lessons Learned from Overseas* (Final Report), Centre for Labour Market Studies, University of Leicester, Leicester, UK.
- Assalini, P. and Hopkins, S. (2002) 'What Business Students Think of Economics: Results from a Survey of Second Year Students', *Economic Papers*. 21, 11-17.
- Aucott, J. N., Como, J. and Aron, D. C. (1999) Teaching Awards and Departmental Longevity: Is Award-Winning Teaching the "Kiss of Death" in an Academic Department of Medicine? *Perspectives in Biology and Medicine*. 42:280-287.
- AUQA (2004) Australian Universities Quality Agency Guidelines, [On-line] Available at: <http://www.auqa.edu.au>. Accessed: 28 January 2005.
- Australian Bureau of Statistics (ABS 2002a) *Business Use of Information Technology, Australia*, Cat No. 8129.
- Australian Bureau of Statistics (ABS 2002b) *Australian Social Trends 2002*, Cat No. 4120.
- Australian National Training Authority, (2002) Environmental scan for the national strategy for vocational education and training 2004 – 2010, Paper released December. [On-line] Available at: <http://www.anta.gov.au/>. Accessed: 10 October 2004.
- Australian National Training Authority, (2003) *Shaping our Future: Australia's National Strategy for Vocational Education and Training (VET) 2004-2010*. [On-line] Available at: <http://www.anta.gov.au/>. Accessed: 15 March 2005.

- Australian Qualifications Framework (2004) *AQF Advisory Board Guidelines on Cross Sector Qualifications Linkages*; [On-line] Available at: <http://www.aqf.edu.au/cs.htm>. Accessed: 29 January 2005.
- Australian Quality Training Framework (2006) *What's the AQTF?* [Online] Available at: http://www.dest.gov.au/sectors/training_skills/ Accessed 21 October 2006.
- Batho, G. R. (2004) Herbert Spencer 1820–1903, In: *Fifty Major Thinkers on Education: From Confucius to Dewey*, Palmer, J. A. (Ed) London, Routledge.
- Beaty, L. and Cousin, G. (2002) "Focus: Linking Research and Teaching". *E-exchange autumn 2002, Issue 3* [On-line] Available at: <http://www.exchange.ac.uk/archive.asp> Accessed: 24 September 2005.
- Belkaoui, A. (1980) *Conceptual foundations of management accounting*, Massachusetts USA: Addison-Wesley.
- Bell, M. (2005) *Peer observation partnerships in higher education*. HERDSA Guide Series; Milperra NSW: HERDSA.
- Benner, P. (1985) Quality of life: A phenomenological perspective on explanation, prediction, and understanding in nursing science. *Advances in Nursing Science*, 8(1), 1-14.
- Bentley, T. (1998) *Learning Beyond the Classroom: education for a changing world*, Routledge, UK.
- Biggs, J. (1978) Individual and group differences in study processes, *British Journal of Psychology*, 48, 266–279.
- Biggs, J. (1979) Individual differences in study processes and the quality of learning outcomes, *Higher Education*, 8, 381–394.
- Biggs, J. (1987) *Student Approaches to Learning and Studying*, Hawthorne Victoria, Australian Council for Educational Research.
- Biggs, J. (1996) Enhancing teaching through constructive alignment, *Higher Education*, 32, 347–364.
- Biggs, J. (2003) *Teaching for Quality Learning at University*, 2nd edition, Suffolk UK, University Press.
- Biggs, J. B. (1993) From theory to practice: A cognitive systems approach. *Higher Education Research and Development*, 12, 73-86.
- Biggs, J. B. (1999) What the student does: Teaching for enhanced learning. *Higher Education Research and Development*, 18, 57-75.
- Biggs, J. B. and Collis, K. F. (1982) *Evaluating the Quality of Learning: The SOLO Taxonomy*, New York, Academic Press.
- Birdsall, M. (1989) *Writing, designing, and using a course syllabus* Boston, MA, Northeastern University Office for the Support of Effective Teaching.
- Birkett, W. P. (1997) *Competency Standards for Middle Level Accountants*, Draft Report to the NIA Steering Committee. June.
- Black, P. and Wiliam, D. (1998) "Assessment and Classroom Learning," *Assessment in Education*, March, pp. 7-74.
- Bloom, B. S. (Ed.) (1956) *Taxonomy of educational objectives. Handbook I: Cognitive domain*. New York: David McKay.

- Boland, Jeff. (1996) Education and the Structure of Earnings in Australia, *The Economic Record*, Volume 72, No. 219, pages 370-380, December.
- Booth, S. and Anderberg, E. (2005) Academic development for knowledge capabilities: Learning, reflecting and developing, *Higher Education Research & Development*, 24(4), 373-386.
- Boud, D. (1995) *Enhancing learning through self assessment*. London: Kogan Page.
- Boud, D. (2003) Creating a work-based curriculum, in D. Boud and N. Solomon (Eds) *Work-based learning. A new higher education?* Buckingham, UK: SRHE and Open University Press.
- Boud, D. (Ed.) (1981) *Developing Student Autonomy in Learning*. London: Kogan Press.
- Bowden, J.A. and Green, P. (Eds) (2005) *Doing Developmental Phenomenography*, Melbourne: RMIT University Press.
- Bowden, J. A. and Walsh, E., (Eds) (1994) *Phenomenographic Research: Variations in Method*. Melbourne, Royal Melbourne Institute of Technology.
- Bowden, J. and Marton, F. (1998) *The university of learning. Beyond quality and competence*. London: Kogan Page.
- Bowen-Clewley, L. (2000) Assessing against competency standards in the workplace – a New Zealand perspective. In: Argüelles, A. and Gonczi, A. (Eds) (2000) *Competency Based Education and Training: A world perspective*. Mexico: Noriega Editores.
- Bowers, H. (2002) Designing Quality Curricula and Assessments. *Australasian Association for Institutional Research 13th Conference*, Edith Cowan University, Perth, December.
- Bowers, H. and Reid, A. (2005) Delivering higher and vocational education: Can an institution's course management system be constructively aligned with a foot in both camps? In Brew, A. and Asmar, C. (Eds) *Higher Education in a changing world: Research and Development in Higher Education*, Volume 28, pps.42-49.
- Boyer Commission on Educating Undergraduates in the Research University, (1998) *Reinventing Undergraduate Education: A Blueprint for America's Research Universities*, Carnegie Foundation for the Advancement of Teaching, USA.
- Boyle, J. S. (1994) Styles of Ethnography. In: Morse J. (Ed) *Critical Issues in Qualitative Research*, Methods, 159.185. Sage Publications, London.
- Boyle, P. and Lee, A. (2002) Criteria and principles to underpin academic program quality assurance processes: Balancing views from different hilltops. *Australasian Association for Institutional Research 13th Conference*, Edith Cowan University, Perth, December.
- Brennan, M. (2002) Curriculum: Is less more? *Curriculum Corporation Ninth National Conference*, Canberra, June.
- Broder, D. R. (1986) *What does your syllabus communicate?* Normal, ILL: Illinois State University.
- Brown, N. (2004) "What makes a good educator? The relevance of meta programmes." *Assessment & Evaluation in Higher Education*, Volume 29, Number 5 (October), pp. 515-533, [On-line] Available at: <<http://ejournals.ebsco.com/direct.asp?ArticleID=5TJR758UYUWBPQ7WBHG4>>. Accessed: 28 June 2004.

- Brown, N. and Graff, M. (2003) Student performance in assessments: an exploration of the relevance of personality traits, identified using meta programmes. Paper presented at the *Business Education Support Team Conference*, Brighton, April.
- Brown, N. and Knight, P. (1994) *Assessing learners in higher education*. London: Kogan Page.
- Bruce, C. (1997) *Seven Faces of Information Literacy*, Adelaide, South Australia: AUSLIB Press.
- Bruce, C., Buckingham, L., Hynd, J., McMahon, C., Roggenkamp, M. and Stoodley, I. (2004) Ways of Experiencing the Act of Learning to Program: A Phenomenographic Study of Introductory Programming Students at University *Journal of Information Technology Education*, Vol.3. pp143-160.
- Buchanan, J. (2005) Project leader, Vocational Education and Training and The Changing Nature of Work: Overview of Work In Progress, *Consultation Paper for the NSW Strategic VET Plan 2005 – 2007*.
- Buzard, James. (2003) "On Auto-Ethnographic Authority." *The Yale Journal of Criticism* 16(1):61-91.
- BVET (2000) [see New South Wales Board of Education and Training]
- Carter, G. (2002) An International Perspective on Curriculum, *Curriculum Corporation Ninth National Conference*, Canberra, June.
- Chambliss, J. J. (Ed) (1996) *The Philosophy of Education: an encyclopaedia*, USA: Garland.
- Chappell, C., Rhodes, C., Solomon, N., Tennant, M. and Yates, L. (2003) *Reconstructing the Lifelong Learner: Pedagogy and identity in individual, organisation and social change*. London, Routledge-Falmer.
- Cherry, N. L. (2005) Preparing for practice in the age of complexity. *Higher Education Research & Development*, Vol. 24, No. 4, November 2005, pp. 309–320.
- Child, D. (2004) *Psychology and the Teacher*, 7th edition, Suffolk UK: Continuum.
- Chua, C. (2004) Perception of Quality in Higher Education. Paper from the Proceedings of the Australian Universities Quality Forum 2004, AUQA Occasional Publication, Adelaide. In: Rob Carmichael (Ed) *Quality in a time of change*. Proceedings of the Australian Universities Quality Forum, Adelaide, 7th -9th July 2004, pp181 - 187.
- Cleary, J. and Skaines, I. (2005) Student Engagement as a Quality Indicator at the University of Newcastle. In: *Engaging communities*. Proceedings of the Australian Universities Quality Forum, Sydney, 6th - 8th July 2005, pp50 - 54.
- Cobb, P., and Yackel, E. (1996) Constructivist, emergent, and sociocultural perspectives in the context of developmental research. *Educational Psychologist*, 31 (3/4), 175-190.
- Cohen, L., Manion, L. and Morrison, K. (2000) *Research methods in education*. London, Routledge-Falmer.
- Connor-Greene, P. A. and Murdoch, J. W. (1999) *Does Writing Matter? Assessing the Impact of Daily Essay Quizzes in Enhancing Student Learning*, National Writing Across the Curriculum Conference, Ithaca, NY, June.
- Cope, C. J. (2006) *Beneath the Surface: The Experience of Learning about Information Systems*, Santa Rosa, CA: Informing Science Press.

- Corbin, J. (2003) *Is observation only for anthropologists?* The Fourth International Interdisciplinary Conference – Advances in Qualitative Methods, Banff Canada, May.
- Cornford, I. (1999) Rediscovering the importance of learning and curriculum in VET in Australia, *Journal of Vocational Education and Training*, Vol. 51, 1, p93-113.
- Curriculum Corporation (2006) [On-line] Available at:
http://www.curriculum.edu.au/projects/cc_proj.php Accessed 1 October 2006.
- Dall'Alba, G. (2005) Improving teaching: Enhancing ways of being university teachers, *Higher Education Research & Development*, 24(4), 361-372.
- Dator, J. (2004) *Universities without 'Quality' and Quality without 'Universities'* Paper from the Proceedings of the Australian Universities Quality Forum 2004, AUQA Occasional Publication, Adelaide. In: Rob Carmichael (Ed) *Quality in a time of change*. Proceedings of the Australian Universities Quality Forum, Adelaide, 7th -9th July 2004, pp1 - 18.
- Dator, J. (Ed.) (2002) *Advancing futures: Futures studies in higher education*. Westport, Conn: Praeger.
- Davies, P. and Brant, J. (2006) *Business Economics and Enterprise: Teaching School Subjects 11-19*. London: Routledge.
- Davis, H. A. (2003) Conceptualizing the Role and Influence of Student-Teacher Relationships on Children's Social and Cognitive Development in: *Educational Psychologist*, 38(4), 207-234 Lawrence Erlbaum Associates.
- Dawe, S. (2003) *Determinants of successful training practices in large Australian firms*, National Centre for Vocational Education Research.
- Dawson, R. (1993) *Confucius: The Analects*. Oxford: Oxford University Press.
- De Luynes, M. (1995) Neuro linguistic programming, *Educational and Child Psychology*, 12(4), 34-47.
- Dixon, T. P. (1991) *A brief review of literature concerning syllabi*, a colloquium concerning syllabuses sponsored by the University of Central Texas, Eric Document Reproduction Service No. 330278.
- Doolittle, P. and Camp, W. G. (1999) Constructivism: The Career and Technical Education Perspective, *Journal of Vocational and Technical Education*, Vol-16. No.1, Fall.
- Dryden, R. (2002) VET Pedagogy – A Review of the Literature 2000-2003, Executive Summary.
- Dutta, K. and Robinson, A. (2004) Rabindranath Tagore 1861-1941, In: *Fifty Major Thinkers on Education: From Confucius to Dewey*, Palmer, J. A. (Ed) London: Routledge.
- Dwyer, J. (2003) *The Business Communication Handbook*, 6th edition, Sydney; Prentice Hall.
- Dwyer, P., Smith, G., Tyler, D. and Wyn, J. (2003) Life-Patterns, Career Outcomes and Adult Choices: The Life-Patterns Study, Research Report 23, *Youth Research News*, Vol.13, No.2, September.
- education, history of. (2006) In *Encyclopædia Britannica*. [On-line] Available at:
<http://www.britannica.com/eb/article-47675> Accessed 1 October 2006.

- Ellis, C. and Bochner, A. P. (2000) "Autoethnography, personal narrative, reflexivity: Researcher as subject". 733-768. In Denzin, N.K. & Lincoln, Y.S. (Eds) (2000). *Handbook of qualitative research* (2nd Ed). Sage: London.
- Elton, L. (1988) Student motivation and achievement, *Studies in Higher Education*, 13(2), 215–221.
- Elton, L. (2003) Creativity and innovation in academic practice, paper presented at the *Business Education Support Team Conference*, Brighton, April.
- Elton, L. (2004) "A Challenge to Established Assessment Practice", in *Higher Education Quarterly*, 0951–5224, Volume 58, No. 1, January, pp 43–62.
- Elton, L. (Ed.) (1996) *Criteria for teaching competence and teaching excellence in higher education* London, The Falmer Press.
- Elton, L. and Laurillard, D.M. (1979) *Trends in research in student learning*, *Studies in Higher Education*, 4, 87-102.
- Encyclopædia Britannica. Retrieved March 10, 2005, from Encyclopædia Britannica Premium Service. <<http://www.britannica.com/eb/article?tocId=9032020>>
- Entwistle, N. (1981) *Styles of Learning and Teaching*. Wiley, Chichester.
- Entwistle, N. (1988) Motivational factors in students' approaches to learning. In R. R. Schmeck (Ed) *Learning Strategies and Learning Styles*. New York: Plenum.
- Entwistle, N. (1997) Introduction: Phenomenography in higher education. *Higher Education Research & Development*, 16 (2), 127-134.
- Entwistle, N. and Entwistle, A. (1997) Revision and the experience of understanding, In: F. Marton, D. Hounsell and N. Entwistle (Eds) *The Experience of Learning*, Edinburgh, Scottish University Press.
- Entwistle, N. and Ramsden, P. (1983) *Understanding Student Learning*, London, Croom Helm.
- Entwistle, N. and Tait, H. (1990) Approaches to learning, evaluations of teaching, and preferences for contrasting academic environments, *Higher Education*, 19, 169–194.
- Eraut, M. (1993) The characterisation and development of professional expertise in school management and in teaching, *Educational Management and Administration*, 21(4), 223–232.
- Evans, N. (2001) From once upon a time to happily ever after. In D. Boud and N. Solomon (Eds) *Work-based Learning: A New Higher Education*. SRHE and Open University Press, 61–73.
- Fairclough N. (2000) Discourse, social theory and social research: the discourse of welfare reform. *Journal of Sociolinguistics* 4, pp. 163-195
- Fisher, A. T., Alder, J. G. and Avasalu, M. (1998) Lecturing performance appraisal criteria: staff and students differences, *Australian Journal of Educational and Child Psychology*, 42(2), 153–168.
- Fisher, W. (2001) An investigation into the concept of a 'good' teacher – based on the views of students and teachers at a University Business School. Paper presented at the *British Accounting Association Special Interest Group Conference*, Pontypridd, Glamorgan, July.

- Fitzgerald, L. F., Weitzman, L. M., Gold, Y. and Ormerod, M. (1988) Academic harassment: Sex and denial in scholarly garb. *Psychology Women Quarterly* 12:329-340.
- Foucault, M. (1973) *The Birth of the Clinic. An Archaeology of Medical Perception*, London: Routledge.
- Fraser, K. (1996) *Student centred teaching: The development and use of conceptual frameworks*. HERDSA Green Guide Number 18. Sydney: HERDSA.
- Frazer, S. and Deane, E. (2002) Getting bench scientists to the workbench, *UniServe Science Scholarly Inquiry Symposium Proceedings 2002 Conference*, pp.38-43.
- Frohmann, Bernd (1992) "The Power of Images: A Discourse Analysis of the Cognitive Viewpoint." *Journal of Documentation* 48.4: 365-386.
- Fuchs, L. S. and Fuchs, D. (2004) Curriculum-Based Measurement: Describing Competence, Enhancing Outcomes, Evaluating Treatment Effects, and Identifying Treatment Nonresponders. *Journal of Cognitive Education and Psychology*, 4, 1, 112-130. [On-line] Available at: www.iacep.coged.org Accessed 12 March 2005.
- Furedi, F. (2004) *Where Have all the Intellectuals Gone: Confronting 21st Century Philistinism*. UK. Continuum International Publishing.
- Galbraith, J. K. (1986) *A view from the stands*. Boston: Houghton Mifflin.
- Gardner, H. (2006) *Multiple intelligences: New horizons*. New York: Basic Books.
- Gardner, H. W. (1987) *The Mind's New Scienc.*, New York: Basic Books.
- Gardner, H. W. (1993a) *Multiple Intelligences: The theory in practice*. New York: Basic Books.
- Gardner, H. W. (1993b) Education for understanding, *The American School Board Journal*, July: 20-4.
- Glaser, B. G. (1978) *Theoretical Sensitivity: Advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press..
- Glaser, B. G. (1992) *Basics of Grounded Theory Analysis*. Mill Valley, CA: Sociology Press.
- Gonczi, A. (1994) Competency Based Assessment in the Professions in Australia, *Assessment in Education*, Vol 1, No 1.
- Gonczi, A. (1997) Future directions for vocational education in Australian secondary schools, *Australian and New Zealand Journal of Vocational Education Research*. Vol 5, No 1, p77-109.
- Gonczi, A. (2000) Review of international trends and developments in competency based education and training. In: Argüelles, A. and Gonczi, A. (Eds) (2000) *Competency Based Education and Training: A world perspective*. Mexico: Noriega Editores.
- Goodman, P. S., Sproull, L. S. and Fenner, D. B. (1990) *Quality and organisations*. San Francisco, CA: Jossey-Bass Publications.
- Gott, S. (1995) Rediscovering learning: Acquiring expertise in real world problem solving tasks, *Australian and New Zealand Journal of Vocational Education Research*, Vol3, 1, p30-69.
- Grant, L., and Evans, A. (1994) *Principles of behavior analysis*. New York: HarperCollins.

- Gray, K. and Radloff, A. (2005) Quality Management of Academic Development – The Challenge of Engaging Stakeholders. In: *Engaging communities*. Proceedings of the Australian Universities Quality Forum, Sydney, 6th - 8th July 2005, pp62 -67.
- Gredler, M. E. (1997) *Learning and instruction: Theory into practice* (3rd ed). Upper Saddle River, NJ: Prentice-Hall.
- Grunnert, J. (1997) *The course syllabus: a learning-centered approach* Bolton, MA, Anker Publishing Co.
- Gubrium, J. and Holstein, J. (1997) *The New Language of Qualitative Method*. New York: Oxford University Press.
- Gurwitsch, A. (1964) *The Field of Consciousness*. Pittsburgh: Duquense University Press.
- Hager, P. (1993) *Conceptions of Competence*. Philosophy of Education Society 49th Annual Meeting, New Orleans, USA. March.
- Harris, D. and Bell, C. (1990) *Evaluating and assessing for learning*. London: Kogan Page.
- Harvard College Curricula Review (2004) *A Report on the Harvard College Curricular Review. Summary of Principle Recommendations*, [On-line] Available at: http://www.fas.harvard.edu/curriculum-review/Summary_of_Recs.pdf, Accessed 30 September 2006.
- Hays Personnel (2000) Salary Survey 1999, *National Accountant*, August 2000, pages 13-15.
- Hazel, E., Prosser, M. and Trigwell, K. (1996) Student learning of biology concepts in different university contexts, *Research and Development in Higher Education*, 19, 323-326.
- Heath, A. W. (1997) The proposal in qualitative research [41 paragraphs]. *The Qualitative Report* [On-line serial], 3(1): Available at: <http://www.nova.edu/ssss/QR/QR3-1/heath.html> Accessed: 2 April 2005.
- Herrnstein, R. and Murray, C. (1994) *The Bell Curve: Intelligence and Class Structure in American Life*. New York: The Free Press.
- Hicks, D. (2004) The Global Dimension on the Curriculum, In: Stephen Ward (Ed) (2004) *Education Studies: a student's guide*. New York, USA: RoutledgeFalmer.
- Hill, Peter (2003) Pedagogy for deep learning, *Curriculum Corporation 10th National Conference*, Perth, June.
- Hofstede, G. (1984) *Culture's Consequences: International Differences in Work-Related Values*. London UK: Sage Publications.
- Hopkins, D. (2003) Good pedagogy is good learning. *Curriculum Corporation 10th National Conference*, Perth, June.
- Hopwood, A., Page, M. and Turley, S. (1990) In Hopwood et al. (Ed) *Understanding Accounting in a Changing Environment, Research Studies in Accounting*, England: Prentice Hall.
- Huitt, W. (2006) The cognitive system. *Educational Psychology Interactive*. [On-line] Available at: Valdosta, GA: Valdosta State University. Retrieved from <http://chiron.valdosta.edu/whuitt/col/cogsys/cogsys.html>. Accessed 8 October 2006.
- Jacobsen, K. (2001) "Unreal Man", *The Guardian*, 3 April 2001.

- Jaivin, L. (2002) "The Getting of Wisdom", *The Sydney Morning Herald*, 19 October 2002.
- James, R., McInnis, C. and Devlin, M. (2002) *Assessing Learning in Australian Universities*, Centre for Study of Higher Education, University of Melbourne.
- James, T. and Woodsmall, W. (1988) *Time line therapy and the basis of personality*, Capitola, CA: Meta Publications.
- Jenkins, A. (2000) "The Relationship between Teaching and Research". *Journal of Geography in Higher Education*. Vol. 24, No. 3, 2000, pp. 325–351.
- Johnson, B. and Christensen, L. (2004) *Educational Research*, 2nd edition, Boston; USA, Pearson Education.
- Johnson, G. R. (1995) *First steps to excellence in college teaching*. Madison, WI: Magna Publications.
- Kalmbach, J. R. and Gorman, M.E. (1986) Surveying classroom practices. In A. Young and T. Fulwiler (Eds). *Writing Across the Disciplines* (pp. 66-85). Upper Montclair, NJ: Boynton/Cook.
- Kember, D. (1997) A reconceptualisation of the research into university academic conceptions of teaching. *Learning and Instruction*, 7, 255–275.
- Kember, D. (2001) Beliefs about knowledge and the process of teaching and learning as a factor in adjusting to study in higher education. *Studies in Higher Education*, 26(2), 205–221.
- Kember, D. and Wong, A. (2000) Implications for evaluation from a study of students' perceptions of good and poor teaching, *Higher Education*, 40, 69–97.
- Kirsner, K. (2002) 'Implicit Knowledge', In: *Knowledge Building: fresh thinking about learners and their teachers*, ANTA: Brisbane.
- Knowles, M. S. (1990) *The Adult Learner: a neglected species* Houston: Gulf Publishing.
- Kohn, A. (2004) *What Does It Mean to Be Well Educated? And More Essays on Standards, Grading and Other Follies*. Boston: Beacon Press.
- Kolb, D. A. (1984) *Experiential Learning: experience as the source of learning and development* New Jersey: Prentice Hall.
- Kornhaber, M. L. (2001) Howard Gardner, in J. A. Palmer (ed.) *Fifty Modern Thinkers on Education. From Piaget to the present*, London: Routledge.
- Kramer, L. (2003) Competency Code a Tough One to Crack, In: *The Sydney Morning Herald*, 12 August.
- Kreber, C. (2003) Do professors self-regulate their learning about teaching? *The 11th Improving Student Learning Symposium*, Hanover International Hotel, Hinckley, Leicestershire, September. [On-line] Available at <http://www.brookes.ac.uk/services/>. Accessed: 18 March 2005.
- Laurillard, D. (1979) The processes of student learning, *Higher Education*, 8, 395–410.
- Laurillard, D. (1984) Interactive video and the control of learning. *Educational Technology*, 24(6), 7-144.
- Laurillard, D. (1993) *Rethinking university education: A framework for the effective use of educational technology*. London: Routledge.

- Leinhardt, G., McCarthy Young, K. and Merriman, J. (1995) Integrating professional knowledge: the theory of practice and the practice of theory. *Learning and Instruction*, 5: 401-408.
- Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic Enquiry*. Newbury Park, CA: Sage.
- Lo, M. L., Marton, F., Pang, M. F. and Pong, W. Y. (2004) Toward a pedagogy of learning. In: F Marton and ABM Tsui (Eds), *Classroom Discourse and the Space of Learning* (pp 189-225). Mahwah, NJ: Erlbaum.
- Lovat, T. and Smith, D. (1995) *Curriculum: action on reflection revisited*, 3rd edition. Wentworth Falls: Social Science Press.
- Lowther, M. A., Stark, J. S. and Martens, G. G. (1989) *Preparing course syllabi for improved communication* (Ann Arbor, MI, National Center for Research to Improve Post Secondary Teaching and Learning) Eric Document Reproduction Service No. 314 997.
- Lucas, U. and Meyer, J.H.F. (2005) Towards a mapping of the student world: the identification of variation in students' conceptions of, and motivations to learn, introductory accounting. *The British Accounting Review*, 37, 177-204.
- Lugg, M. and Saltmarsh, D. (2003) Merging paradigms: teaching and learning in school-based vocational courses, *The sixth Australian VET Research Association Conference "The Changing Face of VET"* 9-11 April 2003.
- Macintyre, S. (2004) Universities and the Idea of Quality. In: Rob Carmichael (Ed) *Quality in a time of change*. Proceedings of the Australian Universities Quality Forum, Adelaide, 7th -9th July 2004, pp 19-25.
- Madson, M. B., Melchert, T. P. and Whipp, J. L. (2004) Assessing student exposure to and use of computer technologies through an examination of course syllabi. *Assessment and Evaluation in Higher Education*. Vol. 29, No. 5, October.
- Malpas, J. E. (1992) *Donald Davidson and the mirror of meaning: Holism, truth, and interpretation*. Cambridge: Cambridge University Press.
- Mangan, J. (1998) 'A Vision for the Department of Economics at the University of Newcastle', *Speaking Notes for a Seminar presented to the Faculty of Economics and Commerce*, Newcastle: University of Newcastle, 3 November.
- Manke, M. P. (1997) *Classroom power relations: understanding student-teacher interaction*. New Jersey: Lawrence Erlbaum Associates.
- Marginson, S. (1997) *Educating Australia: Government, economy and citizen since 1960*. Sydney: Cambridge University Press.
- Martin, E. (1994) *Variations in awareness*. EQARD Occasional paper 94.1, RMIT, Melbourne, Victoria.
- Marton, F. (1981) Phenomenography – describing conceptions of the world around us. *Instructional Science*, 10, 177–200.
- Marton, F. (1988) Phenomenography: Exploring Different Conceptions of Reality, In: P. Fetterman (Ed), *Qualitative Approaches to Evaluating Education: A Silent Revolution*, New York: Praeger..
- Marton, F. (1992) Phenomenography and 'the art of teaching all things to all men', *Qualitative Studies in Education*, 5, 253-267.

- Marton, F. (1993) Phenomenography. In: T. Husén and T. N. Postelthwaite (Eds), *The International Encyclopaedia of Education* (pp. 4424–29) (2nd Ed.). Oxford: Pergamon.
- Marton, F. (1996) Phenomenography – approach or method? *Phenomenography Interest Group (PIG)*, [On-line] Available at: <http://www.ped.gu.se/biom/phgraph/civil/conv/approach.html> Accessed: 13 June 2005.
- Marton, F. and Booth, S. (1997) *Learning and awareness*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Marton, F. and Pong, Wing Yan (2005) On the unit of description in phenomenography, *Higher Education Research & Development*, 24(4), 335-348.
- Marton, F. and Trigwell, K. (2000) Variatio est mater studiorum. *Higher Education Research and Development*, 19(3), 381–395.
- Marton, F., Dall’Alba, G. and Beaty, E. (1993) Conceptions of learning, *International Journal of Educational Research*, 19, 277–300.
- Marton, F., Hounsell, D. and Entwistle, N.J. (Eds) (1997) *The Experience of Learning: Implications for Teaching and Studying in Higher Education*. 2nd edition, Edinburgh: Scottish Academic Press.
- McAllister, M. (1999) The competing interests of assessment: an Australian overview. *Curriculum and Teaching*, Vol. 14, No. 1, pp. 45-62.
- McMahon, M. (1997) *Social Constructivism and the World Wide Web - A Paradigm for Learning*. Paper presented at the ASCILITE conference. Perth, Australia, December 1997.
- Merriam, S. B. (1998) *Qualitative research and Case Study Applications in Education*, San Francisco: Jossey-Bass.
- Meyer, J. H. F. and Land, R. (2005) Threshold concepts and troublesome knowledge (2): epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*. 49(3). 373-388.
- Michael, E. (1996) The Value of University Output - The La Trobe Example, *Journal of Economic Papers*, Economic Society of Australia, Volume 15, No.3, pages 88-96, September.
- Milan, J. and Munt, C.E. (1992) A modern, fully integrated quality management system. In: KC Lun, P Degoulet, TE Piemme and O Reinhoff. (Eds) *QualInfo '92 Proceedings of the Seventh World Congress on Quality*, Geneva. pp.236-240. Amsterdam: Elsevier Science Publishers.
- Millmow, A. (1997) “To Eke Out a Marginal Subsistence: Economics in Business Schools”, *Economic Papers*, 16(3), 88-96.
- Morse, J. (1991) On the evaluation of qualitative proposals. *Qualitative Health Research*, 1(2), 147-151.
- Morse, J. M. (1994) Designing funded qualitative research. In N. K. Denzin and Y. S. Lincoln (Eds), *Handbook of qualitative research* (p. 643). Thousand Oaks: Sage Publications.
- Muncey, T. (2005). Doing autoethnography. *International Journal of Qualitative Methods*, 4(3), Article 5. [On-line] Available at:

http://www.ualberta.ca/~iiqm/backissues/4_1/pdf/muncey.pdf, Accessed: 5 October 2005.

- Munro, John (2003) How people learn. What teachers need to know to be effective. *Curriculum Corporation 10th National Conference*, Perth, June.
- Neill, Norm (1991) *Technically & Further, Sydney Technical College 1891 - 1991*. Sydney: Hale & Ironmonger.,
- New South Wales Department of Education and Training (2003) *Case Studies of Innovative and Excellent Practices and Ideas: In Vocational Education and Training*, Teaching and Learning, TAFE Hunter Institute, Newcastle Campus.
- NSW Board of Education and Training (BVET) *The Changing Nature of Work – Vocational education and training to enable individuals and communities to meet the challenges of the changing nature of work*. Sydney: Department of Education and Training, October, 2000.
- Nulty, D., Vegh, V. and Young, J. (2002) Curriculum design innovation in flexible science teaching, In: *Proceedings of the Scholarly Inquiry in Flexible Science Teaching and Learning Symposium* pp30-51. [On-line] Available at: <http://science.uniserve.edu.au/pubs/procs/wshop9/> Accessed 18 March 2005.
- Orrell, J. (2004) Work-integrated Learning Programmes: Management and Educational Quality. In: Rob Carmichael (Ed) *Quality in a time of change*. Proceedings of the Australian Universities Quality Forum, Adelaide, 7th - 9th July 2004, pp76-80.
- Palmer, J. A. (2004) (Ed) *Fifty Major thinkers on Education: From Confucius to Dewey*, London UK: Routledge.
- Pang, M.F. and Marton, F. (2005) Learning theory as teaching resource: Another example of radical enhancement of students' understanding of economic aspects of the world around them. *Instructional Science*, Vol. 33, No.2, pp 159-191.
- Parliamentary Library, Bills Digest, 23 May 2005, no. 161, 2004–05, ISSN 1328-8091 Department of Parliamentary Services: Australian Government.
- Patrick, K. (1998). *Teaching and learning: The construction of an object of study*. Unpublished doctoral thesis, University of Melbourne.
- Petocz, P. and Reid, A. (2001) Students' experience of learning in statistics. *Quaestiones Mathematicae, Supplement 1*, 37–45.
- Petocz, P. and Reid, A. (2002a) Creativity and conceptions of learning. In Wang C., Monahan K. and Pan D. (Eds) *Proceedings of the Second Symposium on Teaching and Learning in Higher Education*, National University of Singapore, 218–223.
- Petocz, P. and Reid, A. (2002b) Enhancing learning using generic and specific aspects of knowledge formation. In A. Goody and D. Ingram (Eds), *Spheres of Influence: Ventures and Visions in Educational Development*. Crawley. WA: Organisational and Staff Development Services, The University of Western Australia. [On-line] Available at www.csd.uwa.edu.au/ICED2002/publication/. Accessed: 18 March 2005.
- Petocz, P. and Reid, A. (2003) Relationships between students' experience of learning statistics and teaching statistics. *Statistics Education Research Journal*, 2(1), 39-53.
- Petocz, P. and Reid, A. (2004) Statistics – worse than a poke in the eye? In *Proceedings of the Scholarly Inquiry in Flexible Science Teaching and Learning Symposium* pp 30-41. [On-line] Available at: <http://science.uniserve.edu.au/pubs/procs/wshop9/> Accessed: 18 March 2005.

- Phillips, L. and Jorgensen, M. (2002) *Discourse Analysis as Theory and Method*. London: Sage Publications.
- Plaut, S. M. (1993) Boundary Issues in Teacher-Student Relationships. *The Journal of Sex and Marital Therapy*, 19, pp. 210-219.
- Porter, A. C. (2005) Curriculum Assessment. In: J. Green, G. Camilli, and P. Elmore (eds), *Complementary Methods for Research in Education*. 3rd edition. Washington, DC: American Educational Research Association.
- Posner, G. J., Strike, K. A., Hewson, P. W. and Gertzog, W. A. (1982) 'Accommodation of a scientific conception: Toward a theory of conceptual change'. *Science Education* 66(2): 211-227.
- Prawat, R. S. and Floden, R. E. (1994) Philosophical Perspectives on Constructivist Views of Learning. *Educational Psychologist*, 29(1), 37-48.
- Prensky, M. (2002) The motivation of gameplay: The real twenty-first century learning revolution. *On the Horizon*, 10(1).
- Prosser, M. (1993) Phenomenography and the Principles and Practices of Learning. In Hore, T (Ed) Special issue on Learning: Theory in Practice (special issue). *Higher Education Research and Development*, 12, 21-32.
- Prosser, M. and Trigwell, K. (1997) Perceptions of the teaching environment and its relationship to approaches to teaching, *British Journal of Educational Psychology*, 67, 25-35.
- Prosser, M. and Trigwell, K. (1999) *Understanding learning and teaching, the experience in higher education* London, SRHE/Open University Press.
- Prosser, M., Trigwell, K. and Taylor, P. (1994) A phenomenographic study of academics' conceptions of science learning and teaching. *Learning and Instruction*, 4, 217-231.
- Prosser, M., Trigwell, K., Hazel, E. and Gallagher, P. (1994) Students' experiences of teaching and learning at the topic level, *Research and Development in Higher Education*, 16, 305-310.
- Ramsden, P. (1992) *Learning to Teach in Higher Education*. London: Routledge.
- Ramsden, P. (2003) *Learning to teach in higher education* 2nd edition. London: Routledge Falmer.
- Read, J., George, A., Masters, A. and King, M. (2004) Students' perceptions of their understanding in *Chemistry I* for Veterinary Science, In: *Proceedings of the Scholarly Inquiry in Flexible Science Teaching and Learning Symposium* pp 45-51. [On-line] Available at: <http://science.uniserve.edu.au/pubs/procs/wshop9/> Accessed: 18 March 2005.
- Reid, A. (1995) The influence of teaching on learning in music: a case study. In: Zelmer, L. (Ed) *Higher Education: Blending tradition and technology*. Research and Development in Higher Education, vol 18, 622-627, HERDSA.
- Reid, A. (1997) The meaning of music and the understanding of teaching and learning in the instrumental lesson, In Gabrielsson, A. (Ed) *Third Triennial ESCOM Conference Proceedings*, Uppsala, Sweden: Uppsala University, Uppsala, Sweden, pp 200-205
- Reid, A. (1999) *Conceptions of Teaching and Learning Instrumental and Vocal Music*, PhD Thesis, University of Technology, Sydney.
- Reid, A. (2000) Self and peer assessment in a course on instrumental pedagogy. In Hunter, D. and Russ, M., *Peer Learning in Music*, 56-62. Belfast: University of Ulster.

- Reid, A. (2001) Variation in the ways that instrumental and vocal students experience learning in music. *Music Education Research*, 3(1), 25–40.
- Reid, A. and Loxton, J. (2004) Internationalisation as a Way of Thinking about Curriculum Development and Quality. In: Rob Carmichael (Ed) *Quality in a time of change*. Proceedings of the Australian Universities Quality Forum, Adelaide, 7th -9th July 2004, pp99 - 103.
- Reid, A. and Petocz, P. (2003) *The Professional Entity: researching the relationship between students' conceptions of learning and their future profession*. Paper presented at the 11th Improving Student Learning Symposium, Hanover International Hotel, Hinckley, Leicestershire, 1st – 3rd September 2003.
- Robbins, P. S. (2001) *Organisational Behaviour*. 9th edition. USA, Prentice Hall.
- Rogoff, B. (1990) *Apprenticeship in thinking: cognitive development in social context*. New York, NY: Oxford University Press.
- Runesson, U. (1999a) *Teaching as Constituting a Space of Variation*, Paper presented at the 8th EARLI-conference, Göteborg, Sweden, August 24-28.
- Runesson, U. (1999b) Variationens pedagogik. Skilda sätt att behandla ett matematiskt innehåll [The pedagogy of variation. Different ways of handling a mathematical topic]. (Göteborg Educational Studies, nr 129). Göteborg: Acta Universitatis Gothoburgensis.
- Runesson, U. (2006) What is it Possible to Learn? On Variation as a Necessary Condition for Learning. *Scandinavian Journal of Educational Research*. Vol. 50. No.4 pp 397-410, September.
- Runesson, U. and Marton, F. (2002) The object of learning and the space variation. In F. Marton and P. Morris (Eds.). *What matters? Discovering critical conditions of classroom learning*. Göteborg Studies in Educational Sciences, nr 181 Göteborg: Acta Universitatis Gothoburgensis.
- Rutter, P. (1989) *Sex in the forbidden zone*. New York: Fawcett Crest.
- Ryan, R. and Deci, E. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well being. *American Psychologist*, 55, 68-78.
- Salemi, M. K. and Siegfried, J. J. (1999) "The State of Economic Education", *American Economic Association Papers and Proceedings*, 89(2), 355-361.
- Säljö, R. (1979) Learning about learning. *Higher Education*, 8: 443-451.
- Säljö, R. (1997) Reading and everyday conceptions of knowledge. In F. Marton, D. Hounsell and N.J. Entwistle (Eds) *The Experience of learning: Implications for Teaching and Studying in Higher Education*, 2nd edition, Edinburgh: Scottish Academic Press.
- Schon, D. (1983) *The Reflective Practitioner. How professionals think in action*, London: Temple Smith.
- Schon, D. A. (1987) Presentation "Educating the Reflective Practitioner" to the 1987 meeting of the American Educational Research Association, Washington, DC. [On-line] Available at: <http://educ.queensu.ca/~ar/schon87.htm> Accessed 25 March 2005.
- Schramm, W. (Ed.) (1971) *The Nature of communication between humans*. London: University of Illinois Press.
- Seltzer, T. and Bentley, K. (1999) *The Creative Age: knowledge and skills for the new economy*, London: Demos.

- Shreeve, A., Baldwin, J. and Farraday, G. (2003) *Variation in Students Conceptions of Assessment Using Learning Outcomes*. Paper presented at the 11th Improving Student Learning Symposium, Hanover International Hotel, Hinckley, Leicestershire, 1st – 3rd September 2003.
- Shulman, L. S. (1987) Knowledge and Teaching: Foundations of the New Reform. *Harvard Educational Review*, 57(1), 1-22.
- Siegfried, J. J. and Round, D. K. (1994) The Australian Undergraduates Economic Degree: Results from a Survey of Students. *The Economic Record*, Volume 70, No. 209, pp 192-203, June.
- Smith, D. (2002) "It all adds up to life as we know it", *The Sydney Morning Herald*, 26 October 2002.
- Society of Teachers of Family Medicine (2006) *Curriculum Resources Project. Introduction and Background*. [On-line] Available at: <http://www.stfm.org/curricular/index.htm> Accessed 2nd October 2006.
- Spiegelberg, H. A. (1965) *The Phenomenological Movement*, Vol. 2. The Hague, Netherlands: Marinus Nijhoff.
- Stanford University (2006) *Course management System*, [On-line] available at: <http://getcoursework.stanford.edu/> Accessed 1st October 2006.
- Stanley, L. (1993) On auto/biography in sociology. *Sociology*, 27, 41-52.
- Steffe, L. P. and Gale, J. (Eds) (1995) *Constructivism in education*. Hillsdale, NJ: Erlbaum.
- Sternberg, R. J. (1998) Abilities are forms of developing expertise. *Educational Researcher*, 27(3), 11-20.
- Stigler, J. W. and Herbert, J. (1999) *The teaching gap*, New York: Free Press, Simon and Schuster.
- Strauss, A. and Corbin, J. (1990) Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park: Sage.
- Strauss, A. L. (1987) *Qualitative analysis for social scientists*. New York: Cambridge University Press.
- Strike, K. A. and Posner, G. J. (1992) A revisionist theory of conceptual change. In Duschl, R.A. and Hamilton, R.J. (Eds), *Philosophy of science, cognitive psychology, and educational theory and practice* (pp.147-176). New York: State University of New York Press.
- Stubbs, M. (1983) *Discourse analysis: The sociolinguistic analysis of natural language*, Oxford: Basil Blackwell.
- Sudmant, W. (1994) *The Economic Impact of the University of British Columbia*, Office of Budget and Planning, University of British Columbia.
- Surma, A. (2005) *Public and Professional Writing: Ethics, Imagination and Rhetoric*, NY: Palgrave Macmillan.
- TAFE, (2005) About TAFE New South Wales, *New South Wales Department of Education and Training*, [On-line], Available at: <http://www.tafensw.edu.au/about/welcome.htm>, Accessed: 24 March 2005.
- Tang, C. (1996) "Collaborative learning: the latent dimension in Chinese students' learning". In D. Watkins and J Briggs (Eds) *The Chinese Learner: Research and Practice*. Camberwell, Victoria: Australian Council for Educational Research.

- Tatro, C. N. (1995) Gender effects on students' evaluations of faculty, *Journal of Research and Development in Education*, 28(3), 169–173.
- Taylor, C. (1994) Assessment for measurement or standards: the peril and promise of large scale assessment reform, *American Educational Research Journal*, Vol.31, 2, p231-262.
- Taylor, S. J., and Bogdan, R. (1984) *Introduction to qualitative research methods: The search for meanings*. New York: John Wiley.
- Taylor, S. J., and Bogdan, R. (1989) On accepting relationships between people with mental retardation and nondisabled people: Towards an understanding of acceptance. *Disability, Handicap & Society*, 4(1), 21-36.
- The Institute for Research into International Competitiveness (IRIC 2000) *The Economic Impact of Edith Cowan University on the Western Australian Economy*, Perth.
- The Institute for Research into International Competitiveness (IRIC 1999) *Contributing to the Community Through Education and Research: Quantifying the Economic Impact of Curtin University of Technology on the WA Economy*, Perth.
- Thornthwaite, L. (2002) *Work-family balance: international research on employee preferences*, Working Paper 79, ACIRRT, University of Sydney.
- Toohy, S. (1999) *Designing Courses for Universities*, Buckingham: Open University Press.
- Toulmin, S. (1972) *Human Understanding: Volume 1: The Collective Use and Evolution of Concepts*, Princeton: Princeton University Press.
- Toulmin, S. E. (1958) *The Uses of Argument*. Cambridge, UK: University Press.
- Trigwell, K. (1997) Phenomenography: an approach to research. In J. Higgs (Ed) *Qualitative Research: Discourse on Methodologies*. Sydney: Hampton Press.
- Trigwell, K. (2000) Phenomenography: Variation and Discernment. In: C. Rust (Ed) *Improving Student Learning, Proceedings of the 1999 7th International Symposium*, Oxford Centre for Staff and Learning Development: Oxford pp 75-85.
- Trigwell, K. and Ashwin, P. (2003) *Understanding the Oxford Learning Environment*, Paper presented at the 11th Improving Student Learning Symposium, Hanover International Hotel, Hinckley, Leicestershire, 1st – 3rd September 2003.
- Trigwell, K. and Prosser, M. (1996) Towards an understanding of individual acts of teaching. *Different Approaches: Theory and Practice in Higher Education*. Proceedings HERDSA Conference 1996. Perth, Western Australia, 8-12 July. [On-line] Available at: <http://www.herdsa.org.au/confs/1996/trigwell1.html> Accessed: 23 July 2005.
- Trigwell, K., Hazel, E. and Prosser, M. (1996) Perceptions of the learning environment and approaches to learning university science at the topic level. *Different Approaches: Theory and Practice in Higher Education*. Proceedings HERDSA Conference 1996. Perth, Western Australia, 8-12 July. [On-line] Available at: <http://www.herdsa.org.au/confs/1996/trigwell2.html>, Accessed: 17 April 2005.
- Trigwell, K., Prosser, M. and Ginns, P. (2005) Phenomenographic pedagogy and a revised 'Approaches to teaching inventory', *Higher Education Research & Development*, 24(4), 349-360.
- Trigwell, K., Prosser, M. and Lyons, F. (1999) Relations between teachers' approaches to teaching and students' approaches to learning. *Higher Education*, 37, 57-70.

- Trofino, J. (1993) Implementing a quality management system: One university's experience. *Quality Management*, 24(7), 40-42.
- van Manen, M. (1990) *Researching lived experience: Human science for an action sensitive pedagogy*. Albany: State University of New York Press.
- van Manen, M. (2003) A Question of Consciousness: How Experienced Should Phenomenological Experience Be? *The Fourth International Interdisciplinary Conference Advances in Qualitative Methods*, Banff, Canada, May.
- Vygotsky, L. S. (1978) *Mind in Society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wallace, W. A. (1984) *Handbook of Internal Accounting Controls*, 2nd edition, Englewood Cliffs, NJ: Prentice Hall.
- Wankat, P. C. (2002) *The effective, efficient professor: teaching, scholarship, and service* Boston, MA: Allyn & Bacon.
- Watkins, D. (1983) Depth of processing and the quality of learning outcomes, *Instructional Science*, 12, 49-58.
- Webb, G. (1997) Deconstructing deep and surface: Towards a critique of Phenomenography. *Higher Education*, 33, 195-212.
- Wenger, E. (1998) *Communities of Practice: Learning, Meaning and Identity*. (Reprinted 2003) UK: Cambridge University Press.
- Williamson, J. and Marsh, A. (1999) Educational Pathways: Or tracks that lead nowhere? Discussion Paper D2/1999, *Centre for Research and Learning in Regional Australia*, CRLRA Discussion Paper.
- Williamson, V. and White, S. (1996) *Competency standards in the Library workplace*. Adelaide, Auslib Press.
- Wolcott, H. F. (1994) *Transforming qualitative data*. Thousand Oaks, CA: Sage.
- Wolf, A. (1995) *Competency Based Assessment*. Buckingham, UK: Open University Press.
- Worthington, A. C. (2002) The impact of student perceptions and characteristics on teaching evaluations: a case study in finance education, *Assessment & Evaluation in Higher Education*, 27(1), 49-64.
- Zhongqi, J. (2000) The learning experience of students in Middlesex University Business School (MUBS): why do they enjoy some modules/lectures and dislike others? *The International Journal of Management Education*, 1(1), 22-36.
- Zhou Y., Smith, B.W. and Spinelli, J.G. (1999) Impacts of increased student career orientation on American college geography programmes, *Journal of Geography in Higher Education*, 23(2), pp. 157-165.
- Zubrick, A., Reid, I. and Rossiter, P. (2001) *Strengthening the Nexus between Teaching and Research*. Canberra: Australian Government Publishing Service.

This page has been left blank intentionally.

Appendices

Appendix 1 – Teacher and student questions for the pilot survey

Questions for teacher interview - Pilot

Can you tell me what it is you like best about teaching this unit?

What are some of your past experiences in teaching, either this subject or another?

How helpful do you find the curriculum?

What resources do you give your students at the start of the semester when they first attend class? Perhaps you could identify any that are mandatory to hand out.

What type of assessments do you give the students?

Do you feel you have freedom and control over what you teach?

What are your perceptions about a good teacher?

Does the size of your class make any difference to the way you teach?

Do you feel that your teaching in this unit is valued by ICMS?

Are there any other issues you feel you would like to comment upon?

Questions for student interviews - Pilot

You are now in your second year of your course at ICMS. Tell me about some of your past experiences of learning in this program.

What sort of things do you do outside the classroom to help your learning?

In the past, if you did not understand something, what did you do?

What do you do to prepare for examinations?

What do you like best – exams or home assignments?

Can you tell me how you go about learning a new unit? What things do you do in lectures to help your learning?

What do you expect this unit in your course to be all about?

Have you been given the learning outcomes for Managerial Accounting?

What are the things you focus on when first taking a new unit?

Will you use the text book?

Appendix 2 – Teacher and student questions – main study

Teacher questions - main study

Question 1

Can you tell me what you understand 'curriculum' to be about?

Question 2

Now what about Internal Control Principles curriculum?

Question 3

What resources do you have for teaching Internal Control Principles?

Question 4

How do you think the students understand 'curriculum'?

Question 5

How helpful do you find the 'curriculum'?

Question 6

What resources do you give your students at the start of the semester when they first attend class?

Question 7

Can you identify any resources that are mandatory to hand out to students?

Question 8

What do you understand teaching is all about?

Question 9

What are your perceptions of a good teacher?

Question 10

What role does teaching play in the curriculum?

Question 11

What is the role of assessment in your curriculum?

Question 12

Do you feel that your teaching is valued by TAFE?

Question 13

Do you feel that you have freedom and control over what you teach?

Question 14

Could you summarise for me what you understand curriculum is?

Question 15

How do you think students learn best?

Question 16

What text book do you use?

Student questions - main study

Question 1

What do you expect to learn from this unit?

Question 2

What sort of learning materials have you been given?

Question 3

How have the materials you have been given helped you form your views on this unit?

Question 4

If you do not understand something in class what do you do?

Question 5

How will you know when you have learnt something?

Question 6

What things do you do to prepare for exams?

Question 7

What things do you do in lectures to help your learning?

Question 8

What value do you find in assignment tasks?

Question 9

What things do you do outside the class to help your learning?

Question 10

How will the textbook help your learning?

Question 11

How does the teacher help your learning?

Question 12

Can you summarise how you understand what curriculum is?

Question 13

So what are the most important points for your learning?

Question 14

What are the things that you bring from your past learning to help with the present?

Appendix 3 Classroom ATI scores

ATI analysis	Mean response	FT	JT	IT	KT	DT	BT
Statement							
Approach intended to change students' conceptions through student focus	12.50	10	14	10	16	16	9
I feel that the assessment in this subject should be an opportunity for students to reveal their changed conceptual understanding of the subject.	3.33	3	4	3	4	4	2
I encourage students to restructure their existing knowledge in terms of the new way of thinking about the subject that they will develop.	3.17	2	3	3	4	4	3
I feel that it is better for students in this subject to generate their own notes rather than always copy mine	2.83	2	3	2	4	4	2
I feel a lot of teaching time in this subject should be used to question students' ideas	3.17	3	4	2	4	4	2
Strategy used to change students' conceptions through student focus	10.17	5	12	9	14	13	8
In my class/tutorial for this subject I try to develop a conversation with students about the topics we are studying.	3.00	2	3	3	4	4	2
We take time out in classes so that the students can discuss, among themselves, the difficulties that they encounter studying this subject	2.67	1	4	2	4	2	3
In lectures for this subject, I use difficult or undefined examples to provoke debate.	1.83	1	2	2	2	3	1
Formal teaching time is made available in this subject for students to discuss their changing understanding of the subject.	2.67	1	3	2	4	4	2
Approach intended to transmit information through teacher focus	14.17	16	14	17	11	12	15
I feel it is important that this subject should be completely described in terms of specific objectives relating to what students have to know for formal assessment items	4.33	4	4	4	5	5	4
I feel it is important to present a lot of facts in classes so that students know what they have to learn for this subject.	3.50	4	3	5	2	3	4
I think an important reason for giving lectures in this subject is to give students a good set of notes	3.17	4	4	4	2	2	3
I feel that I should know the answers to any questions that students may put to me during this subject.	3.17	4	3	4	2	2	4

ATI analysis	Mean response	FT	JT	IT	KT	DT	BT
Strategy to transmit information through teacher focus	14.17	16	14	16	11	12	16
I design my teaching in this subject with the assumption that most of the students have very little useful knowledge of the topics to be covered.	4.00	4	4	4	5	3	4
In this subject I concentrate in covering the information that might be available from a good textbook	4.50	5	4	5	3	5	5
I structure this subject to help students to pass the formal assessment items	3.17	4	3	4	2	2	4
When I give this subject, I only provide the students with the information they will need to pass the formal assessments.	2.50	3	3	3	1	2	3

Appendix 4 - Internal Control Principles curriculum

Subject Content – Short Form Syllabus 9434P

<i>Week</i>	Topic to be Addressed (and relevant chapters of approved texts)
1	1. Introduction, definitions of the internal control structure (AUS 402[.10]) and the relationship between accounting, auditing and internal control. <i>AGL ch.1 GCL&C ch.1&2</i>
2	Outline management's responsibility as per AUS 202[.14], to ensure the financial statements are drawn up in accordance with accounting standards. The need for internal control. Cases of fraud. <i>AGL ch.1 and W ch.4</i>
3	The three elements of internal control; <i>control environment, management information system and the control procedures</i> . AUS 402[.15-24] <i>AGL ch.1</i>
4	The limitations of internal control AUS 402[.25] and understanding the internal control structure, AUS 402[.26]. Designing a protective mechanism. <i>W ch.5 AGL ch.1 T ch.1</i>
5	2. Identify the accounting transactions cycles and their objectives. Determine the nature of each cycle and the accounts affected by each transaction. <i>AGL ch.2 T chs.2-9</i>
6	The six techniques used to evaluate internal controls. Flow charting, checklists, walk-through. <i>W ch.6</i>
7	(Continued) The six techniques used to evaluate internal controls. Statistical sampling (AUS 514) and risk exposure worksheets. (AUS 402[.30-.38]) Computer auditing techniques, (AUS214.) <i>W ch.6</i>
8	3. The impact of a CIS on the internal control system. Comparison of manual systems and computerised systems. (AUS 214[.03]) <i>AGL ch.3 T ch.10</i>
9	Assessing the risks (AUS 214[.14]), the pervasive general controls and the specific application controls. The problems encountered with a CIS. <i>AGL ch.4 T ch.10</i>
10	Mid semester test
11	4. Internal Auditing – these auditors are employed by management to provide 'audit comfort'. The objectives of internal auditing, its nature and benefits. The Standards for Professional Practice of Internal Auditing. <i>GCL&C ch.19 AGL ch.6 T ch.13</i>
12	5. External Auditing – these auditors are independent contractors who report on management's stewardship. The differences between internal auditors and external auditors. The role of the Audit committee. Cases of negligence and third party liability. <i>AGL ch.7 GCL&C ch.4 T ch.11</i>
13	6. Not-for-profit (NFP) entities. Types of non-business entities, why they are audited and who can audit. Special considerations by the auditor before accepting the audit. Regulations affecting different NFP entities. <i>W ch.18 AGL ch.8 T ch.12</i>
14	Issues in performing an audit on a NFP entity. Reconciling fund accounting with the transaction cycle approach. The three unique control problems for NFP entities. Consideration of fraud issues and using consolidated financial

<i>Week</i>	Topic to be Addressed (and relevant chapters of approved texts)
	statements. <i>W ch.18 AGL ch.8</i>
15	Performing a NFP audit. Using a real life example. <i>ASCPA examples</i>
16	7. Performance audits. AUS 806. A comparison between financial audits and performance audits. The steps in planning a performance audit AUS 808. Special Purpose Reports on the Effectiveness of Control Procedures. AUS 810. <i>GCL&C ch.19 AGL ch.9 T ch. 13</i>
17	8. Ethics and their increasing importance in control procedures. Code of Professional Conduct. General review. <i>GCL&C ch.3 AGL ch.10 T ch.14</i>
18	Final Exam

NSW TAFE COMMISSION

**Business & Public Administration
Educational Services Division**

Accounting

Subject Number: 9434P

Subject Name: Internal Control Principles

COURSE OUTLINE

Advanced Diploma of Accounting

Issued
Semester 1
2000

NSW TAFE COMMISSION

Business & Public Administration
Educational Services Division

Accounting

Advanced Diploma of Accounting

Subject Number	9434P
Subject Name	Internal Control Principles
Presentation	3hr X 18 weeks or 3hr 20min X 16 weeks
Pre-requisite(s)	9434F Financial Accounting

LEARNING OUTCOMES:

On successful completion of this subject students should be able to:

- Define Internal Control, its principles and limitations.
- Identify the control principles as they relate to the transaction cycles.
- Explain the nature and the impact of the computer information system (CIS).
- Describe the role of the Internal Auditor.
- Explain why an External Audit is essential and what role the External Auditor plays.
- Explain the procedures involved in the external audit of a Not-for-profit entity and why internal controls are so important.
- Explain the purpose and practice of performance auditing.
- Explain the importance of ethics in all aspects of auditing and control.

Assessment Details

- Grade Code 72
- Category D assessment.
- Class mark only is required.
- Class mark locally set and locally marked.
- Results are reported as A, B, C, and FAIL.
- A \geq 83, B \geq 70, C \geq 50, all other cases FAIL.

The timing of assessment events is offered as advice only and may be varied as required to meet local circumstances.

CONTRIBUTION TO THE COURSE:

This subject provides students with the practical skills required to design, implement and evaluate internal controls in any entity.

STUDENT RESPONSIBILITIES

Students **MUST** attend tests and other assessment events on the dates specified. It is your responsibility to ensure that you are free to attend these tests and assessment events at the allocated times. If you are absent from a test or assessment event, satisfactory documentary evidence must be supplied when you next attend class i.e. a medical certificate or a letter from your employer, providing it is dated on or before the date of the test or assessment event. You must be ready to sit for an alternative test at any time thereafter.

Published TAFE policy in relation to missed assessment events will apply. In summary the policy states that:

“Where a student is or expects to be absent from an assessment event or is unable to submit an assessment event by the due date:

- *the student must notify the class teacher if possible before the due date or, **if this is not possible**, at the first attendance after the event or within 7 days (whichever is the sooner)*
- *the student should give a reason to the class teacher for not attending/ completing/ submitting the assessment event and provide supporting evidence where possible*
- *If a student is late handing in an assessment event, the following penalties may apply:*
 - ❖ **Penalty A** – *if the assessment event is up to 7 days late the total mark achieved by the student is reduced by 15%*
 - ❖ **Penalty B** – *if the assessment event is more than 7 days late the mark is reduced to zero*
 - ❖ *If a student does not attend a class on a negotiated date Penalty B may apply”*

PRESCRIBED TEXTS

Adams, Grose and Leeson. Internal Controls and Auditing, Prentice Hall, Sydney Australia. (Latest edition) - [AGL]

Arens, Best, Shailer and Loebbecke. Auditing in Australia - An Integrated Approach, Prentice Hall, Sydney Australia. (Latest edition) - [AGL]

Gill, Cosserat, Leung and Coram: Modern Auditing in Australia, John Wiley and Sons, Brisbane, Australia. (Latest edition) - [GCL&C]

Gull, Teoh and Andrew, Theory and Practice of Auditing, Nelson, Sydney Australia. (Latest edition) - [GTA]

Trenerry, Principles of Internal Control, University of New South Wales Press, Australia. (Latest edition) - [T]

References:

Wallace, Handbook of Internal Accounting Controls, Prentice Hall, New York, USA. (Latest edition) - [W]

ASCPA Members Handbook, Volume I – Accounting standards and Volume II – Auditing standards

Subject Content - Detailed Topic Guide

Week	Topic Matters to be Covered	GCLC 1	AGL 2	T 3
1	<p><u>Introduction to Internal Control.</u></p> <ul style="list-style-type: none"> • The nature purpose of internal controls. • Definitions of IC and auditing. • The Auditing and Accounting Standards • The relationship between accounting and auditing • The need for IC. • The objectives of IC • Fundamental principles of the profession. <p><u>Introduction to the basic elements of Internal Control</u></p> <ul style="list-style-type: none"> • The control environment • The management information system • The control procedures <p><u>The objectives of Accounting Internal Controls</u></p> <ul style="list-style-type: none"> • General objectives <ul style="list-style-type: none"> • Financial objectives • Non-financial objectives • Detailed objectives <ul style="list-style-type: none"> • Completeness • Validity • Accuracy 	<p>Ch.8 Q 8.9</p> <p>Ch.2 Q2.14</p>	<p>Ch.1 Q1-6</p> <p>Ch.1 Q1-11</p>	<p>Ch.1 Q1</p>
2	<p><u>Management's responsibility</u></p> <ul style="list-style-type: none"> • Maintaining accounting systems with strong IC • Cost – benefit analysis is necessary • The requirements of law and the reporting framework as per the Accounting Standards <p><u>Reasons for Internal Controls</u></p> <ul style="list-style-type: none"> • Accurate reliable accounting records • Safeguard the assets • Prevent, detect and correct irregularities and errors • Enhance the information flow between departments • Ensure the entity achieves its objectives <p><u>The need for Internal Controls – Risk of Fraud</u></p> <ul style="list-style-type: none"> • Administrative controls are pervasive • Accounting controls operate within this environment • Results of poor IC • Cases of fraud and the levels of risk 	<p>Ch.8 Q8.11</p>	<p>Ch.1 Q1-9</p> <p>Ch.1 Q1-8</p> <p>Ch.1 Q1-26</p>	<p>Ch.1 Q2</p> <p>Ch.15 Case Study 15.1</p>

Week	Topic Matters to be Covered	GCL&C 1	AGL 2	T 3
5	<u>Accounting transaction cycles and their objectives</u> <ul style="list-style-type: none"> Definition of an accounting system and its transaction cycles Identifying the control objectives for each cycle <ul style="list-style-type: none"> Revenue cycle – sales, cash receipts and sales adjustments Expenditure cycle - Purchases and cash disbursements Personnel cycle - Payroll Production cycle – Manufacturing Investing cycle – Temporary and long term investments Determining the nature of the transaction cycle with respect to its transactions, accounts affected and personnel involved Identifying the flow of information through the transaction cycle The relationship of the transaction cycles to the cash cycle. 	Ch.8 Q8.6	Ch.2 Q2.13 Ch.2 Q2-19	Ch.2 Q4 Ch.5 Q6 Ch.4 Q8
6	<u>Six techniques used to evaluate internal controls</u> <ul style="list-style-type: none"> The basic concepts underlying each technique and the situations in which each application can be particularly useful with respect to control related activities. Internal control checklists <ul style="list-style-type: none"> Provide a comprehensive review Documents findings Serves as a link between compliance tests and substantive tests Facilitates review of working papers The drawbacks with the 'Yes'/'No' approach Flow charting techniques <ul style="list-style-type: none"> Simple and descriptive of the process The key is communication Focus on cycles Prepare with the reader in mind The 'Walk through' <ul style="list-style-type: none"> Checks if transactions are processed as they should be Helps understand the structure of internal accounting controls Allows us to 'disprove' a checklist or flow chart Valuable in process reviews 	Ch.8 Q8.4	Ch.17 Q17.2.a Ch.17 Q17-14 Ch.17 Q17.2.a	Ch.2 Q6 Ch.3 Q6

Week	Topic Matters to be Covered	GCLC 1	AGL 2	T 3
7	<u>Six techniques used to evaluate internal controls</u> (Continued) <ul style="list-style-type: none"> • Sampling techniques <ul style="list-style-type: none"> • The sampling process • Planning the sample • Determining what affects attribute sample sizes and how much! • Subjective or statistical • Sample selection for compliance testing • Estimating the tolerable error and risk of assessing the control risk too low or too high • Evaluating the sample results • Computer auditing techniques <ul style="list-style-type: none"> • Tests of controls with computer assisted audit techniques and micro-computer based audit software • Parallel simulation • Test data • Integrated test facility 	Ch.10 Q10.1 Q10.4	Ch.16 Q16-8 Q16-14 Q16-15	
8	<i>The impact of Computer Information Systems (CIS) on an accounting system</i> <ul style="list-style-type: none"> • The characteristics of a CIS • The components of the CIS • Methods of processing • Comparison of manual processing with computer processing • Controls in a CIS • Special considerations <ul style="list-style-type: none"> • Controls in on-line entry and on-line processing • The electronic data interchange environment • Small computer systems • Computer service organisations 	Ch.11 Problem 11.1	Ch.19 Q19-11	Ch.10 Q1
9	<u>Assessing the risks in a CIS environment</u> <ul style="list-style-type: none"> • Interdependence between firms may cause a domino effect when computers fail • The lack of audit trails as electronic data interchange becomes more popular • Application failures which need good contingency plans • The speed of processing transactions and the lack of human intervention increases the magnitude of consequences. • Risks of third party network providers using unauthorised information • Security controls to prevent unauthorised disclosure or alteration 	Ch.11 Q11.15	Ch.19 Q19-19 Ch.4 Q4-19	Ch.10 Q5

<i>Week</i>	Topic Matters to be Covered	GCL&C 1	AGL 2	T 3
	<ul style="list-style-type: none"> Timeliness and recoverability objectives means adequate back-up retention and contingency plans. 			
10	Mid semester test			
11	<p><i>Internal Auditing and its service to management.</i></p> <ul style="list-style-type: none"> Definition of Internal Audit (AUS 604[03]) Describe the objectives of internal audit and the position of the Internal Auditor within the internal control system. Compare the functions of an Internal Auditor and those of an External Auditor. Explain the conflict that can arise between various functions. The Internal Auditor as a specialist adviser to management on internal controls, but with no executive responsibility for it. <p><u>Standards for the Professional Practice of Internal Auditors</u></p> <ul style="list-style-type: none"> 100 – Independence 200 – Professional proficiency 300 – Scope of work 400 – Performance of audit work 500 - Management of the internal audit department 	Ch.19 Q19.9	Ch.6 Q6-8 Q6-13	Ch.13 Q1 Q2
		Ch.19 Problem 19.2		Ch.13 Q5
12	<p><i>The external auditor, statutory rights, obligations and duties.</i></p> <ul style="list-style-type: none"> Define ‘External Auditor’ – qualifications and registrations Define ‘external audit’ (<i>AUS 104</i>) <ul style="list-style-type: none"> Auditing as an enhancing role Auditing – a shifting paradigm Detection of fraud and errors Audit independence Audit liability Audit within an assurance framework <ul style="list-style-type: none"> The audit – quality as per the auditing standards and guidance statements Agreed upon procedures The requirements of the profession The nexus between external and internal auditing (<i>AUS 604</i>) Independent Auditor Relationships <ul style="list-style-type: none"> Audit committees – their role and function Management Internal auditors Shareholders 	Ch.4 Q4.10	Ch.7 Q7-6	Ch.11 Q1
		Ch.4 Q4.14	Ch.7 Q7-11	Ch.11 Q4
				Ch.11 Q5

Week	Topic Matters to be Covered	GCL&C 1	AGL 2	T 3
15	<u>Performing an audit on a NFP entity</u> <ul style="list-style-type: none"> The audit approach – quality from the auditing standards <ul style="list-style-type: none"> Rules of ethical conduct apply Communication with the existing auditor Evaluating the prospective audit The letter of engagement Difficulties that may be encountered <ul style="list-style-type: none"> Internal controls – do they exist and are they working all the time? The notion of the ‘bottom line’ and matters such as revenue recognition Records and accountability - volunteers Different types of organisations – small and large budgets Control requirements <ul style="list-style-type: none"> Sources of funds How these are managed – signing of cheques? Custody of records, documents and securities Governments and Hospitals a special case <ul style="list-style-type: none"> Failure of controls to detect circumvention and fraud Regulatory requirements Provisions for third party settlement Fund balance restrictions Compliance audits, inventory checks and patient data bases 		Ch.8 Q8-11	Ch.12 Q6 Ch.12 Q7
16	<u>Performance auditing – Value for money, operational processes</u> <ul style="list-style-type: none"> The requirements of AUS 806 – objectives of a performance audit <ul style="list-style-type: none"> All parts of an entity are subject to audit Assess economy, efficiency and effectiveness The trade-off between effectiveness and efficiency Types of performance audit – functional, organisational & specific Types of auditor Comparison with the financial audit <ul style="list-style-type: none"> Purpose, scope, necessity, frequency, time orientation, method, realisation, reporting requirements, recipients Benefits from performance auditing <ul style="list-style-type: none"> Management decision making Process reviews give a fresh outlook Identify potential problems and waste Strengthens the focus on the entity’s goals Checks policies, procedures and performance Its role in both the private and public sectors 	Ch.19 Q19.12 Ch.19 Q19.16	Ch.9 Q9-7 Ch.9 Q9-11	Ch.13 Q4 Ch.13 Q2 Ch.13 Case Study 13.3

Curriculum Exemplars

- *For modules category D*
- *Two exemplars and solutions for every learning outcome in the module descriptor.*

Learning outcome 1.

- 1.1 List five inherent limitations that will work against Internal Controls, and briefly explain what they are.

AUS 402 [.25] suggests that internal controls can only give reasonable assurance. Inherent limitations cause controls to sometimes break down. This can be due to:

- Management's requirement that controls be cost effective
- Controls directed towards anticipated types of transactions rather than unusual ones
- Human error due to carelessness, fatigue or distraction
- Circumvention or management override
- Changes in economic conditions or environmental factors
- Breakdowns in communication

- 1.2 Set out the differences between the 'Accounting' function and the 'Auditing' function. Use an example in industry that might explain these differences.

- The accounting function can be described as a 'constructive' function while the auditing function is a 'critical and analytical' function.
- The accountant is like the builder - gradually building the house, starting from the plans and following procedures, making sure that the framework is in place and that all the essential things are in the right place. Finally, the project is finished and the house has been constructed - just like the construction of the financial statements.
- Then the auditor, like the inspector, examines and gathers evidence to ensure that the building has conformed to standard. An opinion is issued and if all is well, the completed house is passed for habitation. The shareholders like to be sure that management has been objective in handling their company and the auditor, like the inspector, will certify this.

- 1.3 What is the underlying basic premise relating to auditing, whether it be external, internal or government auditing?

- The underlying premise in auditing is, that no person shall ever audit that process for which they have had operational responsibility.

- 1.4 What Auditing Standard tells us whose responsibility it is to prepare the financial statements of an entity?

AUS 202 [14] *Responsibility for the preparation and presentation of the financial report is that of the management of the entity. The audit of the financial report does not relieve management of its responsibilities.*⁴

- 1.5 In AUS 210, **Irregularities, Including Fraud, Other Illegal Acts and Errors**, the definition for 'errors' and for 'irregularities' explains the difference between them. Briefly set out in your own words the different meanings of these words.
- 'Errors' means unintended mistakes in, or omissions from, the accounting financial statements.
 - 'Irregularities' means intentional misstatements, fraud and other intentional acts of omission.
- 1.6 Why might we consider that Auditing Standards are as important to the internal Auditor as they are to the External Auditor?
- The auditing standards control the quality of the audit. The internal auditor is carrying out audit work all the time, and the quality of internal auditing can only be improved the more professional the auditor becomes and the more guidance is taken from the standards. There can be no doubt that the better the internal control system, the better the external auditor will be able to carry out the external audit.
- 1.7 Briefly explain why an entity needs internal controls. Give some examples of what might happen if the controls are not in place and working all the time.
- Internal controls form the basis of efficient and effective operations within firms. The size of many businesses has now become so large and complex that management must rely on internal controls. If there are constant checks and review by the internal auditors then there is a measure of protection against human weaknesses and errors and irregularities will be reduced.
 - Many external auditors could not possibly audit large firms without the relying on the internal control systems. For example, we see what happened in the AWA case when internal controls were not in place and excessive foreign exchange contracts were made and huge losses had to be written off. Also, the Barings Bank collapse, where one person in an office had almost complete control over all aspects of the financial transactions, from start to finish. The Bank collapsed and was sold to the Dutch for one gilder.

Learning Outcome 2 – Transactions cycles

- 2.1 What are the major internal control objectives of the purchases cycle?
- That purchase orders are placed only with authorised suppliers
 - Purchase orders are approved correctly
 - That a purchase officer be in charge of all purchase orders at a central location so that preferred suppliers can always be used

⁴ Extracted from ASCPA Members' Handbook June 1999 issue, AUS202.

- Goods received are checked for quality and quantity against the relevant purchase order
- Purchase order files are marked clearly that goods are received and subsidiary records updated
- Payments for purchases are only made after the purchase office has approved the file for payment
- There are no unauthorised debit entries into the accounts payable
- Amounts due to suppliers are paid according to policy - promptly and in time for discount if available
- There is sufficient segregation of duties in the purchasing department - receiving, custody and recording of purchases, cash payments cheques, receipts, banking etc.
- Management supervision at all times exists to ensure controls are effective and working.

2.2 Set out the reasons why an internal accounting control checklist is so useful in evaluating internal controls. Why must we be careful when designing these checklists?
Refer to Wallace, p.221

- Set out the objectives of the checklist, for example in cash receipts state the accounting control related objectives, (all receipts are to be accurately recorded and deposited) and the operational objectives (to ensure that all cash received, recorded and deposited is carried out in an efficient manner).
- Set out the potential errors that may occur. These could be receipts not being banked or recorded, or if they are recorded the amount may be incorrect or the period affected could be in error.
- Then set out the controls, which are useful in achieving those objectives.

Generally speaking the questions on a checklist are worded to solicit a “yes” or “no” answer. A “no” response is expected to initiate follow-up procedures. These follow-up procedures may entail the identification of a compensating control.

In any case, some explanation of what was done with respect to the “no” response, including the source of any information used in evaluating the effects of the missing control, will be essential in order to document the control evaluation process.

The “yes/no” standardisation of responses facilitates the review process.

If either “yes” or “no” is considered inapplicable, then the third column allows a “N/A” response.

One drawback to the standard “yes/no” approach is the possibility that rather than carefully considering each questionnaire item, the person checking the list may be tempted to automatically respond “yes”, knowing that, in some sense, it is the preferred and expected response.

To avoid this tendency, you should purposefully paraphrase some questions in order to solicit an assortment of “yes” and “no” responses, even though the checklist may document all responses as “yes”. For example, if one item is phrased like this:

- ♦ Is the handling and listing of cash receipts segregated from the posting to the sales and general ledgers?

It could easily be revised as follows:

- ◆ Does one individual handle and list cash receipts, as well as do the posting to the sales and general ledgers?

A “no” response to the latter question, with a follow-up inquiry as to how these tasks are segregated, could provide the basis for a “yes” response on the checklist.

You are likely to obtain a much higher a much higher quality set of responses.

Example of a Checklist

Objective to be achieved:

Internal accounting control related: All receipts are to be accurately recorded and deposited.

Operations related:

The collection, recording and depositing activities are to be performed in an efficient manner.

Working paper format										
Key Controls	Are such controls present?				W/P Ref.	Are such controls to be tested for possible reliance?		Evaluation of controls after testing		
	Y	N	N/A	Explanation		Y	N	Reliance		W/P Ref.
								Y	N	
1. Is the handling of cash segregated from the accounting for such receipts?										
2. Is a locked box utilised for collecting customers' payments?										
3. Are cash registers used with controlled-access cash register tapes?										
4. Does one person have responsibility for listing cash receipts by mail for subsequent reconciliation to deposits? Does one individual handle and list cash receipts, as well as do the posting to the sales and general ledgers?										

2.3 State what is meant by 'attribute sampling'.

- Attribute sampling is testing an attribute or characteristic of a sampling unit, rather than a dollar amount. While the attribute of interest may be whether or not the dollar amount in a journal was accurately footed, it can just as easily be a qualitative attribute, such as whether or not there are two signatures on a cheque or whether or not approval was given for a particular item. The objective of an attribute approach is to estimate the rate of occurrence or non-occurrence of an attribute of the population. Sometimes this is called the deviation rate.
- Attribute sampling can be carried out statistically or non-statistically. The fundamental issue is, that statistical sampling is when a random sample is chosen and probability theory is used to evaluate results as well as the sampling risk.

2.4 If we are to be successful in designing and evaluating internal controls, we should be familiar with the tools that are typically considered useful in this process. (Wallace, p.220.)

What are the six techniques we can use to evaluate controls?

- There are six tools of the trade:
 1. internal accounting control checklists
 2. flow-charting techniques
 3. the "walk-through"
 4. computer auditing techniques
 5. statistical sampling techniques, and
 6. risk exposure work-sheets

Learning Outcome 3 - CIS

3.1 What is meant by Parallel Simulation? Briefly explain how it works.

- In parallel simulation actual company data are processed using auditor-controlled software. This method is so named because the software is designed to reproduce or simulate the entity's processing of real data. Parallel simulation may be performed at different times during the year under auditor supervision and may be applied to reprocessing of historical data. (Gill et al, Page 416.)

3.2 Describe the circumstances in which the auditor may find it advantageous to use the computer in tests of controls.

- Testing controls with the computer is also known as testing through the computer. These tests are used extensively in testing input validation routines and programmed processing controls. The auditor may find that using the computer in tests of controls is advantageous when:
 - a) a significant part of the internal controls is embodied in a computer program;
 - b) there are significant gaps in the visible transaction trail;
 - c) there are large volumes of records to be tested; and
 - d) there is a complex computer program.
- The major disadvantages of testing with the computer are the special knowledge and skills required and the possible disruption of the entity's CIS operations.

3.3 Two categories and nine types of CIS controls were identified in this learning outcome. Listed below are a number of specific control procedures:

1. The CIS manager reports to the chief financial controller.
2. Back-up files.
3. Written approval of all program changes.
4. Physical controls for all data files and programs.
5. Batch controls.
6. Reconciliation of output totals.
7. File identification labels.
8. Record counts.
9. Limit and reasonableness checks.

Required:
 Indicate both the category and type of CIS control to which each procedure pertains.

No.	General or Application?	Type of control?
1	GENERAL	ORGANISATIONAL AND MANAGEMENT
2	GENERAL	BACK-UP AND RECOVERY
3	GENERAL	APPLICATION SYSTEMS DEVELOPMENT AND MAINTENANCE
4	GENERAL	ACCESS / COMPUTER OPERATIONS
5	APPLICATION	INPUT
6	APPLICATION	OUTPUT
7	APPLICATION	PROCESSING
8	APPLICATION	INPUT
9	APPLICATION	PROCESSING

Learning Outcome 4 – Internal Audit

- 4.1 Monitoring and evaluating processes is an on-going function for the Internal Auditor. Question techniques are extremely important if quality answers are to be gained. Briefly describe 'Probing' questions and how and when they should be used.
- If there is to be a review of quality, environmental or safety systems, then an auditor will need to use the right "people skills". The auditor will deal with a wide range of employees from senior managers to production line staff. These employees will vary in their communication ability, their understanding of the audit process and their understanding of the auditor's job.
 - **Probing questions** are used to help uncover core issues. These are useful in obtaining more detail. Probing can sound like interrogation so they should be used in combination with other open questions.
 - Open questions are used to get the auditee talking. They provide a lot of information on which to build more specific questions. Generally they start with the words such as...*explain to me, describe or show me*.
- 4.2 Internal Audits are all about finding information on a process. A successful internal auditor is able to very skilfully use a variety of techniques to accomplish these objectives. List some of these techniques.
- i. Do I always have eye contact or do I get involved in my own thoughts and forget about the auditee?
 - ii. Do I fold my arms?
 - iii. Do I point?
 - iv. Do I find common ground on the first meeting?
 - v. Do I find something positive to say about the auditees business area?
 - vi. Do I smile?
 - vii. Am I creating a feeling of teamwork?
 - viii. Have I prepared appropriately?
 - ix. Have I familiarised myself with the process and examined past audit findings?
- 4.3 AUS 604 sets out the scope and objectives of internal auditing. These vary widely and depend on the size and structure of the entity and the requirements of its management. What will you mostly find that internal auditing activities include?

Refer to AUS 604;

- (a) review of the internal control structure. The governing body can delegate its responsibilities for reviewing the internal control structure, monitoring the operations of the information system and internal controls and recommending improvements, to internal auditing;
- (b) examination of financial and operating information. This may include review of the means used to identify, measure, classify and report such information,

and specific inquiry into individual items including detailed testing of transactions, balances and procedures;

- (c) review of the economy, efficiency and effectiveness of operations including non-financial controls of an entity; and
- (d) review of compliance with laws, regulations and other external requirements and with management policies and directives and other internal requirements.

Learning Outcome 5 – External Audit

5.1 Set out a definition of an external audit. What interesting characteristics can you identify in that definition?

- Auditing is carried out by an independent contractor, who systematically collects sufficient appropriate audit evidence to evaluate against a set of criteria, such as accounting standards. The auditor then, as a service to the entity, should be able to provide a high level of assurance and render a professional opinion as to the truth and fairness of the financial statements.
- AUS 104 suggests that this assurance is provided through:
 - the issue of a statement of positive assurance that enhances the credibility of a written assertion(s) about an accountability matter ("attest review"); or
 - the provision of relevant and reliable information and a statement of positive assurance about an accountability matter where the party responsible for the matter does not make a written assertion ("direct reporting review").

5.2 In the last couple of years since August 1997 when the Auditing & Assurance Standards Board (AuASB) published ED 66, Reporting on the Credibility of Information, the role of auditing has changed. How has the auditing standard AUS 210, Irregularities, Including Fraud, Other Illegal Acts and Errors impacted on this shifting paradigm?

- This standard now provides guidance on:
 - (a) planning and conducting an audit to detect misstatements that have an impact on the financial report of an entity arising from irregularities including fraud, other illegal acts and errors;
 - (b) procedures to be performed when circumstances cause the auditor to suspect, or when the auditor determines, that irregularities including fraud, other illegal acts and errors have occurred; and
 - (c) reporting irregularities including fraud, other illegal acts and errors to the governing body or an appropriate level of management, users of financial reports and third parties.
- So there have been consequential changes in the paradigm of independent auditing, in particular with respect to detecting errors and fraud. The independence of the auditor is paramount and the cornerstone of auditing. Also, because of the sustaining factor of auditor liability, it is imperative that the auditor carries out the contractual duties with skill

and due care. There has been an increase in case law and the duty of the auditor to third parties is now of concern as well.

Learning Outcome 6 – Not-for-profit entities

6.1 What issues should the auditor consider before accepting the audit of a not-for-profit organisation?

1. The size and purpose of the entity
2. How the entity is set up, i.e. incorporated, company limited by guarantee etc.
3. The reporting requirements.
4. The requirements of members.
5. Records that are available and the staff that are employed.

6.2 There are three control problems unique to not-for-profit entities. List the three and briefly state why each is important.

i. Interfund transfers: This is perhaps the most critical control problem with respect to fund accounting. Since the entire structure of fund accounting is intended to ensure an appropriate stewardship function over separate operations and related funds of an entity, only authorised interfund transfers should be made.

ii. Incomplete recording of transactions: It is easy to overlook an entry to another fund when a transaction occurs in a self-balancing fund of the entity.

iii. Separating restricted balances from unrestricted balances: These specific funds should be properly separated from general funds. Restricted gifts, bequests, government grants etc, need to be dealt with as specified by the donor.

6.3 What are the steps in reconciling Fund Accounting in Not for profit entities with the Transaction Cycle approach in Profit entities?

- 6.3.1 Be clear about the type of activities of the entity.
- 6.3.2 Classify such activities as to their relationship to:
 - 6.3.2.1 cash receipts
 - 6.3.2.2 cash disbursements
 - 6.3.2.3 finance
 - 6.3.2.4 non-routine activities
- 6.3.3 Identify the specific fund affected by those activities.
- 6.3.4 Identify the control objectives and related procedures.

Learning Outcome 7 – Performance auditing

7.1 Set out the three types of performance audits and give a brief description of each.

- Functional audits - examines a particular operation
- Organisational audits - takes the firm as a whole to see if various functions interact efficiently
- Specific or Special audits - special audits at the request of management

7.2 In operational or performance auditing, AUS 806 sets out the meanings of economy, efficiency and effectiveness. What do each of these mean?

- "Economy" means the acquisition of the appropriate quality and quantity of financial, human, physical and information resources at the appropriate times and at the lowest cost.
- "Efficiency" means the use of financial, human, physical and information resources such that output is maximised for any given set of resource inputs, or input is minimised for any given quantity and quality of output.
- "Effectiveness" means the achievement of the objectives or other intended effects of activities.

Learning Outcome 8 – Ethics

8.1 All the professional accounting bodies have adopted a professional code of conduct adopting the fundamental principles established by the International Federation of Accountants. What are the principles upon which ethical conduct is based?

Integrity

Members must be straightforward, honest and sincere in their approach to professional work.

Objectivity

Members must be fair and must not allow prejudice, conflict of interest or bias to override their objectivity. When reporting on financial statements which come under their review they must maintain an impartial attitude.

Independence

Members must be and should be seen to be free of any interest which might be regarded, whatever its actual effect, as being incompatible with integrity and objectivity. (Refer to Professional Statement F1 of this Code.)

Confidentiality

Members must respect the confidentiality of information acquired in the course of their work and must not disclose any such information to a third party without specific

authority or unless there is a legal or professional duty to disclose it. (Refer to Professional Statement C5 of this Code.)

Technical & Professional Standards

Members must carry out their professional work in accordance with the technical and professional standards relevant to that work. (Refer to Section E of this Code.)

Competence and Due Care

Members must perform professional services with due care, competence and diligence. A member has a continuing duty to maintain professional knowledge and skill at a level required to ensure that a client or employer receives the advantage of competent professional service based on up-to-date developments in practice, legislation and techniques. In agreeing to provide professional services it is implied that there is a level of competence necessary to perform professional services and that the knowledge, skill and experience of the professional accountant will be applied with reasonable care and diligence. Professional accountants should therefore refrain from performing any services which they are not competent to carry out unless advice and assistance is obtained to ensure that the services are performed satisfactorily.

Ethical Behaviour

Members must conduct themselves in a manner consistent with the good reputation of their profession and refrain from any conduct which might bring discredit to their profession.

The Public Interest

Members must at all times safeguard the interests of their clients and employers provided that they do not conflict with the duties and loyalties owed to the community and its laws.

8.2 The role of directors in discharging their duties is called "Corporate Governance". What were the key features identified by the committee led by Henry Bosch in 1991?

- The boards should include a number of outside non-executive directors.
- Audit committees are strongly recommended as part of corporate governance, offering independent advice and expertise on matters such as internal controls, management fraud, etc.
- Directors should disclose financial and non-financial information.

This is the last page and has been left blank intentionally.

