

2007

# Capacity building: home and away

Peter Hudson

*Queensland University of Technology*

Rebecca Spooner-Lane

*Queensland University of Technology*

Karen Dooley

*Queensland University of Technology*

---

## Publication details

Hudson, P, Spooner-Lane, R & Dooley, K 2007, 'Capacity Building: Home and Away', *Malaysian Journal of Learning & Instruction*, vol. 4, no. 1, pp. 55-70.

Published version available from:

<http://mjli.uum.edu.my/images/pdf/4mjli/mjli44.pdf>

## Capacity building: Home and away

Peter Hudson, Rebecca Spooner-Lane, and Karen Dooley  
Queensland University of Technology

### Abstract

Many countries are at pivotal points for reforming their education systems, particularly Asian countries moving into English as the medium instruction. The Ministry of Education Malaysia aims to reach its government's Vision 2020 for education reform, which includes teaching science education in English. Achieving Vision 2020 requires capacity building for Malaysian institutes and their lecturers. This capacity building involved professional development on specific preservice teacher education units conducted through Australian and English universities. Thirty-one Malaysian lecturers from two institutes were involved in professional development with three Australian university lecturers associated with a new primary science education degree. In addition, 96 Malaysian preservice teachers were co-taught by both the Malaysian and Australian lecturers over a two-week period, which provided lecture and tutorial demonstrations on science education, English, and human psychology. This paper highlights capacity-building in the areas of teaching and learning for Malaysian institutes and the affiliated Australian university. Malaysian and Australian lecturers and the Malaysian preservice teachers gained an opportunity to refine their pedagogical knowledge and content knowledge with linkages to current theories (i.e., on science education, English, and human psychology). International collaboration appeared to enhance teaching and learning programs by globalising coursework, and presents potential for collaborative research.

Malaysia aims at developing a world-class education system to strengthen its economic position in the world market (Rahman Idris, 2005). The Ministry of Education Malaysia also aims to reach its government's Vision 2020 for education reform, which includes teaching science, mathematics, and design and technology using English as the medium of instruction (EMI). The key focus has been placed on enhancing scientific literacy, which is considered central to education reform (Ayala 2005; Gallagher, 2000; Pattanayak, 2003). Yet, science knowledge is widespread in English, particularly with the Internet, and English as Global Language (EGL) countries wish to access this knowledge for economic development. Educators (Berleur & Whitehouse, 1997; Meethan, 2001) note English as a contributing factor for globalisation while other educators (Haley & Rentz, 2002; Larsen-Freeman, 2000; Lu, 2002; Wertheimer & Honigfeld, 2000) highlight the essential nature of preparing preservice teachers for teaching science in EGL in order to be at the forefront of globalisation.

Preparation for teaching primary science involves preservice teachers analysing and understanding current theories that underpin a science curriculum and developing adequate pedagogical knowledge and content knowledge (Fleer & Hardy, 2006; Morine-Dershimer & Kent, 1999). However, EGL preservice teachers have an additional

challenge that is, learning to teach science with links to current education reform measures and learning to teach this subject using EMI (Hudson & Nguyen, 2007). The Malaysian education system aims at addressing simultaneously these two key educational reform measures (i.e., teaching science and teaching science using EMI).

In addition to shifting to EMI, Malaysia is moving from a diploma to degree status for preservice teacher education programs so as to advance its education system. The Ministry of Education Malaysia determined that the facilitation of a new degree required input from English-speaking countries (England and Australia) experienced in providing Education degrees. These arrangements had complex challenges with differences between pedagogical paradigms. It has been observed that in Malaysia, as in many other countries, teachers and textbooks were once authoritative. Textbooks were thought to contain all that was worth knowing. Teachers spoke while students listened and learning involved acquiring large quantities of information from teachers and textbooks. Students were examined on their capacity to reproduce the information. While this approach may have been appropriate for earlier times, it no longer produces students with the capabilities needed in new workplaces and societies (Pandian & Balraj, 2005). Factors such as class size, limited resources, and the teacher viewed as an authoritative source of knowledge have contributed to the adoption of a teacher-centred approach as the pedagogical practice. To change this view and generate educational reform necessitated professional development for Malaysian institutes conducting a new degree.

Professional development is viewed as central to educational reform (Elmore, 1996; Hawley & Valli, 2000; Huey-Por & Chorng-Jee, 2005). Professional development activities must meet the needs of teachers who are at different career stages (Ganser, 2000), and teachers should be able to determine their needs for enhancing their own teaching practices (McCarthy & Riley, 2000). Researchers (e.g., Cobb, 2000; Ganser, 2000; McCarthy & Riley, 2000) have articulated contemporary principles for professional development of teachers. Fundamentally, professional development should: deepen and broaden knowledge of content; provide a strong pedagogical foundation; provide knowledge about teaching and learning processes; be based upon current research that also align with curriculum standards; and be designed by teachers in cooperation with experts in the field to include sufficient time, support, and resources (American Federation of Teachers, 2002). Furthermore, professional development should take a variety of forms, and allow sufficient time for colleagues to share ideas and facilitate guided risk-taking through workshops (Bondy & Ross, 2005; Hoewisch, 1998). Most importantly, effective professional development facilitates interactions with teachers (or lecturers) on successful classroom practices and innovations (King & Newmann, 2000). Overall, professional development programs need to be planned to address the learner's needs and should be goal focused (see Bondy & Ross, 2005).

Professional development requires collaboration employing experts who are knowledgeable about learners' needs. In education, the two-way engagement between those requiring professional development and a university is recognised as an investment strategy advocated by Australian universities (Garlick, 2000). Collaboration, which includes professional development programs, is fundamental for capacity building and is "at the forefront of the attributes required by communities to generate viability in the global economy" (Garlick, 2003, p. 2). Developing learning communities necessitates partnerships for cultivating capacity-building communities (Kilpatrick, Barrett, & Jones, 2003). The Queensland University of Technology (QUT) Blueprint (2007) emphasises

engagement as a theme to guide strategic thinking, and implementing this direction requires “partnering with other organisations” to “open up opportunities” and “provide ways of sharing resources or programs” (QUT Blueprint, 2003, p. 7). QUT statements and briefs guide campus staff activities, which also entails international collaboration for community engagement and capacity building. Yet, how can a university collaborate internationally and what are the effects of capacity building for all stakeholders?

The Malaysian government’s Vision 2020 for education reform has generated various plans. The thrust of the Ninth Malaysia Plan, 2006–2010, is to target preservice teacher education by developing specialist primary teachers who can teach specific subjects such as science using EMI (Rahman Idris, 2005). This plan has motivated the Ministry of Education Malaysia to draw upon international resources to move from diploma to degree status in their institutes, and as such invited universities from Australia (Queensland University of Technology and Deakin) and England (University of Hertfordshire and Canterbury Christchurch University) to design and implement new Bachelor of Education degrees that focus on science (and mathematics and design and technology) education. This study describes the professional development facilitated in Malaysia for a primary science degree and focuses on the capacity building received by both the Malaysian institutes and a university as a result of this collaboration.

### **Context**

Two institutes in urban areas of Peninsular Malaysia collaborated with Queensland University of Technology (QUT) in the program described in this paper. Each institution offered the science program to cohorts of approximately 45 high-achieving students preparing to teach primary science throughout Malaysia. Thirty-one Malaysian lecturers were involved in professional development with three QUT lecturers associated with a new primary science education degree. In addition, 96 Malaysian preservice teachers were co-taught by both the Malaysian and QUT lecturers over a two-week period with some lectures and tutorials demonstrated by QUT staff. This study focuses on the third semester of the degree but requires a brief outline of the previous two semesters.

Semester 1 was conducted in Bahasa Malayu and involved compulsory studies required by the Ministry of Education in Malaysia (e.g., Islamic studies, co-curriculum). Semester 2 comprised of four units, that is: (1) the development of skills in information and communication technologies; (2) primary curriculum and pedagogy in health and physical education; (3) English for teachers; and, (4) an integrated mathematics and science foundation unit to develop scientific and quantitative literacy. There was also a two-week school-based experience for these preservice teachers to commence forming understandings of their primary school education system. This second semester was delivered in English with all lectures, readings, workshops, and assessments conducted in English. Lecturers and preservice teachers had to use English as the target language. It was a requirement that these preservice teachers live on campus in the accommodation provided for the duration of each semester.

Semester 3 involved four units, viz: Human development, primary science pedagogy, Earth and space, and an English literacy unit. Each unit had a specific design, for example, the English language and literacy curriculum unit was designed to equip preservice teachers to work with primary school students who were: (1) learning to read (novice readers); (2) reading to learn (fluent readers); and (3) learning to write scientific text. Theoretical frameworks were selected to enable the students to think critically about

a wide range of pedagogical approaches for teaching English language and literacy while considering the requirements and beliefs of local contexts, the demands of economic and cultural globalisation on educators, and the ICT revolution in textual environments. These included notions of multimodal text design developed by multiliteracies theorists (Cope & Kalantzis, 2000), and a pedagogical theory, focused on knowledge processes, developed by *Learning by Design* theorists (Kalantzis & Cope, 2005). Content focused on areas of particular importance for second language learners, including multilingual reading processes, vocabulary, comprehension, spelling and scientific genres. Assignments required preservice teachers to: (1) plan a science lesson highlighting the English language and literacy support provided; and (2) observe and report orally on the language and literacy support provided by a practising teacher of science.

As this was a primary science degree, units aimed to make links with science education. To illustrate, the literacy unit covered controversial issues such as the role of the science teacher in teaching English language and literacy, and the history of pedagogic colonisation by Western English language teachers. Students were encouraged to debate the language teaching role of the science teacher, using perspectives from the literacy literature as provocations (e.g., Manzo, Manzo, & Estes, 2001). Care was taken to link pedagogic approaches encouraged in the unit with Malaysian imperatives: “[Graduates] need to have the confidence, ability to solve problems and have the command of at least two languages ... We need our students to add value to their studies ... and to challenge themselves. They have to be innovative and develop their creativity” (PM Datuk Seri Abdullah Ahmad Badawi, *New Straits Times*, 17/01/07, p. 2). Further care was taken to avoid proselytizing any particular method of English language education, but rather to equip the Malaysian preservice teachers with an understanding of the strengths and limitations of a range of pedagogic methods.

Malaysian lecturers shared with QUT lecturers a strong basis of common knowledge on the semester 3 units. For example, the language and literacy lecturers in both institutes had been experienced school English teachers prior to working in the tertiary sector. Many had qualifications from English-speaking countries, and all had specialist TESOL qualifications. The lecturers were involved in curriculum development, teacher professional development, and other forms of educational leadership. The Malaysian lecturers were also aware of historically important methods of English-language teaching, and the debates and controversies around content and methods of EGL teaching.

### **Results and discussion**

The process of developing the Bachelor of Education Studies units commenced with each QUT unit coordinator compiling Week 1 documents. These comprehensive documents provide a description of the rationale, aim and objectives, teaching and learning approaches, content, assessments, necessary resources and synopsis of a unit. It also provides a scope and sequence of teaching and learning activities for the semester; including lecture topics, tutorial activities, relevant readings from recommended textbooks, and associated online learning and teaching resources (e.g., lecture PowerPoint slides, lecture study guide, course materials database, class handouts, educational activities and applications, important web-based links, research skills tutorials).

Specific feedback was sought from Malaysian lecturers and academic coordinators in relation to the suitability of the unit's content, tutorial activities, and assessment requirements, and the feasibility of the lecture and tutorial sequence in relation to Malaysia's academic calendar. Modifications of the document were made accordingly. Upon receiving support for each unit's Week 1 document, QUT university lecturers developed, in consultation with their respective Malaysian counterparts, online learning and teaching (OLT) resources for each unit. Malaysian unit coordinators were given administration rights enabling them to make appropriate adjustments to the OLT resources (e.g., Week 1 document, lecture PowerPoint slides and study guides) if required and to use the site as a way of distributing important information (e.g., recommended tutorial or exam preparation) to an entire preservice teacher cohort.

### *Capacity building for Malaysian lecturers*

The Malaysian lecturers were responsible for delivering lectures, facilitating tutorials, and marking the preservice teachers' assessment tasks. Each lecturer was required to have a high degree of knowledge and comprehension of the lecture topics, skills in facilitating tutorials, and a clear understanding of assessment criteria used for evaluating student teachers' work. It was therefore necessary to further build the professional capacity of Malaysian unit coordinators and tutors for successful and confident delivery of these new units. Professional development took place in Malaysia over a five-day period, which was prior to students commencing semester 1. During this Curriculum Week, Malaysian lecturers were briefed on how each unit's aims and objectives corresponded to QUT's Educational Practitioner Attributes and Teaching Professional Standards, and were provided detailed information on their specific unit requirements, particularly with respect to pedagogy and assessment. QUT unit coordinators explained the process of developing criterion-referenced assessment rubrics and the value of providing formative feedback to students throughout the semester to enhance their learning (a practice not readily observed in Malaysian universities).

To gain a deeper understanding of an Australian university's academic grading system, examples of Australian students' assignments, reflecting various grades, were distributed to Malaysian lecturers associated with specific units. Practices in facilitating professional development varied between QUT lecturers. For example, in one unit, Malaysian lecturers were given the opportunity to practice marking some assignments according to the assessment criteria sheet and following moderation as a group, a final grade for each assignment was determined. In addition, Malaysian lecturers received training on manipulating their specific unit's online website and accessing relevant electronic resources from QUT's library (e.g., databases). Professional development also took place in the first two weeks of semester 1 at the Malaysian institutes. For each unit, the Australian and Malaysian lecturers worked together to co-deliver specific lecture topics and co-facilitate tutorials. The QUT coordinators also provided lectures as requested and familiarised Malaysian students with the online website linked to each unit, other useful QUT website links (e.g., referencing, plagiarism), searching research databases, and computer accessing procedures. Later in the year, QUT's coordinators will join the lecturers from Malaysia to assist in the process of moderating preservice teachers' assessment grades.

### *Preservice teacher capacity building*

Given that these preservice teachers will later teach primary science, mathematics, and design and technology to their Malaysian students in English, it was educationally sound that they also learnt these subjects in English. During their education program, Malaysian preservice teachers explored current educational research and theories, and discussed associated educational applications with their lecturer and peers. Some preservice teachers continued gathering their thoughts in Malay and trying to translate their native language into English. It was expected that, over time, their English fluency would improve as they learnt to gather their thoughts and respond in English. Bringing information and communication technology (ICT) into Malaysian classrooms provided preservice teachers with the opportunity to refine their computational and Internet skills. Using ICT for e-learning was essential for university education and, as a result, university students are equipped with laptops and in-built wireless capabilities, which was also beneficial as access to journals, textbooks and other hard copy resources were limited. Throughout their degree program, these preservice teachers will learn how to access information from a variety of sources, sort through it, make sense of it, assess its validity, and explore the implications of its content (e.g., see Woolfolk & Margetts, 2007). Acquiring these higher-order thinking skills is important for today's educators as information on the Internet can be uncensored and unsubstantiated.

Whilst teacher-driven approaches have been common in Eastern countries, preservice teachers in this program were learning the value of adapting teaching methods to meet specific learning objectives and individual student needs. For instance, these preservice teachers may use direct instruction to help students learn basic knowledge and skills, but also use discovery learning approaches combined with scaffolding and dialogue to enhance students' creativity, abstract thinking, and problem solving skills, as advocated by Woolfolk and Margetts (2007).

### *Lecturer capacity building*

Lecturers from the two Malaysian institutes were generally enthusiastic to learn different methods of teaching that encouraged preservice teachers to take individual responsibility, and adopted a deeper approach for their own learning. One lecturer indicated that, "through this program I've experienced new ideas and challenges that have enriched my teaching methods, strategies, as well as knowledge about the subject matter." Students in this education program were being taught to reflect critically on presented material, to interpret, analyse and synthesise information and concepts, and formulate applications to educational contexts. Even though learning can occur through reading and reflecting on the literature prior to weekly tutorials, engaging in collaborative small group discussions enabled these preservice teachers to explore further ideas and develop critical ways of thinking about the material presented.

For some lecturers, however, it was a challenge to deliver the units in English. In the past, lecturers have primarily delivered lecture material in Bahasa Malayu. One lecturer noted:

Before this, I have experienced teaching using English, but this is quite different. Sometimes I feel quite nervous on whether I could do it. But so far it is OK. As for the students, they are also having difficulties in comprehending and corresponding in English. To help students, I will translate things that they do not understand in Malay so that my explanations are bilingual: English and Malay.

As lecturers become more familiar with the concepts and subject matter, it is anticipated that their capacity to teach and write in English will be enhanced. Several Malaysian lecturers have expressed interest in working collaboratively with QUT's lecturers on research projects that will further develop their teaching and research capabilities.

### *Personal professional development*

Rebecca (one of the authors of this paper and an early career academic) found the experience of developing the unit "Human Development and Education" both rewarding and challenging. This unit was relevant to the preservice teachers as they needed an understanding of human development in order to plan learning experiences that are congruent with their learners' developmental levels and abilities. It also aimed to prepare these preservice teachers to consider their roles in fostering a supportive learning environment that values diversity and individual differences (e.g., students with learning difficulties and other special needs) in the classroom.

In this unit, preservice teachers were introduced to the significant theoretical frameworks that have contributed to understanding human development across a human life span. These theories, however, are largely biased in favour of Western values that emphasise individualism. To provide Malaysian preservice teachers with a view of human development that they could relate to more closely, theoretical perspectives and current research from Eastern perspectives that are group or family-centred were included where possible. This proved difficult at times. To date, there does not appear to be a comprehensive educational psychology textbook that specifically explores development across human lifespan from an Eastern perspective. Furthermore, research studies exploring human development from this viewpoint were limited. During tutorial discussions, these preservice teachers of various races (e.g., Malay, Chinese, Indian) shed light on the applicability of the developmental theories as they critically examined them in relation to their own cultural and religious backgrounds.

### *Capacity building of QUT units*

Schools are not homogenous and preservice teacher preparation needs to consider diverse cultural populations. So-called debates over migration notwithstanding, the Australian school population has continued to diversify through migration from a widening range of countries in recent decades (Meyenn & Parker, 1999). In addition, international enrolments in Australian schools, including primary schools, have jumped dramatically since the 1990s, although absolute numbers remain relatively small (Walker, 2004). Finally, intense global competition for teachers means increasing numbers of Australian-trained teachers are working abroad (Walker, 2004). In short, more Australian teachers are working "on the front line" of cultural globalisation in "global contact zones" where intercultural competence is essential to negotiate daily moments of discomfort, offence and distrust across linguistic and cultural borders (Singh & Doherty, 2004).

Reflecting on the significant cultural diversity that exists among the Australian university student population had prompted Rebecca to encourage QUT preservice teachers to further explore the influences of culture and ethnicity on the learner's development. In tutorial classes, preservice teachers shared how their culture, familial, religious or ethnic

background have shaped their personal learning experiences. Furthermore, the implications of cultural and linguistic backgrounds on preservice teachers' personal and professional development as educators were also considered. The revised unit encouraged preservice teachers to use pedagogical practices that promoted national unity whilst respecting the cultural and linguistic diversity that exist in Australian classrooms.

## **Conclusion**

Malaysia is at a critical point of education reform, and interactions with other education systems may aid capacity building of such systems. To meet this educational reform in Malaysia will require teaching primary science using EMI. This means targeting primary science education concepts and English concepts simultaneously if the Vision 2020 goal is to be reached. In both Malaysia and abroad, employment prospects are enhanced for bilingual educators. Yet, it should be noted that there has been and continues to be considerable controversy in Malaysia around the place of English as a global language and the teaching of science in English (Pandian & Balraj, 2005). Nevertheless, preservice teacher education course construction will be paramount for injecting new educational ideas into the system but can also have a flow-on effect for providers of professional development. The course structure for the Malaysian Bachelor of Education Studies degree in primary science has nine units of science (Goodrum et al., 2001) whereas most preservice primary teacher degree programs in Australia only contain one or two primary science units with a possibility of an elective or two. If scientific literacy is a way forward for economic gain and preservice teacher education is a formative area to target then Australian universities also need to investigate the effects of degrees (e.g., in Malaysia) that incorporate more science units. Hence, capacity building for collaborating English-based universities can be an additional spin off as a result of involvement in such projects.

The education of preservice teachers must be a focus of attention in an effort to obtain quality teaching (e.g., Haley & Rentz, 2002; Larsen-Freeman, 2000) and gain access to the world's knowledge base on science. Investigating preservice teacher development during this formative period can aid in refining programs to further enhance such development. Preservice teachers involved in this new degree may provide information about their preparation for teaching science using EMI that can guide educators' construction of coursework. Yet, capacity building extends to both the receiver and the provider of professional development. Further investigation would be required to determine if Malaysian lecturers and QUT lecturers employed reform measures in their coursework and whether the results of this collaboration can be measured in terms of preservice teacher achievement.

## References

- Ayala, F. J. (2005). Scientific Literacy. *American Scientist: The Magazine of Sigma Xi, The Scientific Research Society*, 92(5), Retrieved 22 November, 2005 from <http://www.americanscientist.org/template/AssetDetail/assetid/35581>
- Berleur, J., & Whitehouse, D. (1997). *The ethical global information society: Culture and democracy revisited*. London: Chapman Hall.
- Bondy, E., & Ross, D. D. (2005). *Preparing for inclusive teaching: Meeting the challenge of teacher education reform*. Albany, NY: State University of New York Press.
- Cobb, J. (2000). The impact of a professional development school on preservice teacher preparation, inservice teachers' professionalism, and children's achievement: Perceptions of inservice teachers. *Action in Teacher Education*, 22, 64-76.
- Cope, B., & Kalantzis, M. (2000). *Multiliteracies: Literacy learning and the design of social futures*. South Yarra: Macmillan.
- Elmore, R. F. (1996). Getting to scale with good educational practice. *Harvard Educational Review*, 66(1), 1-26.
- Fleer, M., & Hardy, T. (2006). *Science for children*. Sydney, Australia: Prentice Hall.
- Gallagher, J. J. (2000). Advancing our knowledge in order to achieve reform in science education. *Journal of Research in Science Teaching*, 37(6), 509-510.
- Ganser, T. (2000). An ambitious vision of professional development for teachers. *NASSP Bulletin*, 84, 6-12.
- Garlick, S. (2000). *Engaging universities and regions: Knowledge contribution to regional economic development in Australia*, Evaluations and investigations program. Canberra: Department of Education and Training and Youth Affairs.
- Garlick, S. (2003). Creative regional development: Knowledge based associations between universities and their places. *Metropolitan Universities: An International Forum*, 14(2), 48-70.
- Goodrum, D., Hackling, M., & Rennie, L. (2001). *The status and quality of teaching and learning in Australian schools*. Canberra, Australia: Department of Education, Training and Youth Affairs.
- Haley, M. H., & Rentz, P. (2002). Applying SLA research and theory to practice: What can a teacher do? *TESL-EJ*, 5 (4).
- Hawley, W. D., & Valli, L. (2000). Learner-centered professional development. *Phi Delta Kappa Center for Evaluation, Development, and Research*, 27, Retrieved 2 August, 2006, from <http://www.pdkintl.org/edres/resbul27.htm>
- Hoewisch, A. (1998). Teachers' perceptions of their professional growth in a professional development school summer institute. *Professional Educator*, 20(3), 37-55.
- Hudson, P., & Nguyen, M. H. (2007, in press). Mentoring preservice EFL teachers. *Modern Language Journal*.
- Huey-Por, C., & Chorng-Jee, G. (2005). Action Research Aiming at Improving High School Science Teachers' Teaching Proficiencies through the Development of Instructional Modules. *International Journal of Science & Math Education*, 2(4), 435 – 453.
- Kalantzis, M., & Cope, B. (2005). *Learning by Design*. Melbourne & Altona, Vic.: Victorian Schools Innovation Commission in Association with Common Ground Publishing.
- Kilpatrick, S., Barrett, M., & Jones, T. (2003). Defining learning communities. *Centre for research and learning discussion paper*, University of Tasmania, Tasmania.

- King, M. B., & Newmann, F. (2000). Will teacher learning advance school goals? *Phi Delta Kappan*, 81(8), 576-580.
- Larsen-Freeman, D. (2000). *Techniques and principles in language teaching (2nd edn.)*, New York: Oxford University Press.
- Lu, D. (2002). English medium teaching at crisis: Towards bilingual education in Hong Kong. Gema: *Online Journal of Language Studies*, 2(1). Retrieved 2 August, 2006, from <http://www.fpbahasa.ukm.my/PPBL/GemaVol2.1.2002No5.pdf>
- Manzo, A. V., Manzo, U. C., & Estes, T. H. (2001). *Content area literacy: Interactive teaching for active learning (3<sup>rd</sup> Ed)*. New York: John Wiley & Sons, Inc.
- McCarthy, J., & Riley, S. (2000). A new vision for teacher professional development. *Leadership*, 30, 34-36.
- Meethan, K. (2001). *Tourism in global society: Place, culture, consumption*. New York: Palgrave.
- Meyenn, R., & Parker, J. (1999). Necessary but not sufficient: Reconceptualizing primary teacher education. *Asia-Pacific Journal of Teacher Education*, 27(3), 173-82.
- Morine-Dersheimer, G., & Kent, T. (1999). The complex nature and sources of teachers' pedagogical knowledge. In J. Gess-Newsome & N. G. Lederman (Eds.), *Pedagogical content knowledge and science education*. Netherlands: Kluwer Academic Publishers.
- National Staff Development Council. (1995). *Standards for staff development: High school edition*. Oxford, OH: Author.
- Pandian, A., & Balraj, S. (2005). Approaching *Learning by Design* as an agenda for Malaysian schools. In M. Kalantzis & B. Cope, & the *Learning by Design* Project Group, *Learning by Design* (pp. 285-313). Melbourne & Altona, Vic.: Victorian Schools Innovation Commission in Association with Common Ground Publishing.
- Pattanayak, V. (2003). Physics first in science education reform. *Journal of Young Investigators*, 7, Retrieved 22 January, 2007, from <http://www.jyi.org/volumes/volume6/issue7/features/pattanayak.html>
- QUT Blueprint: QUT institutional plan, draft consultation 2003*, Brisbane, Queensland, Author.
- Rahman Idris, A. (2005, July). Conference on progress and challenges in human development in Malaysia: Ideas for the Ninth Malaysia Plan.
- Singh, P., & Doherty, C. (2004). Global cultural flows and pedagogic dilemmas: Teaching in the global university contact zone. *TESOL Quarterly*, 38, 1, 9-42.
- Walker, K. (2004). Teachers and teacher world-views. *International Education Journal*, 5(3) 433-38.
- Wertheimer, C., & Honigsfeld, A. (2000). Preparing ESL students to meet the new standards. *TESOL Journal*, 9(1), 7-11.
- Woolfolk, A. & Margetts, K. (2007). *Educational psychology*. NSW, Australia: Pearson Education Australia.
- Wu, Y. (2001). Trends in China: Current challenges. English language teaching in China: Trends and challenges. *TESOL Quarterly*, 35(1), 191-194.