OSITE POSITION STATEMENT

Guidelines for effective ICT related professional development for Queensland teachers

The Queensland Society for Information Technology in Education (QSITE) commissioned a report in order to develop an informed position statement reflecting contemporary literature and the experience of QSITE members. It has emerged that there are four distinct yet interrelated elements that are instrumental in the success of PD: personal growth, context, community and time. Inherent in these guidelines is the recognition that there needs to be a high level of support for the program from school administrations and a system in place to allow continued participation and support.

Background

QSITE has been recognised as a professional association since its formation in 1981 as the Computer Education Group (Queensland) (CEGQ) becoming QSITE in 1992. Through this time the association has provided relevant and timely professional support for system leaders and education professionals who have been involved in integrating ICTs in education. This support has taken many forms and has involved a diverse selection of people.

In 2005, QSITE is a professional association with a large membership consisting of some of the most respected practitioners in Australia. These members have a wealth of experience in the implementation of ICTs in education and around what makes effective ICT-related professional development for teachers.

This position statement has been developed in response to concerns raised within the QSITE community around current trends in the provision of professional development. QSITE members felt that given the wealth of experience we have to offer, we were well positioned to develop a series of recommendations around effective ICT-related professional development.

Process

A research assistant was engaged to conduct the background research in consultation with QSITE. This consisted of an environmental scan and literature review, data collection and analysis and the development of interim recommendations. These documents have been produced as individual reports and are located on the QSITE website. This position statement has been developed as a synthesis of the findings from the reports.

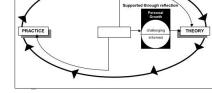
The QSITE study corroborated the findings in much of the literature and the collation of real experiences of practitioners in Queensland's educational contexts and clearly demonstrated

that professional development is a complex issue. While there is no single solution, there are clear guidelines relating to personal growth, context, community and time, which can be applied to the benefit of teachers and students. QSITE believes that recognition of and adherence to the guidelines will assist in the development and delivery of effective professional development programs.

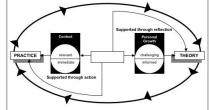
Guidelines for effective professional development

The over-arching guidelines for effective professional development are:

- 1. It must support teachers' lifelong learning through reflection (practice to theory). Indicators of this occurring would be that it:
 - adds to personal knowledge
 - increases personal skills
 - enhances status (within learning community)



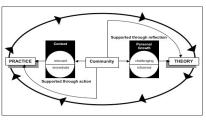
- takes account of teachers' prior knowledge, different levels and learning styles
- enables reflection
- allows personal selection
- allows teachers to take responsibility for their own learning
- 2. **It must improve teaching practice through action (theory to practice).** For this to occur it must:
 - be relevant (authentic, local and real)
 - be meaningful
 - be practical
 - meet immediate needs (direct impact)
 - meet ongoing needs (sustained impact)



3. It should foster active membership and collegiate relationships within

professional communities. This occurs through:

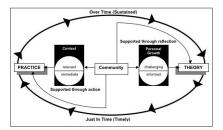
- encouraging sharing with others, hearing other stories from the field
- providing ongoing support and heightened collaboration
- expanding professional and personal networks



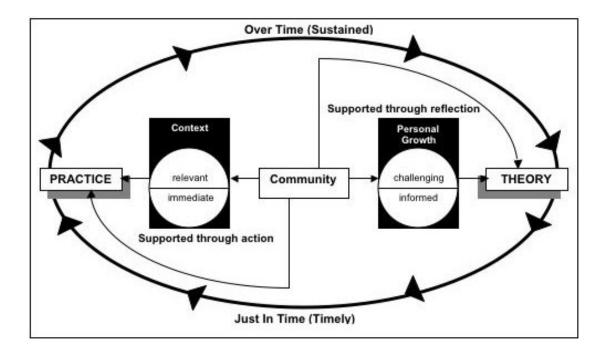
4. It should consider the need for timeliness and reflection over time for practicing

teachers. To cater for this, professional development must:

- be timely (just-in-time)
- be sustained (over time)
- provide adequate time for participation,
 reflection and implementation



Effective professional development has, therefore, to immerse an individual in his or her community, directly address the context of teaching and learning, add to personal growth, and be both "over" time and "in" time. These elements are to be viewed as being the stepping-stones between practice and theory.



In summary, a format incorporating extended time and opportunities to "play", in a supportive environment is instrumental in the success of PD. As stated earlier, it is recognised that there also needs to be a high level of support for the program from school administrations.

QSITE Report

Towards a Model of Effective Professional Development in ICT for Teachers

REFERENCES

REFERENCES

- Abdal-Haqq, I. (1996). *Making time for teacher professional development*. ERIC (Educational Resources Information Center) Digests. Retrieved September 5, 2004, from http://SearchERIC.org/ericdb/ED400259.htm.
- Anderson, N., Baskin, C., & Halbert, M. (2002). Sustaining and supporting teacher professional development in ICT. Retrieved on September 5, 2004, from http://www.aare.edu.au/02pap/and02399.htm.
- Arbuckle, M., & Murray, L. (1989). *Building systems for professional growth: An action guide*. Andover, MA: Regional Educational Laboratory for Educational improvement of the Northeast and Islands and the Maine Department of Educational and Cultural Services.
- BECTA (British Educational Communications and Technology Agency) (2002). What the research says about ICT and teacher CPD. Retrieved September 5, 2004, from http://www.becta.org.uk/page_documents/research/wtrs_cpds.pdf.
- Brains Design (2004a). *About us Our history*. Retrieved September 5, 2004, from http://education.brainsdesign.com/04/2004_about.jsp.
- Brains Design (2004b). *Intel*® '*Teach to the Future*' *Curriculum overview*. Retrieved September 5, 2004, from http://education.brainsdesign.com/04/register options.jsp.
- Brains Design (2004c). *Intel*® '*Teach to the Future*' *Program overview*. Retrieved September 5, 2004, from http://education.brainsdesign.com/04/materials/Program_Overview.pdf.
- Bull, B., Buechler, M., Didley, S., & Krehbiel, L. (1994). Professional development and teacher time: Principles, guidelines, and policy options for Indiana. ERIC (Educational Resources Information Center) Database. Retrieved September 5, 2004, from http://SearchERIC.org/ericdb/ED384112.htm.
- Carr, J. (2003a). 'Moving Online' project Project budget report. Online Learning and Development Team Report for *The Learning Place*. Brisbane, Australia: State of Queensland (Department of Education).

- Carr, J. (2003b). *The Learning Place mentors*. Online Learning and Development Team report for The Learning Place. Brisbane, Australia: State of Queensland (Department of Education).
- Castner, I. (1998). Curriculum embedded applications: A professional development alternative. *QUICK*, 69, pp. 6-12.
- Dalgarno, B. (1996). Constructivist Computer Assisted Learning: Theory and Techniques. Retrieved November 10, 2004, from http://farrer.riv.csu.edu.au/~dalgarno/ucwebpages/articles/ascilite96/paper.htm.
- Department of Education, Science and Technology (DEST) (2004a). *PD 2000 Australia National mapping of school teacher professional development*. Retrieved

 September 5, 2004, from

 http://www.qualityteaching.dest.gov.au/Content/SubSection_PD2000.htm.
- Department of Education, Science and Technology (DEST) (2004b). Raising the standards: Proposal for the development of an information and communication technology (ICT) competency framework for teachers. Retrieved September 5, 2004, from http://www.dest.gov.au/schools/publications/2002/raisingstandards.htm.
- Dewacht, P. (2004, May). Online collaborative mentoring: A PD model for the professional learning of teachers. *Educare News*, *147*, 8-11. Retrieved November 19, 2004, from http://search.informit.com.au/fullText;res=AEIPT;dn=136461.
- Downes, T., Fluck, A., Gibbons. P., Leonard, R., Matthews, C., Oliver, R., Vickers, M., & Williams, M. (2002). *Making better connections: Teacher professional development for the integration of information and communication technology into classroom practice*. Canberra, Australia: Department of Education, Science and Training (DEST).
- Edmondson, A. (2002). What styles of computer training enhance teachers' competence and confidence to use ICT? Retrieved September 5, 2004, from http://www.becta.org.uk/research/reports/docs/cpd_edmondson.pdf#search='andre a%20edmondson'.

- Education Queensland. (1998). *Standards for the development and delivery of professional development and training*. Retrieved September 5, 2004, from http://education.qld.gov.au/learning ent/ldf/pdfs/standards/stdspub.pdf.
- Education Queensland (1999). *Minimum standards for teachers Learning technology*. Retrieved September 5, 2004, from http://education.qld.gov.au/itt/learning/docs/min-standards.pdf.
- Education Queensland (2004a, June). ICTs for Learning. *Monthly update* (22). Retrieved September 5, 2004, from http://education.qld.gov.au/itt/learning/docs/June2004update.pdf.
- Education Queensland (2004b). *Queensland school reform longitudinal study Key issues Productive pedagogies*. Retrieved September 5, 2004, from

 http://education.qld.gov.au/public_media/reports/curriculum-framework/qsrls/html/keyi_pp.html
- Education Queensland (2004c). Queensland school reform longitudinal study Productive pedagogies – Introduction. Retrieved September 5, 2004, from http://education.qld.gov.au/corporate/newbasics/html/pedagogies/pedagog.html.
- Education Queensland (2004d). *Queensland school reform longitudinal study Productive pedagogies* – *Project overview*. Retrieved September 5, 2004, from http://education.qld.gov.au/public_media/reports/curriculum-framework/productive-pedagogies.
- Ellis, A., & Phelps, R. (2000). Staff development for online delivery: A collaborative, team based action learning model. In *Australian Journal of Educational Technology*, *16*(1), 26-44.
- Finger, G. (2003). Conceptualising the Information and Communication Technologies (ICTs) journeys of future teachers and practising teachers: Findings, challenges and reflections. Paper presented at AARE 2003 Conference, Auckland, December. Retrieved September 5, 2004, from http://www.aare.edu.au/03pap/fin03384.pdf.
- Finger, G., Charleston, D., & Baker, N. (2004). *Improving ICT curriculum integration: Informing the links between pre-service teacher education and the continuing PD of teachers.* Paper presented at the ACEC Conference, Adelaide, July.

- Gahala, J. (2001). *Critical issue: Promoting technology use in schools*. Retrieved September 5, 2004, from http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te200.htm.
- Garvey, L (2002). Flexible delivery of professional development in ICT. *QUICK*, 86, pp.8-15.
- Garvey, L. (2004). A Teacher Journey from Access to Engagement with Technology.

 Paper presented at the ACEC Conference, Adelaide, July.
- Grant, C. (1996). *Professional development in a technological age: new definitions, old challenges, new resources*. Retrieved September 5, 2004, from http://ra.terc.edu/publications/TERC_pubs/tech-infusion/prof_dev/prof_dev_frame.html.
- Hord, S. (1997). *Professional learning communities: what are they and why are they important?* Retrieved September 15, 2004, from http://www.sedl.org/change/issues/issues61.html.
- Ingvarson, L., Meiers, M., & Beavis, A. (2003). Evaluating the quality and impact of professional development programs. In M. Meiers (Ed), *Building Teacher Quality: What does the research tell us.* Proceedings of the ACER Research 2003 Conference, Melbourne, October. Retrieved December 21, 2004 from http://www.acer.edu.au/news/documents/Confproceedings2003.pdf.
- Intel® Corporation (2004). *Intel*® '*Teach to the Future*.' Retrieved September 15, 2004, from http://www97.intel.com/education/teach/index.htm.
- Jones, B., Valdez, G., Nowakowski, J., & Rasmussen, C. (1994). *Designing learning and technology for educational reform*. Retrieved September 15, 2004, http://www.ncrel.org/sdrs/engaged.htm.
- Kerans, S. (2000a). Murrumba District tours to schools. *QUICK*, 78, pp. 13-14.
- Kerans, S. (2000b). Three tiers and three bridges. QUICK, 77, pp. 12-19.
- Kessell, S., & Gaynor, I. (2002). *Creating an authentic online learning environment:*Teaching ICT to teachers. Retrieved September 15, 2004, from

 http://www.pa.ash.org.au/acec2002/uploads/documents/store/conferences/conf_8_kessell_gaynor.doc.

- Kleiman, G., & Johnson, K. (2000). Professional development: From reports to reality. *Leadership and the New Technologies*. Retrieved July 27, 2000 from http://www.edc.org/LNT/news/Issue5/feature.htm.
- Lloyd, M. (2000). Reinventing Practice: Online professional development the first year. *QUICK*, 78, pp. 22-25.
- Lloyd, M. (2001). Reinventing Practice: The second year. QUICK, 81, pp. 16-19.
- Lloyd, M., & McRobbie, C. (2003). *Investigation of the practicum model of professional development of teachers in ICT at Kawungan LDC-ICT*. Unpublished report. Centre for Mathematics, Science and Technology Education, QUT. Brisbane, Australia.
- McGhee, C. (1998). A new professional development model for teachers. *QUICK*, 69, pp. 13-15.
- McKenzie, J. (1998). Creating learning cultures with just-in-time support. *Adult Technology Learning*. Retrieved July 27, 2000, from http://www.staffdevelop.org/adult.html.
- McKenzie, J. (2001, March). How teachers learn technology best. *From Now On Educational Technology Journal*, *10*(6). Retrieved September 15, 2004, from http://fno.org/mar01/howlearn.html.
- McRae, D., Ainsworth, G., Groves, R., Rowland, M., & Zbar, V. (2001). PD 2000 A national mapping of teacher professional development. Canberra, Australia: Department of Education, Science and Training (DEST).
- Office of Technology Assessment (OTA) (1995). *Teachers and technology: Making the connection*. Retrieved September 15, 2004, from http://www.wws.princeton.edu/%7Eota/disk1/1995/9541.html.
- Phelps, R., Graham, A., & Kerr, B. (2004). Teachers and ICT: Exploring a metacognitive approach to professional development. *Australasian Journal of Educational Technology*; 20(1), 49-68.
- Prestridge, S. (1999). An online guest event supporting professional development. *QUICK*, 71, pp. 7-12.
- Prestridge, S. & Watson, G. (2003). To skill or to construct? Effective information and communication technology professional development within school reform. Paper

- presented at AARE 2003, Auckland, December. Retrieved December 21, 2004, from http://www.aare.edu.au/02pap/wat02393.htm.
- Rodriguez, G., & Knuth, R. (2000). *Critical issue: Providing professional development for effective technology use.* Retrieved September 5, 2004, from http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te1000.htm.
- Santovec, M. (2004). Doing online professional development online. *Distance Education Report*, 8(18), pp. 4-5.
- Schlager, M., Fusco, J., & Schank, P. (2002). Evolution of an on-line education community of practice. In K.A. Renninger, & W. Shumar, (Eds.), *Building virtual communities: Learning and change in cyberspace* (pp. 129-158). New York: Cambridge University Press.
- Sherman, R., & Kutner, M. (n.d. a). *Professional development resource guide for adult educators*. Retrieved September 5, 2004, from http://www.calpro-online.org/pubs/intro.pdf.
- Sherman, R., & Kutner, M. (n.d. b). *Professional development resource guide for adult educators*. Retrieved September 5, 2004, from http://www.calpro-online.org/pubs/Approach2.PDF.
- Sidey, S., & Stinton, M. (1997). QSITE chapters provide in-service using the CLIC materials. *QUICK*, 66, pp. 14-17.
- Speck, M. (1996). *Best practice in professional development for sustained educational change*. Retrieved September 5, 2004, from http://www.ncrel.org/sdrs/areas/issues/methods/technlgy/te10lk12.htm.
- Stokes, J., & Sidey, S. (1996). CLIC 2 National professional development project days. *QUICK*, 62, pp. 23-24.
- Taylor, D. (1997). Professional development using a technology mentoring plan. . *QUICK*, *64*, pp. 20-21.
- Webb, I., Robertson, M. & Fluck, A. (2004, December). *ICT, Professional Learning: Towards Communities of Practice*. Paper presented at AARE 2004, Melbourne,
 December.
- Williams, M. (2000). *More on learning technology competencies for teachers. QUICK*, 77, pp. 7-11.

- Williams, M. (2004). *AGQTP community Case studies project*. Retrieved September 5, 2004, from http://www.learningplace.com.au/deliver/content.asp?pid=18570.
- Williams, M., & Dundas, A. (1996). SICK: Professional development and resource management at Cooktown State School. . *QUICK*, *63*, pp. 21-24.
- Wilson, E. (2004a, June 8). Intel keeps teachers in touch. *The Age, June 8*. Retrieved September 5, 2004, from http://theage.com.au/articles/2004/06/07/1086460217825.html.
- Wilson, E. (2004b, June 8). Intel keeps teachers in touch. *Sydney Morning Herald, June* 8. Retrieved September 5, 2004, from http://www.smh.com.au/articles/2004/06/07/1086460217825.html.
- Wilson, G., & Stacey, E. (2004). Online interaction impacts on learning: Teaching the teachers to teach online. *Australasian Journal of Educational Technology*, 20(1), 33-48.