

Research article

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Harnessing ICT for quality learning and teaching

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For teachers, quality teaching is linked to a powerful contemporary vision for student learning and the pedagogical approaches that best achieve this. Information and communication technology (ICT) becomes part of the designs for learning that enable the vision and standards to be achieved. For students, quality learning involves harnessing the power of ICT to become successful learners, confident and creative individuals and active and informed citizens, as defined in the *Melbourne Declaration on Educational Goals for Young Australians* (2008). Rather than learning to use ICT for its own sake, students learn to apply the use of ICT for educational purposes.

SparkL (sparking learning and literacy) is a program designed for students currently underperforming in schools. Conducted by EdPartnerships on behalf of four community partners (Brotherhood of St Laurence, Foundation House, Wilin Centre-VCA and Berry Street) SparkL aims to reduce the achievement gap for students with refugee experiences, from Koorie backgrounds and/or low socioeconomic circumstances.

SparkL provides schools with the opportunity to engage creative practitioners (such as film-makers, artists, scientists and business professionals) and supports teachers to design quality learning experiences for students. Several *SparkL* schools have employed professional film-makers to help them provide students with new ways of developing language and literacy.

For students at Sunshine PS, developing a science documentary not only developed a deeper understanding of the physics of light, it also provided a strong motivation to improve oral presentation, write and read as part of script development and team organisation. Targeting an audience of peers, students also successfully considered how best to communicate the findings of their research, which drew upon source material from books, internet and interviews with a local optometrist. The level of understandings demonstrated, particularly in relation to science, thinking and communication, were assessed as above the expected standards for this age group.

How can we know if using information and communication technology is genuinely contributing to better quality teaching and learning? In two English Language Centres, catering for new arrivals in their first six months in Australia, representing ideas visually provided a more concrete stepping stone or bridge to more abstract print and linguistic representations. Narrative film texts, drawing on familiar life experiences or cultural stories, enabled some students to speak confidently to camera in their first language, at the same time creating an authentic purpose for translating dialogue into sub-titles to make their film accessible to an Australian audience. The opportunity to repeat 'takes' encouraged other students to use English language, knowing they could review and re-take their segment to their satisfaction.

Australian Council for Educational Research is currently working on new assessment shells which will enable a finer assessment of growth in oral and written language development, thinking and interpersonal skills for students working in a *SparkL* class. Teacher assessment has already identified a marked increase in vocabulary and the complexity of English language used. Discussing what did and didn't work in a visual narrative or text compared to a print-based text has also helped students to become more meta-cognitive about their own literacy practices.

In 2009 the *SparkL* research team will formally follow up teacher reports of increased student attendance and other indicators of high student motivation and engagement (e.g. students seeking to work on their films through lunch hours, before and after school). The team will consider gains in traditional measures of achievement together with gains identified through new forms of assessment that are more finely tuned to a contemporary view of literacy and learning.

Bibliography

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Quality teaching with ICT involves:

- curriculum designs that include relevance to students, worthy understanding goals, emphasis on rigour and meta-cognition, authentic application of new knowledge and skills
- focus on human purposes (publishing, creating, communicating, collaborating, designing, researching, thinking and analysing) rather than technical proficiency in ICT
- values and beliefs about how students best learn and the role of the teachers (with best results when teachers viewed learning as a partnership, valued students learning how to learn and created opportunities for student voice and agency)
- a repertoire of teaching strategies that effectively address both what and how students would learn
- a contemporary view of literacy embracing multimodality and multiliteracies as a foundation for using digital technologies
- systematic teacher research, documentation and reflection on evidence of student learning
- balanced consideration of progress towards both 'high bar' educational goals such as those of the Melbourne Declaration and 'low bar' enablers or foundations such as expected standards. (O'Rourke, 2003; 2005)

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Further information about the Research Branch is available at: http://www. education.vic.gov.au/researchinnovation/ default.htm

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