Supporting Student Learning Environments in a Digital Age:
Listening to Young People
Executive Summary

Study undertaken for the Teaching and Learning exchange and the Information Technology Directorate

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Purpose of the study

This study has been designed to investigate the ways in which young people’s learning in both formal and informal ways and in school and out of school settings can be supported, primarily, by the provision of digital resources and associated services through the agency of the Teaching and Learning exchange (TaLe). Secondly, to scope future services and tools provided by TaLe and the Information Technology Directorate (ITD) in the NSW Department of Education and Training (NSWDET). It did so by consulting young people and taking their reflections seriously.

Two key concepts that are of a socio-cultural nature and central to understanding how young people learn in a digital environment informed the study. This being cognitive activity, where the learner is actively engaged in both the medium and the message of learning; and social interaction that allows for the development, questioning and analysis of what is being learned through social and machine mediated processes.

The study built upon a considerable body of work that already exists in the area, but drew in a significant way upon Green & Hannon’s (2006) paper prepared for the DEMOS Foundation that investigated with young people the ways in which they understood and employed digital technologies. From their discussions they identified four user ‘types’:

- **Digital pioneers** (who) were blogging before the phrase has been coined;
- **Creative producers** (who) are building websites, posting movies, photos and music to share with friends, families and beyond;
- **Everyday communicators** (who) are making their lives easier through texting and MSN and
- **Information gatherers** (who) are Google and Wikipedia addicts, ‘cutting and pasting’ as a way of life. (p.11)

As well as research that has as its base information regarding uses and affordances of digital technologies, in particular Hand’s (2007) discussion paper which focuses upon providing a conceptual framework for the development of student services for TaLe, 2007 – 2009. Hand’s paper makes a distinction between formal and informal learning which this study further places in the context of inside and outside classroom settings.

Also, in preparation for consulting young people, a recent study conducted by ITD, where adults in school and TAFE settings provided advice regarding the uses of information and communication technology (ICT) in classrooms was considered. ITD facilitated six focus groups with relevant stakeholders from TAFE and schools (100 staff members) to discuss current and future needs in ICT. The focus groups provided valuable insights into current practices in ICT in classrooms across NSWDET, including identifying existing and emerging ICT being used to support learning and teaching.

The study reported here was designed to provide NSWDET, through TaLe and ITD, with a unique opportunity to consult the end users, i.e. students of proposed services and tools to be provided through these two agencies. It posed the following four questions:

1. How is learning understood and constructed by young people?
2. What assists and gets in the way of learning?
3. How do young people learn using digital technologies in and out of school?¹

¹ While it was known and understood that young people use a range of digital technologies including mobile phones and digital cameras, the emphasis in this study was on computers.
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4. What would young people desire in terms of supporting and sustaining their learning using digital technologies?

Participation in the Study

To investigate these questions a qualitative research method was employed – focus group discussion for Stages 3, 4 and 6 students, complemented by student drawing and narrative for Stage 1 students (Total: N=200). A purposive sample of schools was selected for the study – four primary and seven secondary (including one secondary college):

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<thead>
<tr>
<th>School</th>
<th>Region</th>
<th>Stage 1</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 6</th>
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<tr>
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<td>Illawarra &amp; South East</td>
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<td>North Coast</td>
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</table>

* Schools in the Phase 1 Pilot

Findings:

This brief digest of results is supported by a document of over 45 000 words that foreground the responses of the young people who were consulted\(^2\).

How is learning understood and constructed by young people?

It was clear from the discussions and questionnaires that young people understood learning to be a dynamic process which best happens when they are substantively engaged; in contrast to being procedurally engaged.

What assist and gets in the way of learning?

The results clearly indicated that there are four main areas that should be considered here: these relate to: the ways in which the environment is organised; the quality of resources that are available; the quality of pedagogy and accessibility to the power of the Internet. It was clear from student feedback that they believe the new media environment should be one that is flexible and adaptable. Both of these qualities are generally found at home, but not necessarily always at school. In all groups unsolicited responses were generated with respect to filtering. Students, in this study, expressed the view that filtering hindered them in the school setting from gaining access to what they considered to be legitimate learning resources.

\(^2\) In addition to this Executive Summary there is a Report; inquiries regarding the Full Report with Appendices including all the school portrayals should be directed to contact.tale@det.nsw.edu.au
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How do young people learn using digital technologies in and out of school?

The data revealed that young people learn to use a huge range of digital technologies in their homes. Clearly they learn at home by experimenting, problem solving, modelling, and communicating with peers and others. All of these activities take time, time that is less available to them in the school setting.

What would young people desire in terms of supporting and sustaining their learning using digital technologies?

The young people in the study saw themselves not only as what Green & Hannon (2006) referred to as ‘information gatherers’, they also wished for tools that would enable them to engage as ‘everyday communicators’ and be ‘creative producers’. They were looking for what might be termed a “young person's space” where they could conduct forums and employ those multi-media tools which they were accustomed to using outside school. All of these strategies and tools would clearly appear to be an intention of the TaLe Student Learning Environment.

Conclusion:

The report commenced with a discussion of the implications for learning in a digital world. Students who do not have sustained access to the Internet outside the classroom will be disadvantaged in comparison to their peers who do. When young people have significantly more limited access to online resources they gain experience in using them more slowly and sporadically:

this may make it even harder to acquire skills, as the types of hardware, software, and telecommunications connection maybe be constantly changing, preventing (such) users from getting past the beginning of the learning curve (Hawthornthwaite, 2007, p.111).

However, it is not possible to turn away from these complex and visible problems that also involve matters of equity and social justice. Educational organisations have a responsibility to enable students to learn using the burgeoning power of online resources.

Recommendations:

It is in light of these very broad conclusions and the detailed and valuable information provided to the study by participating students that the following recommendations are made.

1. TaLe should provide authoritative access and discovery of learning resources for students as well as teachers.

Students would also like the following services to be provided for them, whether through the TaLe Student Learning Environment, Learning Systems or other NSWDET projects:

2. Student learning would benefit from access to and use of tools for authoring, manipulation, and self expression allowing them to be creative producers;

3. Student learning would benefit from collaborative tools and environments for dialoguing, evaluating, reflecting, exploring, and jointly constructing among and between students, teachers and other expert persons; and

4. Student learning would be enhanced by providing an online workspace for sharing, storing and accessing files for both formal and informal learning.
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Desiderata:

The adoption of these tools and services will require attention to be paid to: features of pedagogy including new learning with new media; the provision of physical and temporal spaces for learning; and, school-based leadership in the employment of ICT. These are broader desiderata and have been nominated as such, rather than as specific recommendations for those more directly engaged in providing innovative digital learning resources and tools.

1. Those responsible for the enhancement of teacher professional learning would benefit from examining the three dimensions of the NSW model of Quality of Teaching: intellectual quality (deep knowledge, deep understanding, problematic knowledge, higher order thinking, metalanguage and substantive communication); quality learning environment (explicit quality criteria, engagement, high expectations, social support, students’ self-regulation and student direction); and, significance (background knowledge, cultural knowledge, knowledge integration, inclusivity, connectedness and narrative) and prepare materials that will support the full and positive integration of new learning with new media into teaching and learning within that pedagogical framework.

2. Learning at school would benefit from examining the learning spaces and blocks of learning time that is made available to students and address those organisational matters that inhibit students’ use of digital resources and tools.

3. Student learning would benefit from school leaders continuing their support of staff confidence and competence in the use of ICT in the classroom.

Acknowledgements

This study has been supported by a number of people who have played a major role in collaborating with the researcher in its design, implementation and interpretation. These being: Jane Hunter and Tim Hand (TaLe, Centre for Learning Innovation); Rosemary Constable and Angela Kasimis (Learning Systems Development, Information and Technology Directorate) and Sue Beveridge, who provided leadership and guidance in her role as Assistant Director for Teaching and Learning Innovation (Centre for Learning Innovation).

Jane, Rosemary and Angela were not only active in setting up Phase 2 but made the many site visits and spent hours in negotiating and writing eight school portrayals and ensuring that they remained faithful to the student voice that informed them. They were ably assisted by Charmaine Rebeira (Centre for Learning Innovation) who transcribed focus group discussions in this phase of the study.

It is also important to acknowledge the case study schools who undertook all the necessary arrangements that allowed the focus group discussions to take place as well as providing teacher observers who could undertake the necessary membership checks. All of this was undertaken with great goodwill and enthusiasm.

Finally thanks are extended to the young people who provided us with such uninhibited and fearless advice regarding their experiences and hopes for the future.
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References


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