Students struggle to evaluate credibility on the net

A study of students’ ability to evaluate digital texts has revealed that teenagers find it particularly difficult to determine the credibility and trustworthiness of material on the internet.

ACER Senior Research Fellow Tom Lumley and ACER Research Director Juliette Mendelovits report on research investigating how well young people deal with information online.

How well do young people deal with contradictory and unreliable information online? That’s a question we investigated using data from the first large-scale international assessment of online reading, the digital reading assessment that was part of the 2009 OECD Programme for International Student Assessment (PISA).

Our study provides empirical evidence – presented at the 2012 Annual Conference of the American Educational Research Association in Vancouver, Canada, in April – that students are better able to evaluate the relevance of content they are presented with than to make basic evaluations about the credibility and trustworthiness of digital texts.

Students’ ability to evaluate digital texts available online is of significance because such content is in many, perhaps most, cases not subjected to the traditional mechanisms that in print publishing exert some control over its authority, reliability, credibility and trustworthiness.

To see how well they are able to evaluate digital texts available online, we analysed data from a field trial for the PISA digital reading assessment conducted in 2008 as well as from the PISA main survey in 2009 in terms of two distinct types of critical judgement that are called upon during online reading – predictive judgements and reflective judgements – as identified by Soo Young Rieh in her 2002 paper, ‘Judgement of information quality and cognitive authority in the web’ in the *Journal of the American Society for Information Science and Technology*.

Rieh’s predictive judgements are the kinds of judgements that students make about which site to go to, based on relevance, authenticity and authority. Rieh’s reflective judgements are the kinds of judgements that students must make once a site has been reached, about its authority, reliability, credibility and trustworthiness.

We found that tasks requiring students to identify contradictory information appeared to be relatively easier than tasks requiring evaluation. We found that in fact the latter kind of tasks are relatively challenging for 15-year olds, and those demanding the critical appraisal of texts for credibility or trustworthiness are particularly difficult.
There is an assumption that students – so-called ‘digital natives’ in our schools – are able to use online resources in their studies that are not only relevant to the tasks they are set, but also are likely to provide trustworthy information. In order to make judgements about the reliability, credibility and trustworthiness of online content, however, students need to have criteria for evaluating information, and need to be taught how to make evaluations. This message is of critical importance to policy makers and teachers.

The full paper, 'How well do young people deal with contradictory and unreliable information online? What the PISA digital reading assessment tells us’ is available from: research.acer.edu.au/pisa/3/
Vocational education and training in schools

The number of students studying technical and vocational subjects in senior secondary school has increased, and the majority immediately enter further education and training, according to a survey of Victorian school leavers.

The annual On Track survey, conducted by ACER for the Victorian Department of Education and Early Childhood Development, surveyed more than 35 000 young people who completed the Victorian Certificate of Education (VCE), the International Baccalaureate (IB), the intermediate or senior Victorian Certificate of Applied Learning (VCAL), or a combined VCE-VCAL.

The survey included young people who completed their qualification in school (98.2 per cent) or in TAFE institutions or adult and community education providers (1.8 per cent). The surveys were conducted in April and May 2011 on young people who finished or left school in 2010. The report was published in June 2012.

While the vast majority (93.9 per cent) of school completers received a VCE or completed the IB, over 2100 young people completed VCAL instead. The proportion of school leavers who received a VCAL increased from 4.6 per cent in 2008 to 6.1 per cent in 2010. Close to 500 of the VCE recipients obtained a VCAL as well.

Apprenticeships, traineeships and employment were the most common destinations of VCAL completers, accounting for 61.8 per cent of the VCE-VCAL group and 60.2 per cent of the VCAL-only group. Certificate-level study was the next most common destination for VCAL completers. Enrolment in Certificate I-IV courses accounted for 25.6 per cent of VCAL-only completers and 24 per cent of VCE-VCAL completers.

The project also surveyed young people who included some Vocational Education and Training (VET) units in their VCE, known as VET in Schools. Bachelor degree study was the most common destination for those who included some VET in their VCE, accounting for 37.2 per cent of the 9000 VET in Schools completers. The proportion of VET in Schools participants entering higher education has increased since the first On Track survey, rising from around 18 per cent in 2003. A further 24 per cent of VET in Schools completers went on to enrol in Certificate I-IV courses and 33.5 per cent were engaged in an apprenticeship, traineeship or employment in the months following graduation.

On Track also interviewed 3700 early school leavers about their post-school pathways. Early school leavers were defined as students in Years 10, 11 and 12 who enrolled in VCE, IB or VCAL but left school without completing the qualification.

More than one-half (55.3 per cent) of the early school leavers in the survey were engaged in some form of education or training at the time of the survey. Apprenticeships and traineeships were the most common destination for early school leavers, accounting for 35 per cent of the group, while 20.2 per cent were enrolled in Certificate I-IV courses. A further 24 per cent were in full- or part-time employment, while 16.2 per cent were looking for work and 4.5 per cent were not in the labour force, education or training.
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For more information about *On Track*, including the annual destination reports, visit:
Healthy prognosis for medical assessment

Findings from the pilot of a test of final-year medical students’ learning outcomes show that almost all participating students found the assessment relevant to their degree and to future professional practice.

The pilot phase of the Australian Medical Assessment Collaboration (AMAC) was completed in May 2012. The project focussed on the feasibility of generalisable assessments for final-year medical students and was conducted by a consortium of staff from the University of Queensland, Monash University and ACER.

Seven medical schools and approximately 500 students participated in the pilot. All students received individual reports which outlined their achievement in key content areas of the assessment framework relative to the other participating students. Participating schools also received institution reports illustrating their cohort’s performance.

The project successfully gathered both substantial data on assessment items for psychometric evaluation and feedback from participating students. The processes have also provided insight into the possibility of benchmarking strategies for participating institutions.

In an exit survey, over 80 per cent of students stated that the pilot assessment was either ‘very’ or ‘quite’ relevant to their medical degree and to their future professional practice. Only two per cent selected ‘not at all’ or ‘very little’.

Student feedback highlighted the appropriateness of the assessment. One student responded: ‘I thought the test was one of the most reasonable ones I’ve done as a med student. Generally they are so abstract that there is no point studying. This test was very appropriate’.

The pilot assessment was built with specific reference to the AMAC Assessment Framework—a blueprint for the possibilities of final-year assessment of medical students, separated into content and process domains. The pilot assessment measured students' knowledge and understanding of clinical problems and conditions in a clinical context. It is envisaged that future incarnations of AMAC will also assess medical skills and procedures, and aspects of professional practice (such as communication, clinical management and professionalism), coupled with processes of demonstrating and implementing in a clinical context.

Assessment consistency, fairness and standardisation were achieved through the development of high quality assessment items, validated by qualified and experienced medical education experts and clinicians. Items for possible inclusion were submitted from nine Australian medical schools, before being subjected to a rigorous quality assurance process. Revised items were discussed at workshops before being validated and selected for the pilot.

Preliminary analyses suggest that the pilot assessment was statistically reliable. Further psychometric analysis will be conducted over the coming months.
AMAC was funded by a grant from the Australian Government’s Office for Learning and Teaching (OLT). A national report will soon be released for the OLT and planning is underway for a new phase of AMAC. This next phase will focus on development, implementation and benchmarking approaches.

In an engagement forum held at the University of Queensland in June 2012, Professor David Wilkinson, Dean of Medicine and Head of the School of Medicine at the University of Queensland, opened the invitation for the next phase of AMAC to every medical school in Australia. ACER Higher Education Research Director, Associate Professor Hamish Coates, similarly emphasised that AMAC aims to be a truly collaborative exercise between Australian medical schools.

For further information visit: www.acer.edu.au/amac
ACER Update

Research Conference 2012
School Improvement: What does the research tell us about effective strategies?

ACER’s annual research conference will take place at the Sydney Convention and Exhibition Centre, Darling Harbour, from 26-28 August 2012. Further information including registration details, the conference program and a list of speakers is available from www.acer.edu.au/research-conference. Enquiries may be directed to Margaret Taylor by phone to 03 9277 5403 or by email to (JavaScript must be enabled to view this email address).

ACER brings leading US autism expert on first visit to Australia

Respected autism spectrum disorder specialist, Dr Marilyn J Monteiro will make her first visit to Australia in July to present a number of workshops for ACER. Marilyn will also present, in conjunction with renowned Asperger's Syndrome expert Professor Tony Atwood, a two-day Master Class designed to provide practitioners with current information regarding the identification of, and intervention planning for, children, adolescents and adults with autism spectrum differences. For further information on these events, visit the ACER Psychology website.

Higher education student engagement conference

ACER and the LH Martin Institute are co-hosting the 2012 National Student Engagement Conference, on the topic ‘Enhancing retention and outcomes in a competitive environment’. The conference will bring together stakeholders from across the sector to discuss how Australian tertiary education can assure and enhance students’ engagement in effective educational practices to boost quality and productivity.

The 2012 National Student Engagement Conference takes place in Melbourne on 30-31 October. Two half-day pre-conference workshops will address using technology to engage students and using student voice data for change. Further information, including a list of speakers and registration details, is available from: www.acer.edu.au/highereducation/courses-and-conferences/