Premier’s Samsung Technology in Rural and Remote Schools Scholarship

An Investigation of Best Practice in ICT for Delivering Foundation Skills to Remote and Indigenous Adult Learners

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As TAFE NSW develops its online learning strategy as described in NSW TAFE Commission’s report, [*A Vision for TAFE NSW*](https://www.nsw.gov.au/sites/default/files/news/vision_for_tafe_nsw.pdf) (2016) and the [OneTAFE](https://www.tafensw.edu.au/media-centre/2016/july/onetafe-gets-thumbs-up-in-the-west?meta_C_or=news&rel=news%20) announcement of 13 July, 2016, TAFE students can be considered to fit into three categories:

* 1. Fully independent students – These students may be working and are daily users of technology. TAFENSW is providing well for this group with digital learning environments and plans to further develop this area. This group is outside the scope of my investigation.
  2. Vocational students in need of support – These students are often resuming study to re-enter the workforce after an extended break, for instance, to raise children, following illness or to re-train following retrenchment. These students may use technology for a variety of simple purposes and/or have been successful learners in a pen and paper environment in the past.
  3. Foundation students – These students haven’t completed high school and include the long-term unemployed, those recently disengaged from school, with learning disabilities etc. These learners are generally from lower socio-economic backgrounds and have multiple barriers. Often they’re enrolled in stand-alone foundation courses, or may be co-enrolled in pre-vocational courses, where vocational and foundation teachers deliver concurrently. Young people will mostly use computers for limited purposes (Facebook and YouTube), while those of mature-age may have little knowledge or experience with digital and communication technology (ICT) in their home environments.

The main focus of my study tour was the third group, foundation students, known in Canada as Adult Basic Education (ABE) students. I wanted to investigate how to provide quality and inclusive learning experiences to foundation learners in rural and remote technology. Low incomes limit availability of computers and other information communities; how ABE is delivered to remote Canadian learners, many of whom are Aboriginal; and how ICT is used for ABE learners. I was also interested in how vocational students in the second group – vocational students in need of support – are supported.

My tour included meetings with adult educators working in a range of contexts across rural and remote British Columbia (BC), as shown in Table 1, and participation in the 2016 National Great Teachers Seminar in the Canadian Rockies at Banff, Alberta.

Canadian community colleges are similar to TAFE institutes, being publically funded to provide post-secondary training suited to regional needs. Overlap occurs between college and university, and between school and adult education. Funding for adult education is also similar in being mainly a Provincial (State) responsibility, although Federal funding is provided for Aboriginal students. While Australia has a Work For The Dole Scheme with strict activity requirements including education and training needed to receive government benefits, Canada makes little connection between job seeking activities and payments (OECD, 2015).

Foundation learners in BC and NSW face similar, significant barriers. Specific barriers mentioned by BC educators included not having completed high school, drugs, mental health issues, poverty, being victims of abuse and more.

Table 1: Places and contacts visited during Study Tour

|  |  |  |  |
| --- | --- | --- | --- |
| **Organisation** | **Place** | **Contact** | **Role** |
| **Schools, Colleges, Universities** | | | |
| Edgewood Elementary School (SD10) | Arrow Lakes | Andrea Galloway | School Secretary |
| North Island Distance Education School NIDES | Courtenay | Jennifer Hibbert | Aboriginal Student Support |
| Northwest Community College | Haida Gwaii | Fraser Earl | Adult Educator, Program Coordinator |
| Okanagan College | Salmon Arm | Tracy Riley | Adult Literacy Instructor |
| Okanagan College | Vernon | Daniel De Groot | Library Assistant |
| Street School (part of SD73) | Kamloops | Pete Grinberg  Tonia Gillespie | Coordinator  Social Worker |
| Thompson Rivers University TRU-OL | Kamloops | Hillary Parsons | Associate Registrar |
| Vancouver Island University | Nanaimo | Janet Sinclair | Aboriginal Student Transition Advisor |
| **Community Literacy Organisations** | | | |
| Columbia Basin Alliance for Literacy | Revelstoke | Tracy Spannier | Community Literacy Coordinator |
| Junction Literacy & Youth Centre | Vernon | Wendy Aasen | Community Literacy Coordinator |
| Literacy Alliance of the Shuswap Society (LASS) | Salmon Arm | Darcy Calkins | Literacy Outreach Coordinator |
| Literacy in Kamloops | Kamloops | Fiona Clare | Literacy Outreach Coordinator |
| **Other** | | | |
| 2016 Canadian Rockies National Great Teachers Seminar (MacEwan University) | Banff, Alberta | Shelley Josey | Administrator |
| Nexus (Job Service) | Vernon | Lynn Belsher | Executive Director |

Indigenous Education

*Vancouver Island University (VIU)*

At VIU I met Janet Sinclair, Aboriginal Student Transition Advisor, who supports Aboriginal students and teaches on the First Nations Aboriginal University Bridging Program, developed in consultation with communities across BC to provide First Nations students with meaningful and accessible prerequisite courses. Although some technology is used to support learning, the focus is on face-to-face classroom learning, coaching and mentoring. Students come from different parts of BC and reside on Vancouver Island while they study.

Cultural support for First Nations students is important for study success. Nine Aboriginal Elders work part-time, delivering cultural programs and supporting Aboriginal students.

Previously paid ‘honoraria’, now they’re paid the same rate as lecturers, recognising their depth of knowledge, although they may not hold formal qualifications. Aboriginal Elders in Australia likewise hold deep knowledge not usually aligned with western institutions and academic qualifications (Purdie, Milgate & Bell, 2011).

*Haida Gwaii*

It was a privilege to visit the remote islands of Haida Gwaii and learn about Haida culture and the educational opportunities there. My host was Fraser Earl, who teaches and programs for North West Community College’s Haida Gwaii colleges. NWCC rents office and teaching space at the Haida Heritage Centre at Kay Llnagaay. Constructed recently, and based on traditional building style and techniques, it houses many local cultural artefacts. Several carved totem poles stand proudly in front of the building, facing the sea. Haida culture stands strong at the centre, and although half the population of Haida Gwaii is Haida, Fraser says ‘about 98 percent’ of his students are Aboriginal.

Of the 198 First Nations governments (or Bands) in BC, the two Bands on Haida Gwaii are seen as examples of resilience and leaders in negotiations concerning self-determination.

Distance education and on-line courses have been used in attempts to cut costs but have largely been abandoned now for Haida Gwaii. Although he recognises some institutions have focused strongly on these methods of delivery and that they can help programs run, Fraser points out the following issues at Haida Gwaii:

* + Each site still needs a supervisor; you can’t run programs in unstaffed colleges.
  + You still need to pay two staff members.
  + Students need help with the technology; ‘you can’t abandon them’.
  + A three-second delay in Skype/video conference (VC) speech impedes teaching and learning.
  + Students aren’t interested in sessions delivered by Skype/VC.
  + Face-to-face support is very important for indigenous learners.
  + All learners want support.

Attempts to deliver programs by distance on Haida Gwaii have largely been abandoned as ultimately they weren’t found to save money.

*Blue Quills University*

I met Sherri Chisan, Director of Programs & Research at Blue Quills University, at the Great Teachers Seminar in Banff. Blue Quills is an Indigenous non-profit educational institution, located in a former residential school that became a community college and university last year. ‘In my own graduate work I realised we need to teach our teachers what we want our children to know.’ Sherri comments that, ‘[O]ur challenge is to help our own people recover, restore our memory, our knowledges, our languages, and share those with the ones who have come to share our lands’. This is done through cultural learning and experiences that take place on site.

Online learning

*NIDES*

North Island Distance Education (NIDES) uses the delivery platform D2L and Blackboard Collaborate, mainly for home-schooled children although it also caters for adults seeking high school graduation. Delivery appears fairly standard. Changes in funding have reduced current adult enrolments.

*TRU-OL*

Thompson Rivers University Open Learning section (TRU-OL), in Kamloops, offers a range of online courses suited to higher level students rather than foundation learners. My visit to their Open Learning Centre revealed:

* + The range of ABE courses was limited and enrolment elsewhere was recommended.
  + There appeared to be little support at the remote locations.
  + Support needed to be requested by the student and was then available by phone.
  + Printed materials were the solution to band-width or technical issues.

*Great Teachers Seminar*

The Canadian Rockies Great Teachers Seminar has been providing opportunities for college and university teachers to reflect on their practice and learn from each other for more than 30 years. Its democratic model is focused on developing excellence in teaching rather than on institutional or bureaucratic demands. It ran for four days with 36 participants and eight facilitators. A session about effective technology use provided several recommendations:

* + Voicethread enables students to contribute to discussions with voice and video as well as typed responses so is inclusive for students with literacy barriers.
  + Adobe Connect is accessible from most devices so students don’t need to attend college for VC.
  + Facetime is convenient for learner groups to communicate using mobile technology.
  + Using blogs for weekly updates and discussions provides greater accessibility and convenience compared to logging in to Moodle or D2L, and Facebook notifies updates.
  + Conrad and Donaldson’s (2011) *Engaging the Online Learner* is recommended reading.

I undertook a quick survey of participants during a plenary session and found that:

* + 44 per cent had delivered programs online.
  + 39 per cent thought that high-quality online delivery of ABE is possible.
  + 33 per cent liked the idea of delivering ABE this way.

The Human Factor

*Okanagan College*

Crossing central BC I visited three Okanagan College campuses that all reminded me of rural TAFE colleges. Tracy Riley teaches a Fundamental (Year 9 equivalent) class at Salmon Arm in a room furnished with large round tables instead of desks.

Tracy provides a teacher-led English class based around shared reading of novels of appropriate reading level that are chosen by the class. With up to 90 per cent Aboriginal students, Tracy says, ‘Reading is power,’ because of its similarity to oral storytelling. Maths classes are also provided, and a computer class once a week. Only the Business Section of the college provides some online learning via a Moodle platform. On the whole, the college promotes face-to-face classes as being a point of difference from other providers. Learners are supported in other courses through the college’s Success Centre, where volunteers are the backbone of support.

*Street School*

Street School, in a shopping centre in Kamloops, provides for adults who want to finish high school. This drop-in, self-paced learning space targets marginalised adults and street people. Pete Grinberg has coordinated since it began in a goal more than ten years ago. Social worker Tonia Gillespie has been with Street School since 2007 and provides the school’s outreach arm. Together the two provide the continuity and vision of this remarkable school, which runs with four teachers, a resident social worker provided through community partnership, and a team of volunteer tutors.

ICT hardly figures in the mix – there’s only one computer available for student use. Pete explained that although there’s a place for technology and online learning, it’s not for people with lower levels and high needs. It’s the human factor that such learners need and technology tends to be a barrier. However, food is integral to the program – shared meals help to build a community of learners.

The shift away from technology in BC extends to mainstream schools. A high school teacher on Vancouver Island told me that a large computing facility at his school is now rarely used because emphasis has shifted from technology to developing a ‘community of learners’, and specific content is now less important than learning to learn.

Literacy – A Community Approach

*Decoda and use of volunteers*

Decoda (previously Literacy BC) helps fund regional literacy outreach coordinators whose scope is whole of community. Volunteer literacy tutors receive 20 hours training and are then matched with students to work with one-to-one. Most of the volunteers are retirees and a focus of training is teaching volunteers to accept the barriers faced by students and how sometimes those means students don’t show up at arranged times and so on.

The three coordinators I met had a strong focus on family literacy (parents and young children) and programs for seniors to master digital technology, usually bringing their own devices. Decoda also provides resources for tutors and learners. One coordinator stated, ‘At the end of the day the face-to-face, real person is what people are looking for… Even in schools, it’s one-on-one; that’s where we get the gains.’

Significant Learning

The unexpected and significant learning that emerged from my investigation was how little use was made of online learning for ABE students in BC, and the strong emphasis on human relationship. NSW is taking a different path, by emphasising technology use to increase flexibility and mitigate costs of delivery to remote locations. With most jobs now including technological requirements, this is a sensible approach as it also prepares students to work with technology.

However, not everyone can cope or learn easily in an online environment. My findings in Canada tell us that foundation learners especially require high levels of human support. Locally, the recently published book, *Beyond Economic Interests*, contains several essays supporting this theme (Yasukawa & Black, 2016). TAFE’s Community Service Obligations and high numbers of students with disability mean we must work with individual needs and not think one size fits all. It’s reassuring to hear NSW Skills Minister John Barilaro’s assurance that increased reliance on technology would not replace face-to-face teaching(TAFE NSW Media Centre, 2016).

Web content can provide an enriched learning environment for foundation learners while helping develop technical skills for future work, such as going online to find a document, interview or information from websites. Technology can provide adaptive technologies such as text to speech; however, the documents must be accessible as many PowerPoints and some PDF files cannot be read by all apps.

Whilst in BC I came across the impressive [BCcampus Open Textbooks Project](https://opentextbc.ca/), which provides hundreds of free open source online textbooks. They include BC Reads Adult Literacy Fundamental English online readers with such related activities as [Book 2](https://opentextbc.ca/abealf2/) about black poet Langston Hughes.

The readers have text and audio, along with activities related to content. Font size and line spacing are adjustable. It would be excellent if similar resources were freely available in Australia, and read with an Australian voice.

However, simply providing technology to students may not improve learning outcomes. A past Premier’s Teacher Scholarship recipient reported that an iPads for learning pilot program found that although ‘… 90 per cent of students reported that learning was more fun with iPads…’, improvements in learning were more significant in primary students compared to secondary-aged students (Fagan, 2015). Disengaged youth may be distracted by the fun and fail to learn.

Online learning is increasingly being provided for convenience, flexibility and to save costs. *A Vision for TAFE* NSW (2016) reports that 57 per cent of TAFE students are working. They’re likely to be using technology in the workplace to some degree and readily adapt to online learning. These are the fully independent students who are outside the scope of this study. But of the 43 per cent non-working students, significant numbers are likely to struggle with online study, at least initially. They may not have been in a learning environment for a long time and lack the study skills required for success in online learning. Perhaps they’re older people who are relatively new users of computers and technology. They could be from lower-socio economic backgrounds and unable to afford a home computer or internet access. Some will be recent school leavers who may know how to access YouTube and FaceBook to see their friends but lack the skills and critical literacy required to engage effectively with the online learning environment. These are the vocational students who may be in need of support.

Feelings of shame can inhibit engagement in online learning, for instance, lack of participation in VC sessions, or students in remote VC locations being zoomed out so far that teachers can’t see their faces clearly. It may mean that work involving ICT isn’t attempted without support. For example, higher education adult teaching students were reported by Herrington (2009) to have found an assignment task that required using smartphones to produce short teaching resource videos ‘initially quite overwhelming’. With clear steps and teacher support, all students eventually completed the task; some commenting that without attempting the task they would not have realised how simple it was.

NSW doesn’t yet have a particular strategy for adult literacy and numeracy outside the K–12 school system. As Keiko Yasukawa stated in the 2014 NSWALC AGM President’s report: ‘community based ABE programs have been cut’, replaced by ‘a proliferation of “products” for assessment and training.’ Community literacy organisations could help fill the gap that I’ve noticed in New South Wales, where the emphasis is so much on accredited courses and work outcomes that literacy needs are largely unmet.

Volunteer literacy tutors cannot replace specialised teachers, but they bring other benefits. One-to-one learning opportunities allow customising for specific learner needs and opportunities to develop strong relationships that support students’ learning.

In the present NSWTAFE environment, the only way adult learners can access one-to-one learning is when specific learning disabilities apply. Even one-to-one tutorial support for Aboriginal learners no longer exists. I believe there’s scope for volunteers to play supporting roles.

I began working as a literacy teacher in one of New Zealand’s community-based volunteer literacy organisations that are supported by Literacy Aotearoa (Literacy Aotearoa, 2016). Western Australia has had a volunteer group for adult literacy, Read Write Now! since 1977 and *Literacy Matters* (2016) proposes the WA State Library lead development of a state-wide, cross sector literacy strategy. Tasmania has also made a commitment to community-based literacy for adults with last year’s launch of the 26Ten project. The [Smith Family Home Tutor Scheme](https://www.thesmithfamily.com.au/home-tutor-scheme) for the Australian Migrant Education Program students has run since 2003 under funding from the Australian Department of Education and Training.

Unfortunately, the NSW Government doesn’t appear to have a specific commitment to adult literacy. The State Library of NSW announced an [early literacy project](http://www.sl.nsw.gov.au/public-library-services/early-literacy-project) in March 2016 and the [NSW Premier and government’s key priorities](http://www.rdacentralwest.org.au/wp-content/uploads/2015/03/NSW-State-Priorities-brochure.pdf) consider literacy and numeracy only in a school K–12 context. There is a real need for NSW to create a strategy for adult language, literacy and numeracy, including links across community and vocational education and training networks and possibly using the Canadian/BC community coordinator and volunteer system as a model.

Recommendations

*National Level*

* + **Recommendation 1** — A high-quality National Broadband Network is essential for any online delivery to succeed and the expectation of this underpins all other recommendations.

*State Level*

* + **Recommendation 2** — We need to ensure sufficient allocation of funds and resources to cater for the complex needs of foundation learners, including counselling, social and youth work services plus one-to-one support, when warranted, for students who have a disability or who are Aboriginal.
  + **Recommendation 3** — We need to develop an adult literacy strategy for NSW, including allocation of funds for coordination across and between sectors.

*TAFE NSW Level*

* + **Recommendation 4** — We need to provide learning centres at every campus, including remote, using face-to-face teachers to support online students.
  + **Recommendation 5** — We need to ensure that technology-rich, learner-centred, face-to-face classes are available for all foundation students.
  + **Recommendation 6** — In consultation with local Aboriginal peoples, wherever possible, we need to incorporate local cultural aspects (visual, process etc.) into facilities and educational delivery.
  + **Recommendation 7** — We need to ensure that all online learning resources are fully accessible and readable by JAWS and other text to speech software.
  + **Recommendation 8** — At least biennially, we need to provide teachers with campus-based professional development in online/connected classroom delivery and associated technology use (such as TAFE Western’s [Technology2U Roadshow](https://www.tafewestern.edu.au/news/tafe-western-staff-appreciate-technology2u-roadshow)).

*Commercial / App development*

* + **Recommendation 9** — We need to develop a good-quality, free Australian voice for text to speech narration.

In closing, I wish to acknowledge the sponsorship of Samsung Technology Australia. Award of the 2015 Premier’s Samsung Technology in Rural and Remote Schools Scholarship provided the opportunity for me to begin this investigation and set it in a global context. In the future, I hope to undertake further formal study on this topic.

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