



Work



Life

Considerations for applying blended learning programs within TAFE

Emma Watson

Department of Education and Training Victorian Government Fellowship

An ISS Institute Fellowship sponsored by

The Higher Education and Skills Group



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i. EXECUTIVE SUMMARY

This Fellowship has allowed the Fellow, Emma Watson, to undertake a study tour of two San Francisco based adult education facilities and attend two eLearning conferences in the USA, to better understand how learning platforms and learning tools are selected to encourage both teaching staff and students to engage fully in blended learning.

The Fellowship focused on three key areas:

1. The range of current technology choices available when developing blended learning courses
2. The significance of teacher technological proficiency when implementing blended learning
3. The overall framework for implementation of successful blended learning programs for TAFE learners and teachers.

The spring-board of the Fellowship involved attendance and participation at two technology and education related conferences in Las Vegas, Nevada (DEVLEARN 2015) and Orlando, Florida (Online Learning Consortium International 2015) to study:

- Latest trends in Learning Management Systems (LMS) related digital pedagogy, and how they apply to vocational education and training
- Emerging technologies for online and blended classrooms
- Developing a blended learning course that supports adult learning principles related to authentication, collaboration, self-direction and reflection
- How to improve online and blended learning effectiveness through broad organisational cultural acceptance.

As well as the conferences, the Fellow participated in two full day training programs, firstly in the cognitive science of learning and secondly in the Online Learning Consortiums application of a Scorecard for measuring Blended Learning success. Some of the areas investigated during these sessions were:

- The effects of teacher technological proficiency on the effective delivery of blended courses
- The acceptance of learners and teachers to learn and teach inside blended learning programs
- The role of subject matter experts in the development of blended content
- Technological choices for different learner demographics and identified areas of disadvantage
- Identification of 'lessons learned' in the implementation of blended learning programs
- The transformation process of existing content to interactive multi-device learning assets.

Watson attended these two sessions whilst also interviewing a number of instructional designers and corporate and educational institute professors and managers to gain an understanding of the US application of the blended learning arrangements. Watson gathered appropriate information, knowledge and experience from the tour to enable her to address the three areas above. In doing so she has been able to draw out a number of practical recommendations for relevant stakeholders to support the successful implementation of 'compliant' blended learning within TAFE.

i. EXECUTIVE SUMMARY

There were a number of significant findings from the Fellowship, namely:

- The distinct difference of designing learning content for blended learning programs compared to traditional face to face learning
- The significant gap between students demanding the use of educational technology in their course and the teachers' lack of skills and ability to provide it, will continue in to the next century
- The selection of 'technology tools' to implement a successful blended learning program is critical.

Above all, this Fellowship has highlighted that blended learning has and will continue to impact the vocational education sector significantly. Whilst a focus on student experience is integral, the teacher's skills and engagement is critical to the long term success and adoption of any new technologies. Skills such as self-direction, collaboration, reflection and self-assessment are essential for student's success now and in their future careers. The traditional, classroom based learning environments and the online learning environment need to be integrated in order to combine for better student outcomes.

It is now an obligation of all educators to promote and provide flexible learning options for their learners. This Fellowship has highlighted that it is not just about building a one off digital learning event, but that we must also provide support and education for the teachers and support staff to design and develop customised learning that is fit for the educator, the learner and the workplace. It must be available anywhere and at any time. Aligned to these proposed new obligations of 21st century education are potentially high rewards in student outcomes, lower operating costs and higher satisfaction from both staff and learners.

This report provides an overview of the Fellowship experience. It includes a series of recommendations for government, education and training providers, our community and the ISS Institute. These recommendations also include suggestions for engaging in knowledge transfer activities.

The Fellow would like to thank those who have supported her to undertake this Fellowship. She has already begun to share her findings and the knowledge and experience gained and will continue to do so.

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ii. ABBREVIATIONS/ACRONYMS

ASQA	Australian Skills Quality Authority
ICT	Information and Communication Technologies
LMS	Learning Management System
MOOC	Massive Open Online Courses
Moodle	Modular Object-Oriented Dynamic Learning Environment
OER	Open Educational Resources
OLC	Online Learning Consortium
RTO	Registered Training Organisation
TAFE	Technical and Further Education
USA/US	United States of America
VET	Vocational Education and Training

iii. DEFINITIONS

Assessment

Tasks or activities related to testing a particular standard to the point of achieving a positive or 'competent' outcome.

Blended / Hybrid learning

An approach to using technology that seeks to integrate different tools and methods and employ them in one program. The 'key' training idea that is underpinned by blended learning is 'choice'. Blended learning can thus respond to different training needs.

Blog

On line forum for sharing information.

Delivery

Tasks or activities related to the training of content.

ELearning

Learning conducted via electronic media, typically on the Internet.

F2F

Face to Face learning.

Instructional Design

A construct referring to the step-by-step prescriptive procedure for creating instructional materials in a consistent and reliable fashion in order to facilitate effective learning. More recently and since the large scale application of WEB2.0, it is synonymously manufactured using digital tools and digital learning design.

Learning Management System (LMS)

A software application for the administration, documentation, tracking, reporting and delivery of eLearning education courses or training programs. Learning Management System range from systems for managing training and educational records to software for distributing online or blended/hybrid courses via the Internet with features for online collaboration. TAFEs and universities use LMSs to deliver online courses and augment on-campus courses.

Moodle

Moodle (acronym for Modular Object-Oriented Dynamic Learning Environment) is an eLearning platform, also known as a Learning Management System, or Virtual Learning Environment (VLE). The Gordon's online learning management system is known as 'Gordon Online'.

Open Educational Resources

OER are educational materials which are licensed in ways that provide permissions for individuals and institutions to reuse adapt and modify the materials for their own use. OER can, and do include full courses, textbooks, streaming videos, exams, software, and any other materials or techniques

iii. DEFINITIONS

supporting learning.

Portal

A web portal is most often one specially-designed web page at a website which brings information together from diverse sources in a uniform way.

Standards for RTOs 2015

A set of eight standards that outline the quality process that Registered Training Organisations (RTOs) must have in place in order to be deemed a compliant training provider.

VET

An internationally applied system of education that focuses on practical skills training particularly popular in Australia.

1. ACKNOWLEDGEMENTS

Emma Watson thanks the following individuals and organisations that have generously given of their time and their expertise to assist, advise and guide her through this Fellowship program.

Awarding Body – International Specialised Skills Institute (ISS Institute)

The International Specialised Skills Institute (ISS Institute) is an independent, national organisation. In 2015 it is celebrating twenty-five (25) years working with Australian governments, industry education institutions and individuals to enable them to gain enhanced skills, knowledge and experience in traditional trades, professions and leading edge technologies.

At the heart of the ISS Institute are our individual Fellows. Under the Overseas Applied Research Fellowship Program the Fellows travel overseas. Upon their return, they are required to pass on what they have learnt by:

- Preparing a detailed report for distribution to government departments, industry and educational institutions
- Recommending improvements to accredited educational courses
- Delivering training activities including workshops, conferences and forums.

Over 350 Australians have received Fellowships, across many industry sectors. In addition, recognised experts from overseas conduct training activities and events. To date, 30 leaders in their field have shared their expertise in Australia.

According to Skills Australia's 'Australian Workforce Futures: A National Workforce Development Strategy 2010'.

Australia requires a highly skilled population to maintain and improve our economic position in the face of increasing global competition, and to have the skills to adapt to the introduction of new technology and rapid change. International and Australian research indicates we need a deeper level of skills than currently exists in the Australian labour market to lift productivity. We need a workforce in which more people have skills and knowledge, but also multiple and higher level skills and qualifications. Deepening skills and knowledge across all occupations is crucial to achieving long-term productivity growth. It also reflects the recent trend for jobs to become more complex and the consequent increased demand for higher-level skills. This trend is projected to continue regardless of whether we experience strong or weak economic growth in the future. Future environmental challenges will also create demand for more sustainability related skills and knowledge across a range of industries and occupations.

In this context, the ISS Institute works with our Fellows, industry and government to identify specific skills and knowledge in Australia that require enhancing, where accredited courses are not available through Australian higher education institutions or other Registered Training Organisations. The Fellows' overseas experience sees them broadening and deepening their own professional knowledge, which they then share with their peers, industry and government upon their return. This is the focus of the ISS Institute's work.

For further information on our Fellows and our work see <http://www.issinstitute.org.au>.

Emma Watson also thanks the CEO (Bella Irlight AO) and staff (Ken Greenhill and Paul Sumner) of ISS Institute for their assistance in planning and development of the Fellowship and completion of this report.

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1. ACKNOWLEDGEMENTS

Fellowship Sponsor

The Victorian Government, through the Higher Education and Skills Group (HESG) of the Department of Education and Training (DET), is responsible for the administration and the coordination of programs for the provision of training and further education, adult community education and employment services in Victoria, and is a valued sponsor of the ISS Institute. The Fellow would like to thank them for providing funding support for this Fellowship.

Supporters

The following organisations/individuals were involved in and supported the Fellowship application and submission:

- The Gordon fellowship mentors
- Eworks – Joanne Norbury – Industry Expert and Fellow Mentor
- OLC – Online Learning Consortium

Employer support

The Gordon has generously supported this Fellowship by providing time to travel to undertake the Fellowship and additional mentoring as required. The Fellow particularly acknowledges:

- Workplace Mentor: Dr John Flett – Head of Innovation and Strategy
- Fellowship Wellbeing Mentor: Carley Brennan - Organisation Development Manager, Strategic HR and Development
- Report Writing Mentor: Glenn Kelly - Instructional Designer and Blended Project Leader – Teaching Excellence and Design
- The Teaching Excellence and Design team for their ongoing support and commitment to innovative learning development.

Organisations and Individuals that participated in this Fellowship

The Fellow would like to acknowledge and thank the following USA based organisations and individuals that gave generously of their time and knowledge to participate in the research undertaken as part of this Fellowship:

- Online Learning Consortium
- E-learning Guild
- Conference coordinators and attendees – DEVLEARN and Online Learning Consortium International.

Organisations impacted by the Fellowship

The following organisations and industry groups should benefit from the findings of this report:

- The Gordon and its partners in learning development projects
- Management, teachers and students from the Australian TAFE sector
- RTOs with blended or online learning offers
- HESG and ASQA regulatory bodies
- TAFE Development Centre.

2. ABOUT THE FELLOW

Name: Emma Watson

Current employment: Manager Teaching of Excellence and Design – The Gordon

Qualifications and Experiences:

- 2015 Graduate Diploma of Management Learning (TAE80210)
- 2014 Registration as a sole trading RTO (National Code: 40844)
- 2013 Diploma of Training Design and Development (TAE50211)
- 2013 Address Language, literacy and numeracy in adults (TAELLN401A)
- 2010 Certificate IV Workplace Trainer (TAE40110)
- 2009 Bachelor of Applied Management Studies (Ballarat University)
- 2006 Advanced Diploma in Business Management (BSBHR508A)
- 2004 Diploma of Hospitality Management (THH51202)
- 2003 Diploma in Retail Management (WRR50102).

Brief Biography:

Watson is a qualified trainer and assessor with over 20 years' experience in the vocational training environment. In this time she has developed a strong interest in the strategic and managerial aspects of online learning research from two perspectives.

The first perspective concerns the strategic decisions associated with the implementation of online learning and ensuring alignment to organisational visions and future strategic planning.

The second perspective deals with the operational aspects and mainly focuses on the internal processes of online learning solutions. This is the application of cultural organisational change, with an interest in the transfer of knowledge and the development of intellectual capital through on-going competency development and technology supported learning.

Above all Watson believes in continuous improvement and in offering learning opportunities inside communities, nationally and globally utilising technology as a powerful vehicle of inclusion.

3. AIMS OF THE FELLOWSHIP PROGRAM

This Fellowship involved a study tour in the USA and attendance at two internationally respected eLearning conferences. The overall aims of the Fellowship were to:

- Facilitate the review of a range of instructional design and technology options at recognised USA educational technology providers, giving the Fellow a global perspective
- Allow insight into the current opportunities to meet the online and blended learners' needs as a community based TAFE organisation
- Understand how technology can enhance the learning process in communities with a similar cohort to the Gordon TAFE particularly with respect to socio-economic and diverse backgrounds
- Allow for the identification of synergies within the TAFE sectors current offering of blended and online learning e-pedagogy. Comparison and reflection based on a global model will enhance and influence the existing blended delivery and feedback mechanisms.

These overall aims were underpinned by specific research aimed at assisting the implementation of blended learning in TAFE organisations. In particular:

- What are the best ways to convert current face to face (F2F) content into the blended model or technology supported learning environment?
- What does a 'smart campus' mean? How do we create sustainable learning spaces?
- What impact does the difference between the average age of learners versus the average age of teachers have on the level of engagement in blended course development and implementation? Is it possible to identify the technology overlap and address the gap?
- What is the process of 'current' technology selection: are browsers, LMS, Java updates, webinar software or hardware investments selected based on need or by coercion by product suppliers?
- How do TAFEs improve the uptake and acceptance of blended learning for teaching staff within the context of broader organisational cultural change?
- How to define the parameters of a compliant blended course delivery model for TAFE?

The Fellow has gained new e-pedagogical knowledge and skills by attending two international conferences in the USA (Las Vegas and Orlando). The conference themes included eLearning, blended learning solutions and technology choices for adult vocational education. The conferences and study tour details were as follows:

Conferences:

1. The ELearning Guild - DEVLEARN 2015 Conference, incorporating The Adobe Learning Summit, Las Vegas, 4 days: 29/9-5/10.
2. 1st Annual OLC International Conference - October 13-16 2015, Orlando, Florida.

Concentrated Full Day Sessions:

1. Incorporating cognitive science into your instructional design
2. In search of a quality online program: Steps for Program Evaluation and Improvement – OLC Quality Scorecard for Online and Blended Learning Programs

3. AIMS OF THE FELLOWSHIP PROGRAM

Over time it is anticipated that the outcomes of this Fellowship will contribute to:

- Increasing access for distance learners or support work/life/learning balance for students
- Reducing the reliance on traditional paper based teaching methods
- Building aging teachers capacity to engage and support technologically supported learning processes
- Improving the engagement of students over the course of the program and in turn increasing student retention and outcomes
- Improving confidence of the organisation in possessing the right 'mix' of technological tools to support meaningful learning
- Identifying opportunities for new learning methods
- Confirming current eLearning and blended pedagogical choices
- Extending student learning opportunities beyond the classroom through external access to interactive web based resources.

4. THE AUSTRALIAN CONTEXT

There are a number of relevant issues within the Australian VET context that provide the mandate for this Fellowship, namely:

1. The growing demand of learners to have a work/life/learning balance with the flexibility of blended learning
2. The growing international market of students engaging in blended programs
3. The lack of 'instructional designer' or 'e-learning producer' skills sets in the Australian TAFE and broader VET sector
4. The broad acceptance and uptake of blended programs by institutions and the ageing teaching population
5. Choosing the right 'mix' of technological tools for the TAFE blended model
6. Benefits of blended course arrangements to improve outcomes of VET learners.

Each of these issues have been identified from a selected range of research of the key environmental factors influencing successful implementation of blended learning in TAFE organisations, specifically for teachers and learners, and are explained in more detail below.

1. Growing demand of learners to have a work/life/learning balance with the flexibility of blended learning

'Online education continues to become a major phenomenon around the world.' (ICEF Monitor, 2012) Learners are regularly managing competing priorities for their time and are seeking to balance work, domestic duties as well as their many other responsibilities with completing an accredited or non-accredited learning programs. It is well documented that today's learners want educational experiences that are relevant and engaging; with a technological interface that supports flexible learning options of anywhere, at any time (Skrzypchak, 2011).

TAFE institutes have also experienced a student cohort demanding greater flexibility in the delivery of their courses. The online learning environment facilitates whether students are able to study when, where, in what sequence and at a pace they choose.

There is no single way to satisfy the broad demand for just-in-time, customised training. **'Rapid and continuing advances in information and communication technologies (ICT) are changing the ways people share, use, develop and process information and technology'** (Ministerial Council on Education, Employment Training and Youth Affairs, 2008). In this digital era, there is an expectation that all people, regardless of work role, experience or background are highly skilled in the use of ICT. While Australian primary and secondary schools already employ these technologies in learning, there is a concerted effort to increase their effectiveness significantly over the coming decade (Australian Curriculum, Assessment and Reporting Authority 2012, 2011). It is the Fellow's experience that demonstrated research or formalised state or federal government approaches to the integration of blended solutions is limited. The TAFE sector is less represented than Australian primary, secondary and other tertiary educators. The research for implementation volume and successes in these vocationally focused organisations is scarce (Australian Curriculum, Assessment and Reporting Authority 2012, 2011).

Alignment with broader secondary and tertiary blended education offers has become an increasingly attractive option for TAFE learners who want to return to school without putting careers on hold. In order to become a meaningful and quality focused educational provider, it is essential that TAFE invest in innovative personnel with a firm understanding of evolving pedagogical trends. Engaging learners effectively with technology is paramount.

4. THE AUSTRALIAN CONTEXT

2. Growing international market of students engaging in blended programs

'Over the past five years, the online education market in Australia, has grown by 20% and was estimated to be worth US\$4.68 billion in 2013' (The Institute of Chartered Accountants in Australia, 2013). ***'Furthermore, there is significant projected growth in online programs based in Australia that teach students across Asia, with the international market expected to grow to millions of students during the next 10 years. This will make Australia one of the world's leading providers of online education'*** (ICEF Monitor, 2012). To capitalise on this area of growth the ability to design, develop, deliver and implement programs that fully incorporate technology requires considerable intellectual capital and planning.

The recognition of the blended model's success over that of the online or purely face to face (F2F) has grown significantly on a global scale. ***'It would appear that the technology is taking its proper place as an enabler rather than as the focus. Students don't focus on the technology they focus on what they want to accomplish'*** (Hawkins, 2005).

A 2011, study found that six million students in the US are taking at least one online course, nearly one third of all those enrolled in higher education. In fact, enrolments in online courses are outpacing those of higher education as a whole. ***'The USA isn't just the leader in terms of volume of learners, it's also been the model to follow in developing online delivery systems'*** (ICEF Monitor, 2012). This information has informed the Fellow's decision to attend a study tour to the United States, to further investigate these documented successes.

3. Lack of 'instructional designer' or 'e-learning producer' skills sets in the Australian TAFE sector

It is well documented that superior instructional design leads to more effective and efficient learning (Noone, 1993). To date, there is a lack of instructional designer vocational qualifications within Australia. This leads to a query as to how to benchmark not only the Australian standards in relation to course design and development, but also how this relates to current technology selection and innovative learning experiences for progressing students. The opportunity to design learner driven courses with easy to use interaction with the most modern integrated technological solutions is an important path for TAFE to embrace.

A 2013 survey of Australian education organisations, identified the following workforce skills deficiencies when implementing a blended solution:

- The administration and managing of blended learning programs and roll-outs, 57 per cent of organisations identified that they have no or very few people inside their organisation with the appropriate skills and experience to do this (Global Learning Services, 2007)
- 52 per cent of organisations indicated that they have no or very few people in their organisation with the skills and experience to design blended solutions (The Oxford Group, 2013)
- Only 26 per cent of organisations indicated that have job roles specifically designated to blended learning (The Oxford Group, 2013)
- The most popular places to draw this expertise from was self-paced e-learning activities such as YouTube (57 per cent), learning consultants (49 per cent) and face-to-face trainers (48 per cent) – who, although expert in their own part of the learning blend may not have the experience in other learning methods to draw together a cohesive blended learning solution (The Oxford Group, 2013)
- The time and complexity of designing and development a blended program were key factors for the reluctance and uptake of blended course development (54 per cent of respondents identified these) as well as lack of internal expertise and cost (both at 51 per cent) as significant factors (The Oxford Group, 2013).

4. Broad acceptance and uptake of blended programs by institutions and the ageing teaching population

In general, there is a view that Australian educators are under pressure to develop learning resources and tools for the 'digital native' – students who have grown up never knowing a world without computers and the internet. ***'Older workers (teachers, case workers) can sometimes find technology confronting – it undermines the traditional view of age and experience equating to knowledge'*** (Australian Curriculum, Assessment and Reporting Authority 2012, 2011). It is a challenge to teachers that their learners may know more than they do about technology, which can sometimes challenge their sense of their own authority (Buckenmeyer, 2008). It is also, as with students, about feeling in control and competent, with new technologies that can sometimes seem to undermine the uptake and usage.

Despite almost 20 years of technological innovation within education workplaces and countless professional development programs, software updates, iterations and integrations, the reluctance and commitment to using technology supported learning options still remains (Buckenmeyer, 2008). Whilst broad research of teacher reluctance is sparse, both across Australia and globally it suggests that a teacher's own educational beliefs are an important influence. Most instructors today teach as they were taught - that is, they stand in the front of a classroom providing lectures intended to supply the basic knowledge students need (Zemsky, 2004). There is also evidence that learner driven context of education and learning is moving away from this classroom 'lecture' style delivery and to a more collaborative and intuitive digitally enhanced learning experience (Garcia, 2009).

It is also reported that a broad range of complex reasons exist for this reluctance (from teachers) and that access (Johnston, 2010) to technology does not necessarily include appropriate uptake or usage. In a Framework's Learn Scope survey conducted in 2007, there were a number of identified barriers to uptake and usage of technology supported learning programs by mature aged workers:

- The demand of VET staff in meeting a growing range of tasks
- Some training provider administrators not being positive about the use of ICT
- Small training providers being without a capacity to develop a professional support system (Global Learning Services, 2007).

These barriers also extend further into pedagogical division between the implementation and the integration (Garcia, 2009) of technological tools of learning design. This implementation is using technology for simple tasks such as uploading an assignment as a word document. The integration is using learning technology to influence and improve student learning experiences such as immersion in an online laboratory, simulations, visualisation or virtual worlds.

The dynamics of learning is changing. Every person has a different learning style. A fundamental shift required across education is that learning must become personal, must become suited to our experience, to our style of thinking, to the context in which we are working (The Institute of Chartered Accountants in Australia, 2013). Blended Learning is easily manipulated to give options and flexibility far greater than its face to face equivalent delivery model. It is not limited by scheduled timelines, geographical locations, brick and mortar or restricted resources. For these reasons, it is an option that maintains the integrity of teacher expertise whilst encompassing the depth and breadth of technology supported enhancements.

The importance of teacher professional development programs is integral to the adoption of blended learning strategies. The current and future teaching staff must transition to a fulfilling role of delivering and assessing using technology supported learning tools, in order to secure the learners of the future.

4. THE AUSTRALIAN CONTEXT

5. Choosing the right 'mix' of technological tools for the TAFE blended learning model

Technology should be an instrument to assist instructors to meet the educational needs of their learners. Therefore, in isolation, technologies cannot produce meaningful outcomes and must be treated as 'parts of a puzzle' to create a total solution to solve core educational challenges. Online education models have existed since the dot-com boom at the turn of the century, originating from a longer history of distance education (The Institute of Chartered Accountants in Australia, 2013).

Thus, technology tools and successful outcomes are not synchronous partners. By simply providing access to technology tools, immediate improvements to teaching and learning will not be forthcoming. Nor does simply providing the access or variety of technological tools imply that teachers or learners will use them with any level of certainty or proficiency.

Technology selection processes should fully realise the strengths and weaknesses of each learning technology and should be understood by learning providers and decision makers (Zaied, 2007).

Many decisions in public education organisations are made by third parties in relation to the selection and use of technology supported learning options. Often the decision makers may be technically savvy, but not educationally focused or equally have educational insight without the technical understanding. There is often an urgency to make a jump to the next 'latest and greatest' digital, generally expensive, educational tool driven by competitor actions. These decisions often don't involve planning, integration or implementation at the time of conception and therefore ensure a low level of acceptance from the broader organisation later on in the application.

It would be better that instructional designers, media developers, ICT teams and graphic designers all work together to create effective digital learning environments that are grounded in sound learning theories with appropriate and current technology choices. It is a key consideration for any technological choice that lead teachers, designers and learners are engaging with this technology at all stages of participation whether this be – within face to face courses, blended or online learning situations.

It is likely that technology choices will mean little without considered intentions and goals for its use, strategies for its application, skilled and confident instructors and clearly proposed tactics for evaluating its effectiveness.

A significant implication of an ageing society relates to maintaining the skill levels of future workforces (Global Learning Services, 2007). The aging workforce of the Australian TAFE teacher is an important consideration when selecting technology. There are recommendations that should be incorporated to define the requirements of teaching staff for the 21st century (Dirksen, 2012).

As a foundation for success, essential skills for these educators are complex and fall into categories such as literacy and numeracy and being creative and productive users of technology in all learning areas (Australian Curriculum, Assessment and Reporting Authority 2012, 2011). It is the opinion of the Fellow that TAFE are not ready for the challenges of this teacher profile.

However as further research suggests, whilst successful implementation of a blended course is focused on utilising the best pedagogical aspects of the online and classroom environment, it is not the blending of the classroom and the Web that makes a course effective; rather it is the right blend for the goals and objectives of the course. The emphasis is on the learning and not the technology (Scott, 2007). Therefore, as long as the instructing cohort are engaged with the objects of learning and goals of student engagement, then the opportunities for success in blended learning are still possible. It is thus essential that education institutions have a cohort of teachers ready to embrace the best options for instruction for a technically savvy or 'digital native' cohort of learners.

4. THE AUSTRALIAN CONTEXT

The range of educational technology available is vast and difficult to navigate for non-digital natives. However, a formula to selecting this technology is unchanged. The objectives of learners and teachers are an important aspect as well as creating a template for selection. There needs to emerge a dominant design, particularly for the learning objects that are e-learning's building blocks. It is not just a matter of making them easier to create - although that end is important— but also more interchangeable and more easily linked with one another (Zemsky, 2004).

6. Benefits of blended course arrangements to improve outcomes of VET learners

Blended learning has been shown by the US Department of Education research to be even more effective for many students than either online or in-person instruction alone (Public Impact, Chapel Hill, NC, 2013).

The benefits of blended classes include greater access, flexibility, student satisfaction, and cost savings (Scott, 2007). There is over a decade of research that outlines the range of benefits of blended learning for both learners and teachers. Reports from Australia, Great Britain, Canada, USA, Singapore and Scandinavian countries such as Norway and Finland, outlined that their national e-learning policies also link it to educational outcomes. They asserted that e-learning is beneficial (Wright, 2010).

In Australian, the Government has recognised the importance of increasing the use of e-learning by establishing The National Vocational Education and Training ELearning Strategy 2012–2015. The Australian Flexible Learning Framework aims to:

- Strengthen the Australian training sector's use of new learning technologies
- Stimulate innovative approaches to increasing participation in training and employment
- Improve the skill levels of the Australian workforce.

This framework discusses the relationship between learning in the vocational education sector and the requirements of technology skills that are also present in Australian workplace. TAFE plays an integral role in creating 'work ready' learners. The importance of equipping learners with current technology usage, exploration and integration techniques inside their courses is an important part of the national development of these skills.

Australian Flexible Learning Framework reports that there is evidence that suggests that the use of ICT may have a 'significant impact on the education and training outcomes of disengaged young learners'. Of even greater importance as TAFE continues to attract a diverse range of learners with a variety of learning needs. This information is also supported by the Smith Family describing how the use of ICT led learning resources within education can promote a 'learner mentality' among disadvantaged young Australians – that is, it gives young people the confidence and interest to engage or re-engage with education.

At present there is a low level of blended model adoption for vocational education in Australia, with the majority of these courses being offered by private organisations. Much of the current delivery formats are face to face. It is hoped that when the benefits of blended learning are examined and promoted, teachers and learners will demand more blended modalities. Blended courses can offer improved student satisfaction levels and organisational cost savings (Scott, 2007).

Blended learning presents some internal organisational challenges such as the skills sets, time management, potential plagiarism and the consistency of quality delivery. On balance, blended learning continues to offers many significant and potential benefits for learners to engage in vocational education that include:

4. THE AUSTRALIAN CONTEXT

- Greater access to a range of appropriate, personalized, and individualized learning, teaching, and resources
- Greater accommodations for learners and teachers of diverse ages, styles, expertise, nationalities, and cultures, who can connect from multiple settings such as homes, workplaces, libraries, and countries
- Greater flexibility and cost-effectiveness in terms of mission, scalability, breadth, time, value and infrastructure
- Greater student and faculty satisfaction (Scott, 2007).

5. IDENTIFYING THE SKILLS AND KNOWLEDGE ENHANCEMENTS REQUIRED

The opportunity for skills growth that this Fellowship has focused on are outlined in this section to allow industry stakeholders to understand the Fellowship context. The specific identified skills addressed by the Fellowship was a lack of detailed understanding of digital e-pedagogy, full range of contextual reasons for choosing technologies; and its application to the learner driven implementation of blended course offerings (Quinn, 2014).

By analysing the blended learning frameworks in the USA, these deficiencies may be investigated to compare and review current TAFE blended learning processes. The blended learning or hybrid courses that combine face-to-face and online learning are increasingly offered at colleges and universities across the United States, with growing evidence that they can enhance student learning (Shank, 2010).

The international study tour has allowed exposure to large educational organisations that have successfully used the blended learning approach to train staff and learners across multiple locations using technology based solutions to best effect. By attempting to adopt and implement these recommendations, this will increase TAFE's profile of blended learning – future proofing its delivery, flexibility and mandate – the 'right' teaching methodology, hence ensuring our continued commitment to customer experience and social mobility. The most important means of social mobility is education. Through technology, we have access to education in a way that we have never had before (The Institute of Chartered Accountants in Australia, 2013).

The Fellow has focused on developing a thorough understanding of the technological relationships between learning management systems and student experience, as well as how to clearly align the principles of best practice in technology usage to the current TAFE vocational educational environment. This is a concept somewhat challenged by current TAFE practice, however one that the Fellow is keen to explore, recommend and implement change.

The attendance at the aforementioned conferences offered an exciting experience to view a broader vision of the 'extended' classroom of the future in an international setting to gauge the level of success in comparison to the experience in Australia.

Outcomes of the Fellow's findings are to be able to influence further investigation into how to:

- Optimise the use of active learning techniques via relevant technology tools
- Take existing curriculum and transform it for a contemporary student audience
- Design and teach online, hybrid, or blended courses
- Apply technology-enhanced educational practices in and out of the classroom
- Evolve with the rapidly changing educational and technological landscapes
- Understand the structure and function of educational technology systems.

There have been significant advances and changes to the approach to technology and how we interact with it as students, teachers and as providers of learning. These changes need to be analysed in order to recalibrate TAFE's understanding of its place within the new technological based learning environment. This is goal directed learning that incorporates information and communications technology of a contemporary nature.

The transition of an innovation from idea to institutional norm is not linear and unproblematic, therefore, the Fellow's approach to understanding the changes in this environment is to immerse herself in the learning environment from all angles; as a learner, teacher and designer of learning activities and finally as a conduit of change for institute wide acceptance. This approach, coupled with a detailed analysis of global learning philosophies and proven implementation criteria, will assist to identify, manage and implement 'ways of change' into the TAFE environment.

5. IDENTIFYING THE SKILLS AND KNOWLEDGE ENHANCEMENTS REQUIRED

The Gordon and several other TAFE institutes have already implemented proven innovative and technologically based learning solutions and are committed to providing flexible learning options that caters to student demand for interactive and dynamic learning. The Gordon's Blended project is committed to redefining the learning experience creating both intrinsic and extrinsic motivations for learners when interacting with technology.

It is expected that the Fellowship outcomes will highlight both areas for improvement and areas of synergy, in the Gordon's and the broader TAFE providers' approach to digital learning engagement.

6. THE INTERNATIONAL EXPERIENCE

This section provides a record of the findings and outcomes from each visit.

Visit 1: DEVLEARN 2015 Conference & Adobe Learning Summit

Destination: Las Vegas

Preamble

- Two Day Blended certificate course
- These blended courses start in early September with tasks and research projects and culminate in the F2F two day conference prior to the conference.
- Three Day Conference symposium
- Ability to demo cutting edge learning technologies
- Ask questions of world leading software manufacturers
- Identify areas of diversity and how to adapt to different learners.
- Outstanding opportunity to learn about the latest technologies and how these apply to global learning centers.

The DEVLEARN conference was attended by some 3000 attendees over five days. This was the largest gathering in its history. The size and the significance of the event are a measure of the increasing importance of online and technology-supported learning and performance support to organisations of all types. The theme of DEVLEARN for 2015 was Innovation in the Making, focusing on blended learning courses, hands-on tutorials, xAPI (Tin Can), and Hyperdrive as well as the many networking opportunities, learning stages, and vendors in the Expo. The Fellow engaged in networking with large and small USA corporate training providers. Some of these were recognised educational institutions, however the majority were organisations training internal staff, some with upwards of 30 000 employees. This was surprising, yet refreshing from the traditional VET education approach.

Growing a talented pool of instructional designers and eLearning experts is an important method to maintaining long term industry excellence. At Dev Learn, developers showcased 91 eLearning and performance support projects. All participants voted for their favorite demonstration, and winners of the various categories were selected.

Over 125 concurrent sessions were offered. Selection therefore occurred based on what the attendee wants to learn, however all sessions encouraged the embracing of change, addressing challenges and how to adopt thinking creatively. This is particularly true when it came to emerging trends and technologies. All sessions were also digitally recorded and presentations from speakers were immediately available online, as well as there being an excellent 'virtual app' that measured performance, engagement and connection with the majority of attendees.

After attending 21 separate sessions and four key note speakers, Watson can acknowledge that DEVLEARN offered a giant scale, comprehensive educational program, a highly focused expo, and a knowledgeable community of professionals sharing their ideas, experience, knowledge, and expertise.

This conference also featured both local USA presenters and international speakers giving it a truly internationally relevant focus. The experience was exciting and inspirational in an industry defined by its sheer pace and quantity of change.

There were several sessions with particular relevance to the fellow's current organisations work, particularly:

6. THE INTERNATIONAL EXPERIENCE

- Best tools, Resources and Apps to use in Everyday Production
- Learning Disrupted: The unrecognisable new world of tech and culture
- The Future of Learning: What should we focus on this year
- Wrangling and Working with SMEs
- Digital Badges and the Future of Learning.

Key Takeaways from Attending

Communication and Collaboration

The underlying assumption of all DEVLEARN presentations was how educators can manage and utilise technology to communicate with colleagues, other educators, students and the broader community, as well as to create mutually beneficial vocational training-community partnerships using a variety of communication tools including Web portals, wikis, websites, email and electronic notifications. The DEVLEARN presentations also showcased how organisations are utilising technology to incorporate global activities that connect learner interstate and internationally through project-based learning, e-pals, online projects, virtual communication, multi-cultural application development and on-site visits.

Digital Teaching Tools and Game-Based Learning

A dominate theme that was constantly reiterated in many sessions was that electronic content and digitized materials for learners will continue to revolutionize both the corporate and traditional education industry at all levels. Instructional technologies and digital toolkits enabling instructors to customise learning materials, introduce content and engage students with the emerging Web 3.0 creativity tools were presented as current technologies and techniques to continue into the futures. The DEVLEARN Demofest demonstrated how to leverage growing online resources, Web tools and the burgeoning digital knowledge base.

Emerging Technologies and Maker Tools

The DEVLEARN theme of 'Innovation in the Making' explored how to incorporate emergent technologies, nascent digital tools and technological resources to enhance education and the learning environment as well as to solve educational issues. These initiatives represented the most innovative thinking in the application of technology and technology strategy in education and are highly regarded models of adoption in the corporate education technology community.

Instructional Design

The instructional designer skill set was discussed at length and showed how educators are using available technologies to expand their learning environment beyond the classroom and engage all learners. There were many practical strategies used by effective organisational departments at all levels to plan, integrate curriculum and manage technology in their classrooms.

Mobile Learning

During the DEVLEARN conference there was significant focus on how educators and learners are currently utilising tablets, eReaders, Netbooks, laptops, smartphones, iPads and other mobile devices to enhance the learning environment, deliver curriculum and content using an untethered method to foster student engagement, and build learning communities. These best practices shared highlighted the effective teacher technology integration training and just-in-time technology solutions to solve common problems.

Visit 2: 21st Annual OLC International Conference

Destination: Orlando, Florida

Preamble

The Online Learning Consortium (OLC) is the leading professional organisation devoted to advancing quality online learning by providing professional development, instruction, best practice publications and guidance to educators, online learning professionals and organisations around the world. The website <http://onlinelearningconsortium.org/> has more information regarding this organisation.

Technology test kitchens – to test and discuss emerging technologies for eLearning and distance learning.

- Awareness of emerging best practices in design, development, and implementation.
- Knowledge of the design, technology, and change management processes needed to launch a successful technology supported programs.
- Case studies from leading Competency-based Education pioneers such as Northern Arizona University, Western Governor's University, The Texas Higher Ed Coordinating Board.

This Annual OLC International Conference brings together practitioners and researchers, administrators, instructional designers, faculty developers, library and support people, instructors, and students to try to make sense of the fast growing and rapidly changing field of online and blended learning. It is geared to both experienced professionals and interested newcomers who hail from a variety of work sectors, including higher education, K-12 education, continuing education, business, government, health care, professional associations, and nonprofit organisations. This conference explored what online and blended learning portends for educational institutions, and the broader academically influenced society.

Over 26 countries were represented among the 1,723 onsite and 1,290 virtual attendees. As the premiere conference on online learning, 2015 boasted a program consisting of a mix of over 400 information sessions and workshops and 90 discovery sessions. The conference catered for a diverse range of educational paths options with K-12 and Spanish special topics new to the program this year and a new conference track focused on Historically Black Colleges and Universities (HBCU) Innovations. They were targeted on the 2015 theme of 'Shaping the Future of Higher Education'.

There were several sessions with particular relevance to the fellow's current organisations work. Sessions that were particularly relevant were:

- Emerging Technologies for Online and Blended Classrooms
- Efficient, effective, personalised learning: the inevitable changes ahead
- On-the-Job food safety simulations for improving behaviours in the real world
- Gamification Techniques
- Developing in Online Learning Unit for next generation learners
- Faculty Development as Flexible Performance: Competency-Based Curriculum Using the Teaching for Understanding Framework
- American Higher Education in Crisis? Myths and Realities.

6. THE INTERNATIONAL EXPERIENCE

Key Takeaways from Attending

Educational Policy and Leadership

It is an integral driver of any educational technology usage that it is supported by appropriate educational policy. Educational technology should be seen and explained as a strategic tool for educational engagement. The process of policy to support such a tool is an improvement and transformational process that is essential now and into the future. All educational organisations should have a focus on the development of educational policy that features state/federal technology funding or tendering, data-driven decision making, teacher evaluation tools, how to make purchasing and budgeting decisions, facilities management, and implications of the national standards of educational technology, compliance undertakings, occupational health and safety and ultimately legislation. These same policies should also outline approaches to data and communications for instructional information processing and reporting, including Web development, dashboards, databases and student information systems which a focus on learner experience, future proofing and organisation skills development.

Professional Development

There is a need to provide specialised training to help administrators, teachers and other educators improve their digital professional knowledge, technological competence, skill and effectiveness. There are significant barriers, both financial and cultural preventing effective professional development programs. Resistance is common place in traditional educating providers, therefore, it is essential to concentrate on furthering education and knowledge in a teacher's subject area, funding models, delivery methods, action research, mentoring structures, specialised techniques, incentivize approaches, technological utilisation and training procedures.

Online and Blended Learning

Defining the presences and scope of online and blended learning concepts is a key step in establishing what educators need to offer to students. Blended and online learning is described as methods of teaching and learning in which the online delivery of content is facilitated by various technologies including video, voice, audio, online collaboration tools and correspondence over the Internet. The OLC conference highlighted technologies that offer a great deal of flexibility in when, where and how education is distributed, presentations featured ways to improve interactive communication, assessment, feedback, support and content delivery whether it is synchronous or asynchronous. Having a united understanding and sharing a common definition base is essential to meeting the expectations of future learners and to scoping the requirements for professional development for teachers.

Technology Infrastructure

The use of technology infrastructure to support the management of information systems is also essential when considering the blended learning offer. Learning environments such as desktop virtualisation, implementation of 1:1 computing, solutions to bandwidth issues, implementation of wireless environments and the roll out of mobile devices are all ways to move to a competitive and dynamic blended learning experiences. Other aspects of infrastructure also relate further to concepts of campus safety and security (i.e. cyberbullying and security within social networking, as well as campus-wide security issues).

7. KNOWLEDGE TRANSFER: APPLYING THE OUTCOMES

Overall outcomes of the Fellowship for the Gordon, TAFE teaching profession and industry:

The Fellowship has highlighted the following overall takeaways for the Gordon, TAFE teaching profession and industry:

- There is a distinct difference when designing learning content for blended learning programs compared to traditional face to face learning
- The significant skills gap of teaching staff compared to the emerging technology demanding learner will continue
- The selection of 'technology tools' to implement a successful blended learning program is critical
- Expectations of blended learning programs need to be thoughtfully designed and communicated to learners and teachers.

How the outcomes of this Fellowship will be shared:

Watson will undertake a number of activities to ensure the outcomes of this Fellowship are disseminated:

- The Gordon Teaching Excellence and Design Forum - conclusive presentation to the TED management team about the suggested improvements to the BlendED program
- Through the 20 part online recorded and facilitated training program available to any interested party in the areas identified as critical to blended and online learning delivery Capturing the Fellow's overseas investigations, information and findings
- Through the relationships created by the ISS with other fellows in their own institutes – Melbourne Polytechnic and Wodonga institute of TAFE may be scheduled for dissemination sessions.

8. RECOMMENDATIONS

A blended program can offer the benefits of both face to face delivery and the power of global digital access. Although creating blended courses is demanding, successful implementation, offers benefits for teaching staff, organisations and students. Many educators are already equipped with the required technologies for blended implementation and students will continue to demand flexibility in their learning experience whilst also embracing being in the connected world that the web provides. Additionally as blended programs become more prevalent, evidence is growing to indicate that they also rank high in learning outcomes and satisfaction, make better use of teaching resources and facilities, increase class access and potentially speeding up pathways of learning.

The skills growth opportunity that this Fellowship was designed to address have been provided below along with relevant recommendations for relevant stakeholders.

The following recommendations are also closely aligned to address commonly found challenges of implementing blended learning strategies.

The challenges are:

- developing blended pedagogy
- teacher support and professional development
- technological challenges
- student preparation/support and transition
- assessment considerations
- culture and innovation (State of Victoria , 2012).

Recommendation 1: Converting face to face content into the Blended Learning program

It is essential for all educational stakeholders to be aware that blended or online learning programs are not simply face to face content pushed into a repository style folder in a commonly stored zone or LMS. Successful blended learning content is rethought, reimaged and creatively organised into small capsules of powerful information. Learners may pick and choose or have pathways designed for their own customised learning options.

Blended learning comes in many shapes and sizes – there is no right way or wrong way, no correct formula or single “right” ratio of face-to-face, online time and self-paced activities in and beyond the classroom. Each approach is based on the needs of the students, the curriculum and the resources available (State of Victoria , 2012).

It is the powerful instructional design properties that make the difference between poor or good blended offerings. Difficult, complex or boring learning solutions are no longer tolerated by learners and are quickly becoming obsolete.

To teach a successful hybrid course instructors must re-examine their course goals and objectives, design online learning activities to meet these goals and objectives, and effectively integrate the online activities with the face-to face meetings. Instructors must make the transition from lectures and presentation to a more student-centered active learning (Idaho Digital Learning Professional Development, 2009).

With shrinking budgets, staff reductions, and increased availability and access to digital technologies, educators have been seeking ways to convert face to face programs to alternate formats for the past two decades. When converting face to face content to a blended or online delivery, there are

8. RECOMMENDATIONS

many lessons in planning, developing, and testing the curriculum that can now be learned through the experience of large universities and international colleges.

Steps to converting face to face content into a blended or online learning content (Zamora.D, 2012):

1. Engage Key Partners in the Process
2. Include a Technology Specialist on the Project Team
3. Identify Key Learning Features
4. Assess Whether or Not You Can Afford a Professional Developer
5. Break Up the Content into Modules
6. Create a Draft Module for Review
7. Implement Best Practices for Adult Online Learning
8. Test the New Curriculum with Target Audience Members
9. Consider Using a Professional Narrator
10. Make the Online-Curriculum Available
11. Select Software That Can Provide Evaluation Data.

Government (Federal, State and Local), Industry and Professional Associations: Develop a qualification under the VET system that trains 'Instructional Designers'. This is a growing field with significant growth in overseas markets. It is also essential in providing ethical and nationally compliant training and assessment materials that skills development is invested in the blended and online learning models. An approach that seeks to understand and support these models will support a quality methodology in meeting the future demands of learners, workplaces and industry.

Industry and Professional Associations: Identify key individuals with current skills in instructional design. Encourage these individuals to pursue technological application for the sharing of knowledge and skills in the workplace.

The TAFE sector: Many blended courses by design are already interesting and engaging, but are the students actually learning what they need? The instructional approach needs to be carefully selected and requires knowledge of their application, their relative strengths and weaknesses, and most importantly their alignment with the course's instructional objectives. Why and how materials were selected or being used is a question that requires attention. For this reason, the use of technology may not always be the answer, but merely a way to identify active learning pedagogy.

TAFE institutes need to invest in the skills of current and future instructional designer training and development of personnel on a broad scale. Further, they must encourage creativity and professional development of blended course design through good technology skills, active learning object development and valid pedagogical selections.

The International Specialised Skills Institute: Continue to foster the innovative and digital education discovery of Fellows interested in the areas of blended and online learning design and development.

Recommendation 2: Establishing the Student and Staff Expectations of Blended Learning

Great blended learning programs are designed with the users' needs, expectations and motivations in mind. To motivate learners to 'buy in' to a blended learning process the expectations of teachers and learners need to be managed closely. If expectations are met (or exceeded) it will result in a positive effect on their experience which will ensure future and ongoing engagement to other courses or units of study.

Several myths circulate within the eLearning educational sector about the existence of digital acceptance or rejection being associated with age and demographics. However, after more than two decades of research it can be ascertained that it is not necessarily the learner's ability to use technology but rather their expectation of the blended or online learning experience being offered by the educator (Kehrwald, 2011). Therefore it is essential to have clearly defined learning objectives and expectations communicated regularly to students about their blended learning program.

No doubt as blended learning offers become more prevalent, this expectation will achieve a natural balancing point. However, the expectations of how a blended learning program is offered, the timelines required and the standards for interaction should influence the course design.

Instructors must be prepared to help students understand their active role in the hybrid course offer, assist students in keeping their work on time and on track, and be prepared to offer strategies for trouble-shooting new course technologies (Idaho Digital Learning Professional Development, 2009).

Key aspects to establishing learner expectations for blended and online learning programs are:

- Designing with purpose for a blended course not a face to face learning program
- A standardised learning design with clear learning objectives and 'bite-sized'
- A combination of delivery methods, with use of the blended delivery method preferably
- The use of a mixture of media-voice, pictures and text
- The conveying of the same message in multiple ways
- Discussion at intervals either face to face or online and
- A mix of approaches varied over time to keep the learning interesting and fun (Global Learning Services, 2007).

Government (Federal, State and Local), Industry and Professional Associations: It is important for blended learning to be strategically funded and have clearly communicated expectations to both learners and educational institutions.

Industry and Professional Associations: Blended learning is cost effective and easily customisable to a busy workforce. This flexibility should be supported both by industry and encouraged by professional associations.

The TAFE sector: Should capitalise on their excellent facilities to provide the practical skills onsite and the theory in a blended capacity. This allows for more productive room and facilities usage, increases the amount of resources and access per student. By supporting and promoting blended as a learning option it also allows greater competitive advantages for TAFE on a national delivery model.

The International Specialised Skills Institute: Blended learning is an integral part of international education and should be a focus for the Institute to continue to support. The Institute's ability to influence change and support for blended learning methodologies ensure that it maintains currency within a changing global educational landscape.

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Recommendation 3: Teacher Technology Skills Update and Uptake

In order to meet the future demands of students to have technology enabled learning, the creation of teacher training within a blended context will require significant time and resources. It will not always be economical in initial iterations, but cost/benefit analysis over a more extended period will generally suggest that the blended model is not only sustainable but eventually essential.

It is essential that teachers are exposed to blended learning options and encouraged to utilise technology on a regular and ongoing basis inside the classroom and for administrative duties. When ICTs were fully integrated into classroom practices (embedding them as opposed to just adding technologies) it was noticed that teachers take a more deliberate approach to lesson planning (State of Victoria , 2012). The purposeful integration of educational technology as 'normal' will encourage teachers to develop their own skills. The development will be received well by learners and therefore create a positive loop of reinforcement of the blending of learning. There is research that teacher confidence and knowledge of teaching with ICTs contributed to a more engaging and considered curriculum, and subsequently, better student outcomes (State of Victoria , 2012).

There is a growing world-wide trend in initiatives that are explicit about the availability of learning anywhere, anytime. The underpinning notion is that teachers will need to be up-skilled quickly to cope with the virtual learning opportunities in the classroom (State of Victoria , 2012).

Government (Federal, State and Local), Industry and Professional Associations: A state or national model for Vocational Trainer and Assessors capability framework for skills development. Motivating and/or rewarding teachers for the innovative use of blended learning approaches to improve student outcomes plus support from peers and technical experts.

The TAFE sector: It is essential to develop a united approach to TAFE teaching staff capability to meet the growing demands of a changing learning demographic. There are requirements to update the process of communication and evidence collection with learners. Teacher training needs to include and refine competencies of teachers in taking on a more facilitative role: skills such as questioning, creativity, observation, differentiation/scaffolding, and facilitating collaboration and networking opportunities and especially in understanding of and imparting of knowledge of online protocols (such as cyber ethics and intellectual property) (State of Victoria , 2012).

The International Specialised Skills Institute: Teacher skills updating is essential to the premise of the Institute's Fellowship. An aspect of each Fellow's research area should identify the key uses of educational technology.

Recommendation 4: Parameters of a compliant Blended course - Scorecard

The volume and quality of blended and online learning in Australia is currently difficult to quantify. Blended learning interventions should be appropriately and thoroughly measured, evaluated by participants, and analysed by the teaching and broader production teams. The use of the OLC Scorecards may be utilised for benchmarking the end-to-end Blended course from policy to strategic objectives, from governance and development, to compliance.

Developed through extensive research and educator collaboration with several dozen seasoned online educators, the OLC Scorecard aims to advance the quality of blended learning offers by simplifying the steps needed to identify, measure and quantify elements of quality within an online education program. The Quality Scorecard metrics, uncover and evaluate quality indicators in key categories, and allow institute to consider thoughtful recommendations for implementation.

Categories Include:

- Institutional Support
- Technology Support
- Course Development / Instructional Design
- Course Structure
- Teaching and Learning
- Social and Student Engagement
- Faculty Support
- Student Support
- Evaluations and Assessment.

Institutions that implement the OLC Scorecard to review their programs – regardless of size or type – can determine strengths and weaknesses of their program, and initiate planning efforts towards areas of improvement. It can also be used to demonstrate elements of quality within the program, as well as a record to highlight to governing bodies.

The OLC Quality Scorecard is now being utilised by institutions all over the United States and Latin America. Online education program administrators, by using the Scorecard for quality evaluation, they are able to develop strategic objectives for program improvement and demonstrate to accrediting bodies the breadth of quality in program administration.

Government (Federal, State and Local), Industry and Professional Associations: The OLC is a globally recognised benchmark of success, yet they are not represented in any Australian Educational organisations. Whilst this OLC scorecard shows in-depth USA related compliance objectives, this closely mirrors the standards for Australian RTOs and may be easily modified to ensure a roadmap for compliant and robust blended learning programs nationally.

The TAFE sector: The OLC scorecard should be implemented with an approach to measure the process of blended implementation. The Blended learning program should be implemented as a Board dictated strategic direction and institute wide policy and procedures should reference the importance of the blended learning model.

The utilisation of this internationally standardised scorecard would allow for the development of a basic guide or to address the pedagogical, technological, and logistical needs of blended learning programs. Developing a guide would allow programs to report in such a way that comparisons could more easily be made across all blended learning programs both interstate and nationally.

8. RECOMMENDATIONS

Recommendation 5: How to select ‘Current’ technology – Technology selection tools

At all times, technology should be subservient to the function of teaching and the desired learning outcomes, and there is no doubt that limitations regarding access and technology should be accounted for. However, as technology becomes cheaper, faster and more immersive, the demands will outgrow the resistance from traditional educators.

Emerging New technologies were prevalent in the Fellow’s journey and offered unrivaled access to connectivity and real life simulations of current workplace activities. This technology is exciting and will drive the learning experiences of a new generation.

The selection current technologies will continue to be challenging. The key identifiers of technologies selection will be their abilities to integrate, immerse and easy user ability. This selection will be defined by the technologies we are using in everyday life being explored and reimagined for the educational realm.



Images (left to right): Augmented reality, Gamification, Case based learning, New technologies (Drones, Robotics, Software for rapid production), and Learner generated content.

8. RECOMMENDATIONS

Industry and Professional Associations: Educational Technology choices should be informed by leading practice, their ability to apply active learning and be driven by the industry of application. Therefore, industry has a significant part to play in the research and development of technology that plays a part in various workplace roles and how to communicate this to educators at appropriate training organisations.

The TAFE sector: Shifting from a face-to-face setting to an online classroom requires not only a different skill set, but a different mindset. Technology choices must be made on the basis of merit and not due to commercial sales. Any technology selected should first be tested on the teaching staff to ensure that there is adequate buy in and return on investment.

The International Specialised Skills Institute: Technology choice is a small part of introducing successful online teaching pedagogies. It is these 'pedagogies' that still need further investigation and research for their application to the Australian Vocational education system.

8. RECOMMENDATIONS

Recommendation 6: Improve the uptake and acceptance of Blended Learning

It is likely that new skill sets may be required by staff and students, ranging from basic information technology (IT) skills to learning new ways of interacting throughout the learning process. Important skills for trainers revolve around IT, information literacy, and eLearning or instructional design development. New skills training for learners will involve IT, eLearning study skills, time management, and advice on organising e-learning tasks for the purpose of assessment.

When embarking on a new approach to delivering learning, comprehensive and customised support for all stakeholders should be available on demand. An appropriately skilled team of eLearning experts and a detailed digitally resourced library should allow for easy information navigating and fact finding by all stakeholders. It is also important to provide clear and straight forward communications as this will also assist to facilitate buy-in from all involved. A process of continued review and improvement should be sustained which in turn provides a learning environment with minimal disruptions.

Teacher and learner 'buy-in' cannot be emphasised enough as a critical influence on the pathway to a successfully implemented blended program. A rushed and reactively designed product is likely to be counter-productive and more like to find ongoing resistance from teacher and student alike. Blended design and delivery is carefully thought out and considers the range of stakeholder needs, expectations and technological skills availabilities.

Government (Federal, State and Local), Industry and Professional Associations: A coordinated effort to a state and national initiatives for supporting blended learning options for learners. Generally there is resistance to the change by local and state government, citing poorer outcomes and experiences; there is no way to validate such viewpoints in the current global environment. Government need to behave responsibly toward a generation of learners demanding blended and other flexible learning options.

A blended learning model should describe a planned and deliberate educational activity that integrates student-centered learning, classroom-based teaching and learning with mobile and web-based online approaches based on individual learners and their specific needs (State of Victoria , 2012).

Create a nationwide/statewide plan that could be used to understand what online and blended learning is, why it is beneficial for students and teachers, and where to begin with implementation. Continue to foster and promote online and blended learning options to all educators in order to find blended learning champions.

Industry and Professional Associations: Blended learning solutions offer quicker pathways to learning for workplace personnel with less cost and more flexible arrangements for students. This in turn builds a more resilient workforce. Industry associations are encouraged to promote blended learning arrangements and actively use them for internal as well as external training options.

The TAFE sector: A culture that encouraged innovation was typical for the success of these blended learning projects. In general the culture was accepting of change and risk and looked to overcome issues and to challenge students to do better (State of Victoria , 2012). TAFE organisations need to behave responsibly toward a generation of learners demanding blended and other flexible learning options. This will in turn increase market share and ensure effective competitiveness within private and government RTO services.

The International Specialised Skills Institute: Promote blended learning options, training, conferences, and resources to all educators.

Continue research to gather more empirical data, particularly data that addresses distance and online tools and components used within the vocational education or TAFE sector for student and teacher blended learning programs.

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9. REFERENCES

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10. ATTACHMENTS

Attachment 1 - Conference Agenda of Sessions - Itinerary

The ELearning Guild - DEVLEARN 2015 Conference, incorporating The Adobe Learning Summit – Las Vegas – 4 days – 27/9-3/10

Date	Session Title
8.30 – 4.30 pm Sunday, September 27	Pre-conference Blended Courses
	Scriptwriting and Audio Production for eLearning
8.30 – 4.30 pm Monday 28th September	Pre-conference Blended Courses
	P03 - Ten Steps to Realistic Project Management
8.30 – 4.30 pm Tuesday, September 29th	Pre-conference Certificate Workshops – Adobe Summit
	Adobe Summit – Incorporating Cognitive Science into your instructional design

Date	Session Title
Wed, September 30 7.30AM – 6PM	1. Best tools, resources and Apps to use in Everyday Production
	2. Learning Disrupted: The unrecognizable new world of tech and culture - KEYNOTE
	3. The ABC of xAPI: Lessons learned and shared
	4. Transform existing content efficiently for interactive multi device learning
	5. The future of Learning: What should we focus on this year
	6. Wrangling and working with SMEs
	7. Digital Badges and the future of learning - KEYNOTE

Date	Session Title
Thu, October 1 7.30AM – 8 PM	1. SMEs - Can't work with em, can't work without them
	2. Curiosity, discovery and learning - KEYNOTE
	3. Ten cool tools to support learning
	4. How to design blended learning programs for a millennial workforce
	5. The science of attention, willpower and decision making
	6. Assessment Strategies for competency-based learning
	7. DEVLEARN Demofest

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Date	Session Title
Fri, October 2 7.30- 12PM	1. L&D: The essential New skills
	2. Learning a learning ecosystem in SharePoint
	3. Exploring WordPress as a tool for delivering blended learning
	4. Learning without boundaries - KEYNOTE

21st Annual OLC International Conference - October 13-16 2015 | Orlando, Florida

Date	Session Title
October 13, 2015 - 8:30am – 5:00 pm	In Search of a Quality Online Program: Steps for Program Evaluation and Improvement

Date	Session Title
October 14, 2015 - 8:30am – 11:30am	Emerging Technologies for Online and Blended Classrooms
October 14, 2015 - 11:45am	Efficient, effective, personalised learning: the inevitable changes ahead
October 14, 2015 - 12:45pm	On-the-Job food safety simulations for improving behaviours in the real world
October 14, 2015 - 1:45pm	Gamification Techniques
October 14, 2015 - 2:45pm	Developing in Online Learning Unit for next generation learners
October 14, 2015 - 3:45pm	Faculty Development as Flexible Performance: Competency-Based Curriculum Using the Teaching for Understanding Framework
October 14, 2015 - 4:45pm	American Higher Education in Crisis? Myths and Realities – KEYNOTE

Date	Session Title
October 15, 2015 - 9:15am	Breakthroughs in Badging, Traditional Credentialing to Badging Possibilities
October 15, 2015 - 10:15am	Promoting Learner-Centered Teaching Through Instructional Design
October 15, 2015 - 11:15am	Confidentiality and Online Classrooms
October 15, 2015 - 1:30pm	Building a Culture of Innovation Through Research, Development, & Leadership in Online Learning

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October 15, 2015 - 2:30pm	Higher Education And Employability: New Models For Integrating Study And Work - KEYNOTE
October 15, 2015 - 3:30pm	The Medium is the Message: A Showcase of Innovative Online Activities

Date	Session Title
October 16, 2015 - 8:15am	Shaping the Future of Online Learning: Issues and Emerging Technologies to Watch
October 16, 2015 - 9:30am	Online Human Touch: High & Low Tech Strategies to Personalize the Online Student Experience
October 16, 2015 - 10:45am	Transcending Participation: Creating and Supporting Engagement in Online Courses
October 16, 2015 - 11:45am	What All Online Teachers Ought to Know About Universal Design for Learning (UDL): Simple Steps to UDL Greatness!

10. ATTACHMENTS

Attachment 2: Dissemination Session Information



