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AUTHOR Schofield, Kaye; Walsh, Anne; Melville, Bernice
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ABSTRACT

Eighteen VET practitioners considered to be at the leading edge of online education in technical and further education in South Australia were interviewed to determine the extent of their knowledge about and experiences of online learning and teaching. Data were gathered through a survey, structured interviews, online research events, and two face-to-face workshops. Responses indicated that, despite a VET policy environment keen to accelerate the take-up of online learning, online teaching and learning remains a very new area of human endeavor and a new area for VET policy and practice. The practitioners were actively involved in constructing knowledge about online learning. However, they were not yet systematically or consciously reflecting on the inferences to be drawn from their individual and collective experiences. Although the practitioners were excited and challenged by their online activities, they were also frustrated and pressured by lack of time, infrastructure, and resources. The practitioners' four main sources of professional learning about online teaching and learning were as follows: learning by doing; learning through work colleagues and teamwork; learning through communities of practice; and learning through formal off-the-job professional development. Organizational culture, policies, and structures played a big role in the VET practitioners' adoption and implementation of online VET. (MN)

Online learning and the new VET practitioner

Kaye Schofield, Anne Walsh & Bernice Melville

UTS Research Centre for Vocational Education & Training

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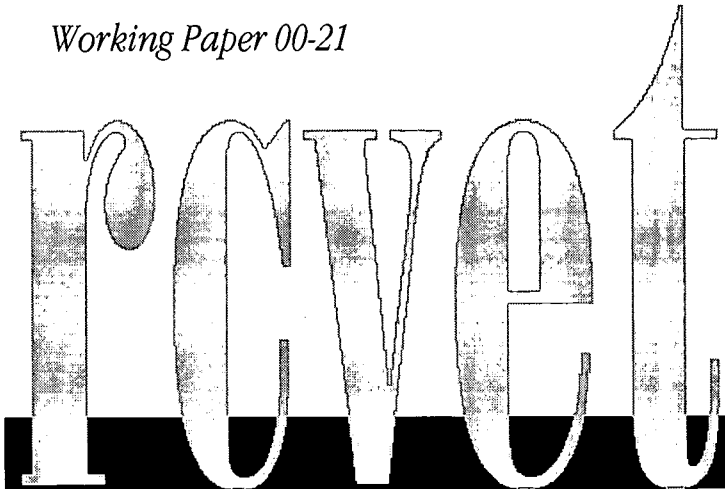
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INTRODUCTION

This Working Paper presents a brief initial report of a research project undertaken during 2000 as a collaborative research effort between the Research Centre for Vocational Education and Training (RCVET) at the University of Technology Sydney, the Adelaide Institute of TAFE and TAFE SA.

Further analysis of the data is required and the research findings will need to be discussed in the context of the research literature, to the extent that it informs online activity. What follows are some of our preliminary findings only, painted here with a very broad brush. The full research report will be publicly available in January 2001.

Feedback on this Working Paper would be most welcome and may be sent to

Kaye Schofield: schofiel@ozemail.com.au

Anne Walsh: Anne.Walsh@det.nsw.edu.au

BACKGROUND TO THE PROJECT

For more than a decade, the demands placed on VET professionals arising from major changes in the Australian vocational education and training (VET) system have been growing. Comprehensive changes in the external environment together with internal changes have come together to transform the scope and nature of the work of the VET practitioner.

Many of these internal and external pressures for change have converged around the concept of “flexibility”. Since the mid 1990s, flexible delivery of VET has been one of the central objectives of both VET systems and training organisations alike, paralleling and intersecting with the pressure for an Australian workforce which is more “flexible” in terms of working hours and the site and scope of paid work. As Buchanan and Watson (2000) have noted... *‘Flexibility’ now ranks equally with (if not greater than) fairness in industrial relations and wages policy.*

The relatively recent systemic shift from the objective of flexible “delivery” to the objective of flexible “learning” reflects a growing wish to focus beyond the flexibility of the systems for distributing vocational learning towards the flexibility of teaching and learning processes themselves and, by implication, the flexibility of learners and VET teachers and trainers.

Flexible “delivery” and flexible “learning” may be achieved in many ways. It is certainly not confined to practices using information and communications technologies (although these do broaden the means by which flexibility can be achieved) nor are online technologies the only form of technology which can be applied to make delivery and learning more flexible. However this project was concerned with online learning, defined here as a form of flexible learning which is facilitated by the use of the Web-based technologies and resources.

The application of new information and communications technologies to teaching and learning processes is a rapidly expanding but still a marginal and under-conceptualised area of VET practice (Harper et al 2000). Research into online education is still at the developmental stage and validated research and evaluation is, as yet, insubstantial (Cashion 2000).

The speed of technological change and continuous innovation has meant that sound evidence-based and potentially generalisable principles underlying most aspects of online teaching and learning in VET are not yet articulated; experiences in schooling and higher education are often presumed to be applicable to VET; practitioner knowledge is not systematically organised in ways which expand the VET knowledge base; and ways of enhancing the capability of VET practitioners to engage with online technologies in a principled way are still evolving.

THE RESEARCH PROJECT

The primary research questions were structured to explore VET practitioner knowledge about and experiences of online learning and teaching. A subsidiary set of research questions explored the extent to which the conduct of research and professional development could be enhanced by use of the Internet. This Working Paper reports only on the first set of research questions.

Data was gathered using a survey, structured interviews, online research events and two face-to-face workshops.

The project was a collaborative one, designed from the point of view that the relevance and quality of research in this embryonic field is enhanced when VET practitioners engage in research in partnership with research institutions. It also hypothesised that enabling VET practitioners to be part of a research community and to develop an orientation towards research and inquiry is itself a new form of professional development relevant to the emerging field of online education. The final research report will examine the role of research in professional development.

18 VET practitioners considered to be at the leading edge of online education in TAFE South Australia volunteered to join the research project. The self-nominated group comprised 13 women and 5 men aged between 30 and 58. The average age was 44.8 years. 4 participants were full-time continuing employees while 14 were full-time contract employees, mostly on long-term contracts. One was an hourly-paid/ sessional teacher.

The group came from a relatively narrow range of vocational and general education areas. Ten had a teaching background in Office Administration, Business or Information Technology studies. Four had an ESL/Adult Literacy background and two came from Community Services. Library Services and Women's Education were the other backgrounds represented.

Members of the group held varying understandings of what "online learning" was beyond the concept that it is learning, which is facilitated by the use of the Web-based technologies and resources. While all members of the group reported that they used online instructional strategies, half also reported the use of offline strategies. Most were using a combination of instructional strategies.

The nature of the group's involvement in online learning was diverse, encompassing professional development or mentoring of other staff, developing and/or delivering online modules/ training packages and involvement in LearnScope projects. Other online involvement included marketing online education services nationally and

internationally; developing the functional specifications for an online virtual learning environment; helpdesk and technology support and management of online enrolments.

Because of its self-nominating nature, small size and particular context, care is needed in generalising from the experiences of this group to the wider community of VET practitioners. Nevertheless, the findings do yield some propositions worthy of testing in other contexts and with other groups.

Four main themes have emerged from the data so far and these provide the structure for this paper.

- Constructing knowledge about online learning.
- Changing professional roles and practice
- The workplace learning of VET practitioners
- The organisational context of online teaching and learning

CONSTRUCTING KNOWLEDGE ABOUT ONLINE LEARNING

In a VET policy environment keen to accelerate the take-up of online learning, the findings from this research serve as a timely reminder that online teaching and learning is still a very new area of human endeavour and a new area for VET policy and practice. It is an area in which there are no necessary or deductive truths and where bold hypotheses have not yet been put forward and subjected to rigorous testing and criticism. There is no single body of theory which is widely accepted as informing online practice in VET, although distance education theories are widely regarded as helpful and relevant. There is a good deal of uncertainty about whether institutionalised educational knowledge about the application of educational technologies or teaching and learning is applicable to teaching and learning in a Web-based environment and therefore there is uncertainty about the extent to which this idealised knowledge could form a foundation for knowing about online teaching and learning.

The research shows one group of VET practitioners actively if not always consciously engaged in the process of constructing and discarding knowledge about online teaching and learning emerging from their own, often eclectic, experiences. To do this, they are telling the stories of their contributions, helping themselves and others to see the problems from many different points of view. They are continuously making choices based on certain presumptions, although these presumptions are not always conscious or articulated. They are creating a language with which to describe more clearly what they do, believe and value. They are sharing what they know in verbal and electronic conversations in their workplace, between workplaces and around the globe, thus helping to build common ground for action. From these practices they are establishing practical systems for the design, production and distribution of online products and services.

What they are not yet doing in any systematic or conscious way is standing back and reflecting on what inferences (if any) may be drawn from their individual and collective experiences. However this finding must be modified to take account of the production and circulation of practitioner knowledge within statements in online learning manuals and formalised professional development activities. Nor are they yet systematically testing their interpretations of online teaching and learning (as distinct from techniques) against the interpretations of others within their own organisations or beyond.

Furthermore, the research suggests that organisational and systemic interest in or capacity to capture and manage practitioner-constructed knowledge for wider application and testing is highly variable and generally at a low level.

Preliminary findings

The research sought to briefly explore what the practitioners believed about learners and learning online.

In relation to learners, a small majority of survey respondents did not believe that all students could learn effectively through online activities. Others did believe that all students could learning online but more were unsure whether this was so.

Almost all believed that having computer skills and being comfortable with the technology was a necessary pre-condition for learning online. Learner motivation and commitment to learning was the second most common attribute of students, together with a willingness to try new methods. An independent learning style was thought an important attribute by almost half the participants. Other attributes identified as necessary included communication skills, a reasonable command of English and an ability to read.

Is online more suited to some areas of study than others? Participants were asked about whether some competencies were more or less suitable to online methods. Overall, there was little support for a fully online approach, with a common view that different learners, different competencies and different industries required different mixes of online and face-to-face. Just what factors would lead to any particular mix was unclear.

Three quarters of the group believed that online delivery is more suitable in some industries or occupations than in others although 3 were unsure. Most believed that practical technical skills required some face-to-face learning, although they remained receptive to new ways of thinking about how online could assist the development of practical skills, leaving open the possibility of their view changing in light of other experiences.

There was no shared view within the group as to whether all key competencies could be learnt online. In the survey, half believed they could, 6 did not and 4 were unsure. Language, literacy and ESL competencies were frequently mentioned with some degree of ambivalence in terms of the extent to which such skills could be developed online, particularly in relation to spoken language skills. Team skills were generally thought best developed largely through offline strategies.

Respondents to the survey were also asked to rate the importance of a number of benefits commonly attributed to online learning. Every respondent emphasised benefits to learners rather than to teachers or the organisation and all believed that the capacity to meet the individual need of students was a very important benefit. Other benefits rated as important or very important by most of the group were promoting access to VET of disadvantaged learners, meeting the needs of workplaces and meeting the growing demand for VET. Significantly, many challenged the notion that online learning reduces delivery costs, and even if it does, few thought this an important benefit, with 6 indicating this as unimportant or very unimportant although one interviewee noted that

...online learning can be a very efficient means of operation. Online learning lends itself to integration with Student Information Systems, campus networks and communication networks, thereby promoting efficiencies in delivery and administration

Participants during interviews and in the survey nominated a wide range of other benefits they attribute to online learning including exposure to new technologies and the opportunity to reflect on teaching practice; the ability to easily tailor content and update material by teacher; the possibility of improved retention and completion rates through the provision of more study options; enabling communication between distance learners – each other and the facilitator; and helping shy students to communicate without fear.

The research also sought practitioners' views of teachers and teaching. Respondents were asked how much they personally agreed or disagreed with a number of statements about online teaching and learning, posed in order to shed light on their educational philosophies. Responses suggested agreement around many statements, signalling a convergence of professional judgement in some areas, but also suggesting widely differing views in others.

With only one exception, participants believed that good online teaching is about building community, caring for students and being responsive. Building and belonging to community was a recurring concept evident all the data collected and was highly valued by this group.

...aha...online activity is about building communities through communication... being proactive and not assuming participants will make the first move. (Online event)

Most participants agreed that teaching online is considerably more intensive than traditional face-to-face education and that teaching becomes more creative when it uses interactive multimedia. They also believed that online work is undervalued because it is regarded as a practice still struggling for organisational legitimacy.

In contrast, members of the group held very differing views on a range of matters. There was no consensus within the group on the following statements.

“While emerging online technologies enable different methods of delivery, the teaching strategy is more or less the same as in a face-to-face context”.

“The knowledge and skills of teachers about online learning is the single most important factor affecting implementation”.

“Educational media are simply vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in our nutrition”.

The group was also clearly divided on whether all teachers could become effective facilitators of online learning. In the survey, 8 respondents did not think so, 6 did think so and 4 were unsure. Despite these differences, there was considerable agreement on the question of which attributes would indicate that a teacher would be an effective facilitator of online learning. The most commonly described attribute was that of being imaginative and creative, a lateral thinker. This was most frequently coupled with the attribute of being a risk taker, someone who was prepared to get out of their comfort zone and try new things, to experiment.

These attributes present as personality traits rather than “skills” or “knowledge” in the way we usually understand them. If it is the case that personality traits rather than competence are significant in the adoption and implementation of online VET, then the implications for the recruitment, induction, role assignment and professional development of online practitioners are substantial.

The next most frequently mentioned attributes were having some computer skills, an understanding of the medium, confidence in using technology and also a commitment to online methodologies.

A small number of respondents thought that already being an effective facilitator of learning in a face-to-face setting was a desirable attribute, while the personal qualities of being flexible/adaptable, of patience and persistence and of being enthusiastic were attributes regarded as desirable by some. Other attributes mentioned included good planning and preparation; knowledge of how to involve students in online activities; ability to adapt material for online; having a learner centred philosophy on teaching; being willing to let go of power and being prepared to put the time into doing the module themselves first.

The research also explored whether involvement in online activities had changed the educational values and practices of the group and, if so, in what ways and to what extent. When asked at interview whether their ideas about education or their educational values had changed as a result of their experience in online delivery, most indicated that while their professional values had remained the same, involvement in online activities was causing many of them to reflect on their teaching approaches and strategies, illustrated by the following interview comments.

...it's making everyone go back and is making them think about the general education issues

For myself it has not been a rethink - my overall philosophies haven't changed but the way I do it might. . I look more at the learners from the learners' point of view (imagining the experience for them and what assistance might be needed)...

...when I was studying adult education I kept looking at this thing called androgogy and thought "I'm bugged if I can see the difference [from pedagogy]". Learners of all ages have the same drivers and need to be listened to. They need to be respected, to experience the excitement of discovery, to be able to develop the capacity to discover for oneself, to have a feeling of care and getting positive feedback (if you are 'loved' you will respect that relationship), and have a need for structure...it is the clear and definite role of the nurturer (teacher) to provide an environment where this can happen and I have firmed up in that view.

Some reported a heightened level of awareness of individual differences and different needs amongst learners. Others indicated they had shifted towards a more collaborative approach in relation to both teacher-teacher and teacher-learner relationships. Some no longer felt a need to know everything and saw the need to provide for greater learner choice and more learner input. Increasing recognition of the value of informal learning was also evident. However, there was no consensus as to whether their involvement in online activities had changed their relationship with learners:

...online delivery can deal more with individuals – there is much more one-to-one which changes the relationships...you -have to get to know them all better, to know their preferred styles [of learning] etc (Interview)

In the classroom students have become more allies of teachers - and there is more of a collaborative approach among them (Interview)

It hasn't changed the relationship [between lecturer and learners] 'but students have become more responsible for their own learning'.

The relationship with learners haven't really changed - in terms of language and literacy the demands are much the same (Interview)

From the interviews it would seem that value clashes are emerging in both the implementation of online learning itself and at the intersection between educational philosophies and management philosophies about online learning. Practitioners' sense of education as a human service rather than a "productivity" centre was causing a good deal of anxiety for some. Overall, there seems to be a growing tension between the organisational emphasis on administration, finance and class hours and the practitioners' own sense of professionalism which is being progressively enhanced by involvement in online activities.

CHANGING PROFESSIONAL ROLES AND PRACTICE

The impact of online activities on the professional role and practice of this group of TAFE staff is not easy to distinguish sharply from the wider changes which have been wrought to the role of the TAFE teacher/lecturer. Nevertheless, the dichotomies experienced by practitioners are clear. On the one hand they are excited and challenged by their online activities while at the same time they are feeling frustrated and pressured by lack of time, infrastructure and resources. On the one hand they have a heightened sense of professionalism deriving from their involvement in online VET while organisational pressures seem to challenge their sense of professionalism and their professional identity.

Preliminary findings

Participants reported a general shift in their professional practice over the past five years from an instructor role to a facilitator role, a shift not confined to or necessarily caused by teaching online. They were also experiencing a general organisational and systemic shift towards self-paced learning, and expressed reservations that this is not desirable for all learners in all instances. They felt considerable pressure to be more flexible and multi-skilled and some reported feeling greater stress as a consequence.

There have been huge changes!...five years ago we were responsible for the preparation and delivery of class materials plus a small portfolio with a limited range of admin tasks...now the system is asking more and more of people (Interview)

...most teachers are working harder - more is imposed on them - reports, assessment, evaluation, - there's less time for preparation -system upon system, upon system!
(Interview)

Other contextual factors impacting significantly on the roles of practitioners include a stronger emphasis on budgetary restraint and income generation at lecturer level; a strong emphasis on accountability and auditing; pressure to meet deadlines and student hours targets and the devolution of additional administrative responsibilities (formerly done at middle management level) to lecturer level. Cumulatively, this is having a negative impact on lecturers' perceptions of their professional role.

I feel I can't do my job as an educator as well as I'd like - the pressures of balancing the budget is to me not my role...balancing time and budgets at work has to be done in the context of my whole life- my own life as a wife, mother, administrator and educator - if there is more pressure on the administrative side then one of the others has to go!
(Interview)

Not all staff have embraced change. One interviewee suggested that where an industry or business has not changed, then it has not been necessary to change the associated training. Another noted

I work in (name of section) – I haven't seen changes here - the teachers are tired they don't have the energy to take on new things (Interview)

It also seems that more tenuous employment conditions have impacted on their role and work in a number of significant ways. Especially troubling is the suggestion that the shift to individual contracts has caused some TAFE staff to be increasingly reluctant to speak out.

...more teachers are on contract and live in fear of losing [their job] and don't speak out... there is fear and frustration around their jobs (Interview)

Importantly, the group also suggested that being on a contract had been a factor leading them to engage with online VET. They suggested that, as contractors, they felt a need to develop and maintain a profile and to keep a range of employment options open. This question of the non-standard nature of the group's work and the associated conditions will be further considered in the final research report.

However, for virtually all members of this group, their involvement in online activities has caused major and very positive changes in their professional role and practice, changed their perceptions of teaching and increased their sense of professional satisfaction and challenge. Satisfaction with their current jobs was high, with 10 survey respondents indicating they were very satisfied and 6 indicating they were satisfied. Most importantly, involvement in online delivery has been a very positive experience for the majority of respondents, increasing professional satisfaction for 15 of the 18 respondents.

When asked whether their first experience of online had shaped their subsequent involvement, most indicated that it had prompted a fundamental shift in their professional lives. It has provided more (and welcome) work challenges, more involvement in planning the content and sequencing of teaching, more focus on the teaching process rather than the content to be 'conveyed' and more opportunities for team-based work which they clearly valued highly.

In a classroom ...I wasn't stimulated...it's now stimulating and challenging trying to train the staff up...I'd be disappointed at the thought of going back to face-to-face without the flexibility of online

I feel its more interesting - it always was but now it's more so. I think more about why I am doing what I'm doing.

I now do more research instead of relying on old material - material online is easier to update

I'm extremely lucky - I'm not bored...I really like the variety

Now I do all the TAFE SA online facilitating for staff - I wouldn't have believed it 12 months ago

As a result of their involvement in online learning, most participants had a positive feeling of being part of a big story beyond the confines of their own day-to-day work, of feeling that their professionalism has been extended by the challenges of online and, in most cases, acknowledged.

...I have gone from being a classroom teacher to a global teacher involved in research and communication with a student base from anywhere in the world (Interview)

we are ordinary people but the technology has allowed us to become globally significant...(Interview)

Teachers don't get recognition generally but we do (individually and as a group) because of our involvement in online... (Workshop comment)

However, a couple within the group expressed some dissatisfaction, noting that despite having acquired new skills and being recognised internationally, their Institute did not recognise or utilise their skills in online learning.

When asked whether these changes have made them feel different about themselves, the overwhelming majority indicated a positive difference, signalling confidence, skills, interest and enthusiasm as positive outcomes.

Some expressed a degree of ambivalence about the way online teaching changes professional practice. They were troubled or frustrated by the way online causes the teacher to become a learner, by the shift from being a 'knowledge-giver' to a learning facilitator and by having to live with the feeling of not being in control. Others were concerned that they are under pressure from their managers to do everything online rather than finding an appropriate mix of face-to-face and online. In this they felt caught between competing pressure from their organisation on the one hand and from their professional need to respond to the needs of their learners on the other.

WORKPLACE LEARNING

This research set out to explore the group's ideas about and experiences of professional development. In the process it became clear that the traditional concept of 'professional development', with its historical overtones of formal training and instruction, of behaviour modification, change management techniques and de-contextualised learning are not helpful in explaining the complexity of why and how this group of practitioners came to know and love online VET. Despite their own participation in formal training or professional development programs and despite the fact that many had a formal professional development function, formal training was the least valued form of learning and the least useful source of learning for this group.

The concept of workplace learning seems far more helpful in capturing the nature and diversity of the research findings. We are now beginning to see the development of conceptual frameworks which acknowledge the complexity of workplace learning and its holistic, social and situated nature (Tavistock Institute 1998:57). One such framework (Onstenk 1997) suggests that learning processes which result in knowledge, skills and understanding arise from the specific interaction of four factors: staff skills and qualifications; the ability and willingness to learn; the learning possibilities of the work process and the structured learning opportunities available. In relation to the third of these factors, the concept of the 'learning potential of jobs' seems especially useful

by highlighting the research findings that the scope and variety of jobs themselves and the immediate physical and social environment in which they are located are important factors influencing VET practitioner learning.

Some of these conceptual frameworks will be considered further in developing the final research report, as will their relevance to the production and application of VET practitioner knowledge. For the purposes of this Working Paper, Onstenk's framework has been drawn upon to organise the findings.

Preliminary findings

This was a group of experienced professionals with a strong sense of their own professional responsibilities. The extent to which they might be considered "typical" of VET practitioners needs further analysis. Collectively, they represented 204 years of TAFE experience with the average number of years working in VET being 11.3. The first of the group to become involved in online learning did so in the early 1990s, the most recent to do so became involved in 1999. On average the group had 3.4 years involvement in online learning.

While most were formally trained as teachers, not all were. The research did not explore the skill and qualification mix within the group or record differences, if any, between those who were teacher-trained and those who were not, although one participant was obviously conscious of difference when commenting that

...I don't know all the fancy words to use - I'm not a trained teacher...

The single most important factor triggering the decision of the participants to become involved in online learning was personal and professional interest. The other two factors which seem to have been significant in triggering their involvement were the availability of resources and anticipated demand from students. The least likely drivers were pressure from the Institute and demand from industry.

Other factors triggering the decision to become involved in online learning activities included the support of a mentor or encouragement by a colleague; anticipation of the benefit of technology in improving delivery to students; the opportunity to improve student access; the prospect of streamlining the administration of learning; wanting to learn something new; and seeing online innovations as providing a personal career opportunity.

Equally important seems to have been the chance opportunity, being ready for a change and in the right place when an opportunity arose.

These findings are significant in the context of the national VET system which has tended to use international competitiveness and the national interest as rallying cries to encourage organisational and individual take-up of online strategies.

Most who were initially hesitant to become involved in online learning commented in terms of their initial lack of confidence in their own competence and a fear of the unknown, although all commented on the importance of a "significant other" working formally or informally as a mentor.

The design of individual jobs and the organisation of work play a critical part in opening or closing learning possibilities. Many jobs, even professional jobs, are not big

enough for the people who hold them and these are unlikely to be a source of learning. Work can be organised in ways to encourage or discourage staff creativity and learning. In this area of knowledge-in-the-making, where staff have to construct and disseminate most of the knowledge themselves, the design of their jobs and their work processes become central to the online endeavour.

The most striking thing about this group of practitioners was that their jobs were broad in scope and offered much variety and discretion. Multiple roles were the norm, with only 3 of the 18 participants describing a single role. Nearly half of the respondents had 3 or more roles. These roles spanned technical, instructional, content development, marketing and management roles. 11 respondents had some form of co-ordination role such as program or project coordination, or staff management. 7 had some involvement in professional development for other staff, or a mentor role. Many had been involved in various pilot projects and 12 of the group indicated they had a major role in online education.

In terms of job design, the roles of program design, materials development and teaching may have been separated in the past but this was generally considered undesirable. Three quarters of the participants disagreed or disagreed strongly with the statement "In the area of online learning, design, development and teaching are really separate and distinct activities, best done by people with different skills". This and other findings point to the need for jobs in the area of online teaching and learning to be strongly integrated and multi-functional.

Another recurring theme in participant responses was that job discretion and work freedom was important to learning how to facilitate online learning. Freedom to create, freedom of choice to participate and freedom to make mistakes were ideas consistently evoked as important factors facilitating staff learning.

Interviews sought comment on the extent to which work colleagues were involved with online learning. What emerged was a picture of a group of leading edge, enthusiastic and motivated practitioners working with each other and sharing their experiences, but struggling (at least in this early stage) to integrate online work more fully within their work environments and engage immediate work colleagues in the process. It also showed a group of practitioners still operating outside the "mainstream" of VET practice.

Where there were a number of people involved in online activities at an Institute or a particular workplace, staff felt supported and the exchange of ideas and information was a highly creative process. However, where there was only one or two practitioners active in online VET, there was a strong sense of workplace isolation. Nevertheless, there were indications of a growing receptivity amongst currently non-involved colleagues. Convincing work colleagues to become involved was seen as very hard work, requiring patience rather than a hard sell, requiring the development and application of multiple techniques to support and encourage colleagues rather than compel them.

When asked what professional development programs related to online learning they had participated in, almost all the group nominated both formal and informal training programs and the majority had participated in development projects and action learning

projects. Other professional development for online learning included Web- based community building activities; volunteer teaching; online and physical conferences; facilitating and mentoring other staff in LearnScope projects and being an online student.

Participants cited four main sources of their own professional learning.

Learning by doing. Participants reported that in the beginning they had little choice but to learn by doing. Because they were leaders in the field, there was no one else to learn from - they were pioneers “making it up as they went along”. They were also individuals with an inclination to learning through problem solving. Assigned real-life problems such as product-development projects, they simply rolled up their sleeves and did it. But this was not, of itself, sufficient to ensure appropriate learning.

Learning through work colleagues and teamwork. Supportive work colleagues and membership of a team is a key factor in learning about online VET by this group. When asked how they first learned to use information and communications technology for online learning, the source most frequently cited was work colleagues in the same discipline area. Colleagues with online learning or discipline expertise were and remain the most used source of information and advice about online learning.

Meeting challenges every day is enormously helpful in putting things in perspective and gradually building skills, strategies and understanding. I've needed enormous amounts of support as I have learnt intuitively. Had I not had a great colleague to solve problems with, moan and dream with I'd have fallen off the bus years ago.

I like working with a team ... focusing on a problem and working it out together

I like to be able to do it myself with someone I like one metre away and who is very patient and knows a lot about it.

I was called the evangelist - I had an effect on those around and they became interested...last year 400 teachers came on line...when I started in the unit where I now work there were 2 people, now there are 15 running online services

Within the group, and reflecting TAFE SA priorities and strategies, mentoring is widely used to develop staff capability to work online. Different meanings are attached to the word ‘mentor’ by group members, with some referring to informal collegial support while others used it in a more formal sense of structured and planned personal coaching and development. Mentoring will be considered further in the research report but clearly it is widely accepted, practised and valued by the group as a method of developing online teaching capability.

Learning through communities of practice: The research highlighted a community of practice as a very important source of learning. Communities of practice, while intersecting with the concept of work teams and supportive work colleagues, offered wider learning possibilities unconstrained by place and time. Despite feeling locally isolated at times, when participants were asked directly whether they felt part of a community of online practitioners, the overwhelming answer was yes, although it was also clear that each participant felt they belonged to very different communities of practice.

Huge! It is my whole focus! This is my passion...a community of TAFE SA online

I feel integrated into the global community

I feel part of the ESL community online through module delivery group

Within the 2 LearnScope Programs I find it exciting and a 'community of like minds'...I also enjoy the international community of ESL teachers (I haven't met them but I feel very close to them)... -"I wouldn't call it 'virtual' anymore it has become part of my life"

Extremely strong [sense of community] I've worked with people with passion... the community is 'extremely important to me'

I use the community network of committed people and talking to them renews my enthusiasm and confidence

I also belong to a WebCT online community group...WebCT chat is the biggest support...although I'm alone on campus I do feel part of a wider community

I developed the Web page for Office Administration and update it so I'm a part of that community

Yes - I feel part of a community being a writer ... they are great people - energised, passionate people! 'I could pack groceries all day and like it with people like that'

Learning through formal off-the-job professional development: Most members of the group seemed to have little confidence in formal off-the-job professional development activities, expressing scepticism about the quality of the formal activities they had been involved in. This was not however a universally held view and, for some, conferences, overseas study tours and workshops and fellowships had provided good learning opportunities.

The research suggests that the point in time that participants first became involved in online activities may influence views about formal professional development. Those who became involved more recently would have been entering the field at a time when more sophisticated and structured professional development had become available, when the experience of the first wave of innovators had been captured in the first manuals and programs. Thus the experiences of more recent online practitioners would in all probability be more positive than those who participated in first-wave professional development.

Despite reservations about the direct value of structured off-the-job development, many participants identified less tangible but nevertheless useful outcomes from formal professional development programs.

The programs I have participated in have not always helped in a direct way to further my professional development, what they have done is highlight the need to keep experimenting and try new and innovative ideas as there is no one clear answer about online learning that has emerged as "the solution"

What seems to be emerging amongst individuals in the group is a view about how different formal and informal opportunities can work together to enhance practitioner learning, exemplified by the following interview comment.

Formal training taught me the fundamentals of how to do it! Development projects have forced me to identify areas in which I need to learn more and to seek assistance. And that assistance has mostly come through informal training by more experienced people than I.

As a way of gaining further insight into the way practitioners believe practitioners learn, participants were asked what advice they would offer to colleagues wishing to prepare themselves for participating in online delivery. Some commented that advice was context-dependent while others believed that the learning styles of their colleagues would need to be considered, drawing a distinction between “problem-solvers” and “step-by-step learners”.

If they like to play –I’d tell them to go away and play around then try a little module of say 4 weeks duration with no outcomes in terms of assessment and no payment of fees...If the person is a step-by-step learner I would direct them to where the processes are clearly set out and have back-up and support

Most comments reflected simple pragmatism, based on their own personal experiences and the view that multiple (if not random) strategies are needed.

Do a whole range of things – do an “Intro to Online Learning” module yourself in your own time, do an awareness raising session, work with someone – buddy up with someone, observe, visit an on-line unit, be part of a project team, visit the staff site on the Web, attend conferences, look up the online newsletter, participate in discussions and do a small project yourself

Whatever happens to be handy - formal or whatever. I have learned in different ways - we all do - none of us learns in only one way.

However, at least four themes were discernible in participant responses.

It’s attitude, not skills: Participants believe that, in the first instance, adoption of online practices is dependent on practitioner attitudes rather than technical skills. They stresses the importance of having a “flexible attitude”, being “open minded” and being “willing to explore possibilities”. One suggested the need to “buy a bullet-proof vest!” This affirms the view of the group (indicated earlier in this paper) that personality traits of individual teachers are highly relevant to the take-up of online VET.

Learn basic computing skills: Participants stressed the need for a basic familiarity with computers and the Internet and good mouse skills. All participants believed these skills were only required at a low level in the first instance. Most believed that formal professional development was now the best way to acquire this basic technical competence, although this was not a view shared by all, with some believing that “playing around” remains the best starting point for acquiring computing skills.

Think about the learning experience, not the technology: Respondents consistently stressed the need for new starters to reflect carefully upon the educational dimensions of online learning and to be educationally sound in their decision-making. They pointed to the need for a clear view of the educational and methodological issues involved, to ask questions about why go online and where might be a good starting point and to think how to move through the process. They also emphasised the need to focus on the teaching and learning processes, not the technology.

Try not to blind them with the technology. They want to be refreshed and enthusiastic when they experience online not wanting to go home and have a Bex and a good lie down. (Online event)

Have a go but not by yourself: Most participants, perhaps because of their own experiences as early adopters, believed that getting in and having a go is the best way to get started, although they consistently stressed the importance of learning from respected colleagues. Interestingly, the idea of 'time to play' was frequently raised,

Have some friends – don't work on your own

Give them plenty of mentoring, and playtime to develop their own skills in the new areas and don't expect them to do it in their own time on top of their current workloads. (Online event)

ORGANISATIONAL CONTEXT

From the previous section is clear that the adoption and implementation of online VET is affected by the content and structure of work. It is also clearly the case that the culture, policies and structure of the organisation can impede or facilitate its adoption and implementation.

Preliminary findings

Interviews and the survey indicated a wide range of organisational limitations impeding the take-up of online learning. Generally, these fell into four categories.

Inadequacies in the technological infrastructure (slowness, insufficient teacher access to computers, not enough modems for external access, insufficient phone cabling etc). A couple of participants, while irritated by inadequate infrastructure were even more irritated by the widespread perception that the infrastructure served as a brake on VET online.

...there are always problems with log-ins, access, content and there is always some bleating about these things but it's the same as if there are no markers for a whiteboard - you do something about it-like take your own! We have no contingency plans - you need contingency plans in any media. When the network crashes you use a pencil and paper!

Alongside the need for a sound technological infrastructure is concern about the implications of online VET for the built environment

At the moment we have big lecture rooms (which have to be booked well ahead) and computer labs where there is no place for books - we need study skills centres (learning rooms) where students can bring in their lap tops and plug them into the network have their books etc with them

Inadequate allocation of time for designing, developing and delivering online programs. Despite very high levels of personal enthusiasm for online learning, lack of time was consistently and frequently described as a significant barrier to involvement in online VET, underscoring participants' deepening concerns about having to learn about and develop online education outside of normal working time, on top of actual class time. Participants identified the problem of lack of systems for back-filling those undertaking specific online projects so as to minimise disruption of the wider work team.

Due to ever increasing workload and a number of additional tasks, I am not (currently) involved (apart from meetings) and I can't justify more hours for the greater good of TAFE. I've spent a lot of time and money learning online and although I have gained personal satisfaction from this I can't afford not to be reimbursed for at least some of my efforts. Sad when it comes down to it

Lack of support from local management or influential colleagues. All participants regarded policy at the state level (and in many instances the national level) as supportive of online learning, but many believed that policy is not always backed by local managers or by the provision of adequate resource allocations, especially for reliable and fast technological infrastructure at Institute level or fair allocation of time for online activities.

Organisational cultures which do not promote collaboration and innovation. While the participants in the group were drawn from a number of TAFE Institutes, came from different discipline areas and have had very different roles and experiences, they all believe that staff collaboration is central to the development and application of online practices. All their personal experiences of online have been through collaboration and sharing and they believe that where an organisation does not promote this way of working, online innovation and take-up is impeded.

On the question of whether all training organisations can become proficient in the delivery of learning online, most believed they could while a few were unsure. However, when asked what characterises those training organisations, which are most likely to become proficient in the delivery of learning online, there was an almost universally consistent response. These core characteristics were:

- a commitment by the organisation to online learning and an organisational view that its application is beneficial to both staff and students;
- a willingness to embrace change, and an ability to put change management strategies into place;
- support for staff professional development and the provision of adequate resources to enable staff to undertake necessary training;
- resourcing for mentors, online learning facilitators and IT support staff and a helpdesk;
- having technical expertise and instructional design expertise (including online pedagogy); and
- having the IT hardware and the ability to create or find and license good content.

Three other organisational characteristics mentioned were of interest: scattered employees for whom online communication does away with geographical or time barriers, a commitment to critical trial and evaluation and high standards in professional conduct.

The following response is a good summary description of group's views.

Organisations that... encourage and accept change, provide and promote flexible teaching and learning environments, have senior management endorsing and promoting online learning, are innovative and visionary, have a change management plan, and have a professional development strategy

The interviews indicate that despite continuing difficulties in engaging work colleagues in online activities, the mood in the field seems to be changing. This seems to be coming from the cumulative impact of intensive individual mentoring combined with a strategic, consistent, long-term and generally understood policy position adopted and promoted by TAFE SA.

During interviews, participants were asked what they saw as the main challenges facing them in their work in online learning over the next 2-3 years and those identified were as follows.

Change management. Participants see a need for strategies to get middle managers to become more supportive and “old world lecturers” to try online technologies.

Responding to rapidly increasing demand. A rapid increase in demand is expected and there is growing concern about how to scale up capability to meet the expected demand.

...when the floodgates are opened we'll need a raft! - I worry about how I will cope...the demand for online is scary - it's scary because it is doubling every 6 months which means if I replace myself with 2 people I might be able to keep up!

Legitimising and recognising online teaching as “real work”. The practitioners held strong views that online activity needs to be regarded as legitimate and recognised as “real” teaching by institutions and work colleagues alike.

...because sitting on the Internet is perceived by some as 'play' there needs to be recognition of online as part of the workload - there are issues around the hidden, intangible nature of working online

There are some issues about having it [online teaching] legitimised by management by being resourced...let's see the support! Getting support where it is needed is important - valuing at all levels is important...What is legitimate learning...if you are in front of a class, that is legitimate, if you are in front of a computer you are asked 'are you playing around on the internet?' and it is not seen as legitimate. If you are doing PD online no one respects the time - 'Oh I'm glad you've got time to play!' How do you legitimise the experience? It means changing the culture and perceptions - it is not seen as core business - there is a need to integrate online into core business

Inadequate technology. This was seen as a major challenge by around one third of participants, with issues of internal cabling, firewalls and speed of technology all mentioned.

...the technical infrastructure can't keep up - we can't keep up having to buy bigger and faster machines - plans are in train to do this but it just exponentially expands with a need for bigger faster machines!!

However not all participants were convinced that the current rate of technological change will continue.

I don't think the technology will change dramatically - there have been drastic and fast changes up until now but this will now allow let people catch up a bit - everyone has had a very rapid induction into online

Is the mentoring strategy sustainable? There is substantial concern that mentoring (one of the principal strategies used by TAFE SA for skills development and professional support) is not sustainable without change.

With more people adopting online, mentoring will be more of a challenge

Mentors do so in their own time - this needs to be rethought

...online [effort will be] difficult if we early adopters drop off before the majority picks it up

Ever increasing workloads. Almost all participants expressed concern about current workloads and the additional demands on their personal and professional time arising from their online activities. There is a general view that the current highly intensive nature of the work is not sustainable over the longer term.

There are not enough people - we are always playing catch-up

How long will the goodwill last?... teachers are tired...they can't keep doing it all in their own time... you have to keep looking at e-mails to check if figures are on target because if you are under hours then you are seen as having too much [funding] and if you go over hours then you are seen as doing more for less and you don't need that much funding... so it's a 'no-win' situation...looking for fee for service we joked the other day that we should 'open a brothel' to raise funds

Nevertheless, there remains a strong sense of optimism within the group

...but hey...so we are overloaded but we wake up and we want to go to work because we feel satisfied

Some participants made comments which went to the very interesting and important question of the nature of online work itself. For some, its high-intensity and emotionally exhausting nature is causing them to reflect on and worry about the future.

Sometimes I can't face turning the computer on...although I'm generally excited by it...it's disembodied...there's a difference in how people relate online...I can't explain it but it's different...there's a hypnotic 'pull of the thing' in doing e-mails...there's something almost too smooth about online. (Interview)

Last term I was not in a class but was involved with distance learning online but I would find that difficult to do this continually as it was emotionally draining dealing with low-level learners. Online you sit in a swivel chair trying to simulate one-to-one what happens in peer groups (Interview)

This matter will be further considered in the research report.

CONCLUSION

This Working Paper has reported on preliminary research findings concerned with the knowledge and experiences of practitioners involved in online VET. These findings go to important questions of practitioner construction of knowledge about online learning, changing professional roles and practice, the workplace learning of VET practitioners and the organisational context which supports or limits online teaching and learning

Research such as this, based on the knowledge and experiences of a small group of leading-edge practitioners, will not necessarily produce propositions which can be generalised across all online teaching and learning in VET. However, this research is seeking to go beyond simply reporting the reflections of a single group of practitioners. It aspires to report in an integrated way on multiple dimensions of the group's perceptions and experiences of online teaching and learning. In doing so it is beginning to offer insights into how the knowledge-base underpinning online teaching and learning in VET is being constructed and how the personal attributes of individual practitioners, their workplaces and the organisation within which they work interact to create a learning context for the construction of this working knowledge. From this evidence-base, potentially generalisable propositions are beginning to emerge.

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