ODL STUDENTS' PERCEIVED COMPUTER LITERACY COMPETENCIES, EXPECTATIONS OF SUPPORT INTENTION TO USE AND PERSEVERANCE

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ABSTRACT

This paper reports on disadvantaged South African practising teachers' perceptions on computer literacy competencies while studying to improve their teaching qualifications. During the process of developing a learning technology integration framework for the School of Continuing Teacher Education at North-West University, South Africa, an initial exploratory survey identified issues and themes for systemic inquiry, in order to provide substance to the integration framework.

The purposive sample related to a criterion-based selection of N=338 teacher-students attending supplementary computer literacy training sessions. Queues from the Technology Acceptance Model supplemented the questions intended to investigate enablers and barriers to learning technology adoption.

The pragmatic approach was towards discovering which possible interventions could be introduced to enable adoption of technology in interaction and learning. Descriptive statistics and structural equation modelling produce a suggested parsimonious model relating to self-confidence, trust and perseverance in acquiring computer literacy.

Keywords: **Higher Education; Open Distance Education; computer literacy; developing students; technophobia; teacher training; SEM.**

INTRODUCTION

Though educational technology may assist ODL students, at the School for Continuous Teacher Education (SCTE) at the North-West University, South Africa, in their study, reflection, thinking, assignments, information handling, assessment, group work, and communication with peers and facilitators (Laurillard, 2006), few use electronic technologies to enhance and augment their learning. The SCTE employs few learning technologies to teach and support students within an ODL model of course delivery. This situation does not comply with the aims of the South African Government's White Paper on e-Education (Department of Education, 2004) which demands a definite outcome of ICT mastery as a matter of urgency in teacher training.

It specifically states that all pre-service teacher-training in higher education institutions should include basic Information and Communication Technology (ICT) literacy and basic ICT integration into teaching and learning.

Teachers should have access to in-service training on how to integrate ICTs into teaching and learning. The e-Education White Paper acknowledges the backlog in its e-learning expectations and calls for development actions in this regard:

> *Many teachers have grown up in an environment that had less electronic technology available, and thus find the adaptation to working with ICT more difficult than their learners. A programme that urgently addresses the competencies of teachers to use ICT for their personal work, in their classrooms, should be developed. This will require extensive staff development and support. Thus, ICT will be central to the pre-service training of recruits and the on-going professional development of practising teachers (Department of Education, 2004, p. 22).*

The SCTE acknowledges this requirement for the advancement of e-learning. During the systematic investigation to develop a social transformational technology implementation framework to address the specific needs of SCTE, the needs of the students, faculty members, and the constraints of the organisation are considered.

After a series of needs, context, situational and tasks analyses, this emerging framework will be applied during implementation, evaluation and dissemination. This paper describes results of a survey conducted amongst in-service teacher-students attending computer literacy training sessions as part of a needs analysis.

It benchmarks the perceptions of the teacher-students on their computer competencies. Benefits of computer literacy for SCTE teacher-students include:

- **skills in information gathering and sharing computer-based learning,**
- **content with study groups and leaning communities,**
- **acquiring and sharing information that may be searched, manipulated copied and re-arranged to edit assignments and formulate arguments in documents and thought synthesised study resources and e-portfolios**
- **higher-order text-based learning possibilities,**
- **re-using text, graphics and multimedia in electronic format to produce learning materials for learners at school,**
- **acquiring and reusing Open Educational Resources (OERs) to further self-learning and presenting to learners in the school context,**
- **confidence in communicating online to effect collaboration in communities of enquiry.**

In compiling a social transformational learning technology implementation framework, various themes are explored with the aim to establish relevance while extracting meaning from the lived experiences of research participants.

To this end, the survey which is the subject of this paper, contributes to a framework of themes to be explored during subsequent research to expand and verify the initial framework.

LITERATURE REVIEW

Using Computers for ODL

While distance learning can be defined as "all forms of education in which all or most of the teaching is conducted in a different space than the learning, with the effect that all or most of the communication between teachers and learners is through communication technology" (Moore, 2003), ODL refers to the provision of opportunities to and eliminating unnecessary barriers for a diverse range of students in order to assist them to succeed in their education or training according to their specific needs and diverse learning settings (Butcher & Wilson-Strydom, 2008).

Open learning approaches include student-centred approaches, resource-based and autonomous learning, indicating the central position of the student. *Learning to learn* is in itself a goal for students in order to develop critical thinking skills and the ability to learn independently.

This philosophy becomes increasingly important for lifelong learning where people become functionally equipped to operate in the knowledge society (Butcher & Wilson-Strydom, 2008). With ODL, the culture of learning has shifted from the tradition of students passively listening in a classroom where attendance matters, to the culture of proactive reading, encoding and decoding at anytime, anywhere, indicating ODL efficacy (Kurtz, Amichai-Hamburger, & Kantor, 2009; Pena-Bandalaria, 2007).

The South African Government's White Paper on e-Education defines the use of ICT as "the convergence of information technology and communication technology. ICT is the combination of networks, hardware and software, as well as the means of communication, collaboration and engagement that enable the processing, management and exchange of data, information and knowledge" (Department of Education, 2004, p. 15). If correctly organised and managed, ODL enables the training of more teachers in less time at lower cost: "It not only enables in-service teacher education to take place in the schools, but also, through the growing use of information and communication technology, it makes possible the creation of virtual communities of practice in which working teachers can learn from experienced practitioners and from each other" (P.A Danaher & Abdurrahman Umar, 2010, p. v). The value of ODL for teacher education reflects against the huge need for teachers in the Sub-Saharan region of Africa, and especially in South Africa (CDE, 2011; Wolfenden, 2008). This need could be relieved through training unqualified and upgrading under-qualified teachers already in the system by consortia like Teacher Education in Sub-Saharan Africa (TESSA), providing appropriate continuing professional development, structuring in-service teacher training across South Africa, and supporting teachers with readily available open education resources (OERs) (Patrick Alan D anaher & Abdurrahman Umar, 2010). ODL courses and programmes for in-service teachers provide a cost-effective approach to address the scarcity of trained teachers, specifically in the rural areas (Harreveld, 2010).

Taylor classifies distance education into four distinctive generations and adds a fifth to his models of distance education: a conceptual framework (Taylor, 2001). Computer literacy on the part of students is not essential for the first generation where learning is offered through the paper-based correspondence model. Most of the delivery technologies prevalent in the second generation (the multimedia model) do not require computer literacy either, except computer-based learning.

In the third generation (the tele-learning model), none of the delivery technologies requires computer literacy. All of the delivery technologies in the fourth generation (the flexible learning model) require computer literacy: interactive multimedia online, internet-based access to the World Wide Web resources as well as computer-mediated communication.

Taylor's fifth generation, the intelligent flexible learning model, includes all the delivery technologies of the fourth generation, but adds automated response systems to computer-mediated communication and campus portal access to institutional processes and resources.

Computer literacy is essential for participating in fourth and fifth generation distance education delivery technologies. This implies that at higher education level, students have to be ICT literate, or alternatively the institutions have to offer programs to develop their ICT proficiency.

In conjunction with UNESCO, Mayes and Burgess (2010) list the subsequent functions of ICT in ODL teacher education as;

- **an aid to the distribution of materials as a means of affording two-way electronic communication;**
- **access to the internet and multi-way communication through networked computers; and**
- **a process of diversifying into resource-based teacher education.**

The focus in Taylor's distance education conceptual framework is on flexibility (learning any time, any place and any pace); the ability to present learning through highly refined materials, and advanced interactive delivery and reducing institutional variable costs. Computer literacy on the part of teacher-students is a pre-requisite for widespread use of computers in schools as well as to successfully integrate ICT-based learning technologies at the SCTE.

Computer Literacy

As early as 1978, Molnar (1978) grappled with the concept of computer literacy. Determining people's ICT literacy evolved from absolute views, such as measuring people's total functional skills in using ICT (Foell, 1983; Rawitsch, 1982), to assessing a set of skills and understanding people's varying needs for meaningful use of computers. While the first instance relates to comparing a user to a common set of criteria regardless of his/her occupation or technological requirements, the second scenario relates to a relative measure of a person's capacity to appropriately use ICT in a specific context, e.g. the use of learning technologies for study purposes (Oliver & Towers, 2000). Students should gain the confidence, skills and discrimination to adopt and use ICT in appropriate ways. "ICT literacy cannot be defined primarily as the mastery of technical skills. The concept of ICT literacy should be broadened to include critical cognitive skills such as reading, numeracy, critical thinking and problem solving and the integration of those skills with technical skills and knowledge" (Williamson, Katz, & Kirsch, 2011, p. 5).

The South African white Paper on e-Education defines digital literacy as "the ability to appreciate the potential of ICT to support innovation in industrial, business, learning and creative processes" (Department of Education, 2004, p. 15).

Digital literacy is regarded as a *life skill*, similar to literacy, numeracy and information literacy, as "the ability to locate, evaluate, manipulate, manage and communicate information from different sources" (Department of Education, 2004, p. 15). Anderson (2008) summarises the principles of ICT literacy for teachers as the use of technologies for processing information and communicating, i.e. computer technology, multimedia, networking, and especially the Internet. Teacher-students should attain six competencies:

- **operating computers,**
- **using computer applications,**
- **integrating applications into curricula,**
- **evaluating applications,**
- **designing new applications, and**
- **programming of computer applications (Geisert & Futrell, 1984).**

ICT literacy requires more than merely being informed on how to use technology formats. It impacts on teacher training, teachers' adoption of digital technologies, as well as the application of ICT in their teaching and learning.

In many cases it becomes impossible to distinguish between the individual technologies because of their integration in teaching and learning (Anderson, 2008). The National Assessment Governing Board (2010) prefers the term technological literacy due to "the capability to use, understand, and evaluate technology as well as to apply technological concepts and processes to solve problems and reach one's goals." ICT literacy is more than merely being informed on how to use technology formats as it has implications for teacher training, teachers' adoption of technologies, as well as for pedagogical use in classrooms (Pelgrum, 2008). Teacher-students' ICT mastery should be such as to enable them to function in a knowledge society, use appropriate technology to communicate information, invent and author information, as well as master communication and collaboration skills.

Technology Acceptance Model (TAM)

Building on social psychology and sociology theories like the Theory of Reasoned Action (Fishbein & Aj zen, 1975) several models for acceptance and use of technology were developed.

The Technology Acceptance Model (TAM) (Davis, Bagozzi, & Warshaw, 1989) became prominent. The TAM states that the acceptance of a technology depends on two types of beliefs: the technology's *perceived usefulness* and its *perceived ease of use*.

Abbad, Morris and de Nahlik (2009) applied the TAM in the e-learning domain to determine the perceived *usefulness* and perceived *ease of use* of individual IT technologies of teachers in training, as well as to determine how an individual's contact with and use of a specific technology influence the individual's perception of the ease of use of a specific technology.

RESEARCH DESIGN AND METHODOLOGY

This paper reports on the quantitative data analysis of a survey that also contained open-ended questions (Appendix I). The analysis of the open-ended question data is not addressed in this article.

The survey was conducted amongst in-service teacher-students attending computer literacy training sessions as part of a needs analysis. It benchmarks the perceptions of the teacher-students on their computer literacy as part of the integration of learning technologies in ODL at NWU to inform an emergent sociologically transformative implementation framework.

The Instrument

Benchmarking e-learning (Bacsich, 2008), determining e-readiness (Bridges, 2005), and the evaluation of e-maturity (Becta, 2008) relate to the evaluation of the ability to use ICT and electronic media for learning, individuals' work and play, the evaluation of organisations, businesses, and countries, to provide and utilise electronic media and technology.

Assessment of the e-Readiness of the current and future students of the SCTE could assist the prediction of successful use of learning technologies in an ODL environment.

A survey instrument was developed for administering during training sessions arranged for students who required additional support to pass the computer literacy module.

The researchers took cues from the TAM (Davis, et al., 1989) during the compilation of the survey. The instrument gathered data on teacher-students';

- **demographics augmented by information from the central student administration system;**
- **perceptions of fear of technology,**
- **technological disadvantage;**
- **iv) frustrations during the use of technology;**
- **perceived usefulness of computers; and**
- **perceived ease of use of technology.**

The survey (Appendix 1) consists of two parts: Section A comprises seventeen structured questions introducing themes about computer use in an attempt to focus respondents' attention on presumed topics relevant to their experiences.

These questions required single-responses to statements through a five-point Likert-scale: *Strongly agree; Agree; Neutral; Disagree* and *Strongly Disagree*. Section B consists of seven questions requiring open-response replies and five statements requiring Yes/No responses. Section B yields seventeen responses, five of which are binary Yes/No and five statements.

The questions were presented in the particular sequence to reduce possible feelings of being accused for the predicament of not passing the module on computer literacy.

The questions were non-confrontational and positive in approach. In the first six questions, self-confidence in the ability to use computers and a construct from the TAM about *Perceived Ease of Use* are introduced.

These questions address positive anticipation and technophilia (love of technology), technology access, work satisfaction and the benefits of empowerment through computer literacy. ODL practitioners at SCTE reviewed the instrument (Appendix 1) for content validity, language and context appropriateness.

Study Sample

The SCTE follows an ODL model to train about 24 000 under-qualified and unqualified practising teachers across South Africa and Namibia. Rolling enrolment admits already practising teachers for the:

- **National Professional Diploma in Education (NPDE) for teachers without a three-year teacher qualification and at least five years' teaching experience**
- **Advanced Certificate in Education (ACE) for teachers with a three-year teacher qualification**
- **Honours Degree in Education (BEd Hons) for teachers with a BEd Degree or a four year education qualification.**

The study sample relates to an availability sample of 338 teacher-students who required only one module, computer literacy, to complete their various qualifications.

They attended special computer-literacy contact sessions at twelve learning centres across South Africa during 2010. Some students had never before enrolled for the computer-literacy module, while others had previously failed the module. They completed the survey instruments during the contact sessions. From the 338 respondents, the data of six were removed as missing data occurred.

RESULTS

Access

Only 23.31% respondents strongly agreed that they have easy access to a computer and only 9.2% indicated easy access to a reliable Internet connection (Table 1).

Combining *strongly agree* and *agree* responses, about 60% of the teacher-students indicated access to a computer, while less than a third of the respondents (29.14%) indicated access to a reliable Internet connection.

Table: 1
Percentage Frequencies Computer and Internet Accessibility

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Missing
I have easy access to a computer [A8]	23.31	36.81	23.31	13.19	3.07	0.31
I have easy access to a reliable Internet connection [A9]	9.2	19.94	25.15	30.98	11.35	3.37

Anticipated Support

Expressed technophobia [A10] is small but teacher-students' need of assistance [A11] is significant (Table: 2).

Table: 2
Percentage Frequencies Support Anticipated

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Missing
I am afraid of computers [A10]	1.84	3.07	4.29	31.29	58.90	0.61
I usually need assistance while using computers [A11]	11.66	43.56	21.17	11.96	9.20	2.45

Self-confidence

Confidence relates to engagement and use (Table 3). These two questions measuring *anticipated support* have an interpretation opposite to the two items measuring *ease of access* to computers.

When the items measuring *anticipated support* are reverse-scored, they can form a construct measuring *trust* to attempt use of computers together with the two items measuring *access*.

This construct has a Cronbach's alpha coefficient of 0.53, and a mean inter-item correlation of 0.22, which are indicative of reliability.

Table: 3
Percentage Frequencies Student Computer Use

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Missing
I frequently use computers [A1]	18.40	35.58	23.39	14.11	4.29	3.68
I like using computers [A2]	57.06	37.73	3.37	0.92	0.31	0.61
It is easy for me to use computers [A3]	16.26	42.02	28.53	9.20	1.23	2.76
It is easy for me to use a computer mouse [A4]	43.56	42.33	8.90	2.76	0.61	1.84
I can type on the computer keyboard [A5]	46.32	42.33	8.28	1.53	0.31	1.23
I can use a word processing program in my work [A6]	28.22	45.40	15.64	7.36	1.53	1.84

About half (53.98%) of the respondents are reported *frequent computer use*. However, it is questionable if these numbers are indicative of students' readiness to initiate the implementation of a fully-fledged e-learning strategy at the SCTE.

Insufficient ready access is regarded as a major barrier preventing complete technology integration (Aguti & Fraser, 2006), including reliable Internet connectivity.

Christensen and Knezek (2008) claim that teachers without home access to the Internet seldom integrate technology on a high level when working with their students in classrooms.

Combining *strongly agree* and *agree* responses, 94.79% like using computers, and 73.62% can use a word processing program in their work. More students (94.79%) *like using computers* than the 58.28% who consider it *easy to use a computer*. This indicates a motivation to *like using computers* though it is not necessarily experienced as *easy to use*. These questions form the construct measuring *self-confidence,* and have a Cronbach's alpha coefficient of 0.84 and a mean inter-item correlation of 0.47, both of which indicate reliability.

Intention to Persevere

Stone and Madigan (2007, p. 79) found that university students who participated in a survey of technology skills do not generally perform at the level they themselves believe they perform: "The gap between perception and reality creates an atmosphere of frustration for students and faculty alike."

Engaging routinely with ICT technologies in order to produce productive results in terms of administration, assessment, communication and lesson material production may be frustrating for teacher-students who perceive themselves as ICT literate after superficial introduction to computer literacy. When engagement with technology requires higher levels of mastery, despondency may result. Table: 4 list three items relating to student personal responsibility and intention.

Table: 4

Percentage Frequencies Student Personal Responsibility and Intention

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Missing
If I were better skilled, computers would make my work easier [A7]	70.25	24.85	2.15	0.31	0.61	1.84
I want to learn how to use computers better [A15]	71.78	21.78	2.45	1.53	1.23	1.23
If I had worked harder, I would have been better at using a computer [A16]	55.83	29.75	7.36	3.07	2.45	1.53

These three items form a construct *intention to persevere* and has a Cronbach's alpha coefficient of 0.64 and a mean inter-item correlation of 0.39, both of which indicate reliability.

Intention to Use

TAM (Davis, et al., 1989) includes attitude toward using and behavioural *intention to use* which are both determined by *perceived usefulness*. *Perceived ease of use* influences *attitude toward using*. Questions A12 and A14 relate to *perceived usefulness* as well as to external social influences, while A13 relate to ease of use. For the SCTE to employ more learning technologies for teaching and learning to support teacher-students as part of an ODL model, computer-based technologies require teacher-students to achieve basic computer literacy. However, on a mastery level, the results of this study do not show a convincing picture of ICT competency (55.21%, *strongly agree* and *agree* responses combined, [A11], Table 2) as respondents indicated they usually need assistance while using computers. Though the sample represents only students who still needed to pass the module on computer literacy, it nevertheless comprises more than three hundred students (Table: 5).

Table: 5
Percentage Frequencies Motivation to Use

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Missing
I look forward to using computers better [B6]	-	93.87	-	1.53	-	4.60
I believe my learners gain from using computers [A12]	41.10	37.42	8.90	5.83	3.99	2.76
I believe my learners are skilled computer users [A13]	10.43	23.31	21.78	25.77	13.80	4.91
Computers are useful for everyday life [A14]	73.01	20.55	1.84	1.23	0.92	2.45

These four items form a construct *intention to use*, but have proven to be not reliable. However, two items (A12 and A13) have a Cronbach's alpha coefficient of 0.61 and a mean inter-item correlation of 0.45, both of which indicate reliability. These two items are thus used to represent the construct *intention to use*.

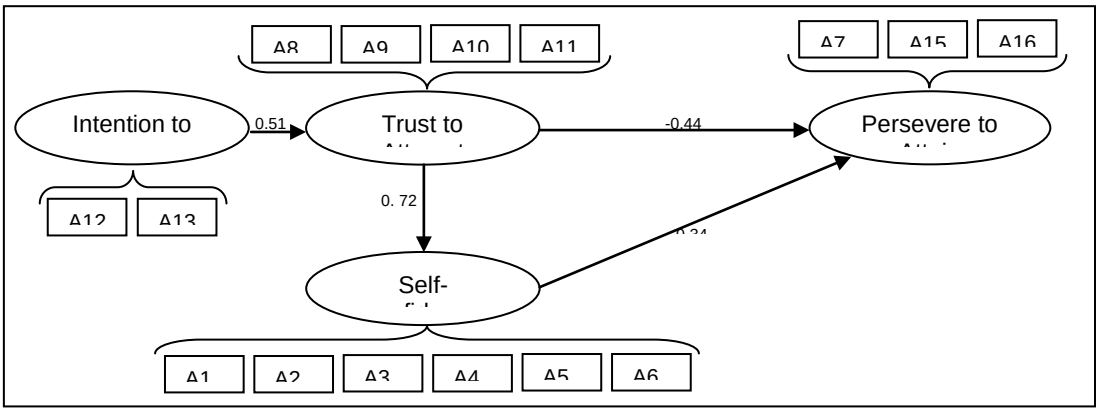

Figure: 1
Model for Intention to Use, Confidence, Trust and Perseverance with Statistical Significant Standardised Regression Weights

The above mentioned constructs were entered in a structural equation model (SEM) to examine the relationships between them. The final SEM model is presented as Figure: 1

Structural Equation Model for Intention to Use, Confidence, Trust and Perseverance

In the measurement part of the model, all items loaded statistically significant on the latent constructs. Further, all structural paths were statistical significant. The direct structural path between *intention to use* and *confidence* was not statistically significant in a previous model (p=0.92) implying that the relationship between *intention to use* and *confidence* was completely mediated by *trust*.

On the other hand, only partial mediation was observed for *confidence* in the relationship between *trust* and *perseverance*, where the standardised regression weights in these to paths are approximately of the same magnitude (Figure: 1).

The relationships between *intention to use* and *trust*; *trust* and *confidence*; as well as between *confidence* and *perseverance* were all positive implying that the more useful they perceive computers to be, the more they will *trust* to use them; the more *trust* they have in their abilities, the more *confidence* they will have and the more they will intend to *persevere*.

On the other hand, the direct relationship between *trust* and *perseverance* is negative, implying that the more trust they have in their abilities, the less they will find it necessary to persevere.

The goodness of fit statistics for this model was satisfactory with a Chi-square/df=3.46; CFI=0.86; RMSEA =0.085 with 90% Confidence interval of [0.076; 0.096]. A construct in the TAM is *behavioural intention to use*. In analysing the data in this study, the response to the binary Yes/No question: "I look forward to using computers better" [B6], resulted in 98.4% replying "Yes."

Apart from fifteen respondents, who left the response blank, five replied "No" in which cases three gave the reason that they were satisfied with the level of use of computers they had attained in the computer literacy course, and did not consider it necessary to look forward to better use of computers.

One respondent replied that s/he was waiting for the promised computers received from government, presumably implying that until that happens, s/he was not looking forward to better use of computers. The universal desire for getting to know computers better renders it inappropriate to suggest actions to improve behavioural intent to use. The question should be why these participants had difficulty in passing the module on computer literacy if they had an established behavioural intent?

The TAM predicts actual use of technology from an intention to use as a result of preconditions (p*erceived ease of use* and *perceived usefulness*). This study established the intention to use of the related participants right from the start.

The resulting model (Figure: 1) shows anticipation of support and access to computers contributing to trust to attempt, which results in confidence. Confidence resulting from successful attempts to use relates to an intention to persevere.

CONCLUSION

This exploratory survey's data reflect a landscape of the competencies of in-service teacher-students at SCTE, in which their perceptions of the value of such skills emerge as well. The results mirror the reality of the newly industrialised country, where extensive barriers exist for population-wide ICT adoption.

A significant number of SCTE teacher-students indicated a lack in Internet and computer access as a m ajor obstacle. Although Africa tries to emulate first world progress, up to now, it has not been able to turn indigenous knowledge into knowledge management, specifically due to limitations on ICT usage (Jain, 2006). ICT adoption in Africa could be extended by formulating appropriate ICT policies, implementing literacy programs, creating legal frameworks, putting in place human resources training, and empowering local people. Countless instances are recorded where the application of ICT in African countries is hampered by insufficient access, as o pposed to the developed world where access is no longer a strong predictor in predicting teachers' use of instructional technology (Agyei & Voogt, 2011). Only a portion of the African population has access to computers, and even less to the Internet. Indications are that inhabitants of e.g. Botswana, prefer access to information on goods, medicine and financial issues above access to Internet or computers (Mutula, 2008).

From the attendees of additional computer literacy training sessions surveyed, an overwhelming majority declared that they look forward to using computers better; while 94% consider computers useful for everyday life and 78.53% believe their learners may gain from using computers. Only 4.91% confess to being afraid of computers, while 55.21% usually need assistance while using computers. Strong intentions of perseverance in attaining functional computer literacy are evident, with 95.09% thinking computers will make their work easier if they are better skilled. With support and an enabling environment, even these students may participate in computer-mediated ODL and be able to promote computer literacy among learners at the schools where they teach.

The aim of TAM is to promote both intention to use and actual use through improved perceptions of usefulness and ease of use. The intention to use was already established with these participants. Sufficient self-confidence effected frequent use at a basic level. The model confirmed an expressed need for assistance and an enabling environment to persevere in learning to use computers better.

The intention to persevere towards attainment of functional computer literacy is reflected by the perception that computers would make work easier and that school learners would benefit from using computers.

Limitations of this study relate to the sample which may represent a single bounded case that is not generalizable to the population of teachers furthering their studies in South Africa.

Future research should focus on objective e-competence measurement after support initiatives as recommended in the proposed learning technology integration framework of which this article is part have been implemented. However, this article informs the framework that SCTE should focus on support and enablement.

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APPENDIX I:
SURVEY ON COMPUTER LITERACY

Strongly agree=5; Agree=4; Neutral=3; Disagree=2; Strongly disagree=1

Section A:
Please mark with an X in one of the five blocks for each statement

	Statement	5	4	3	2	1
A1	I frequently use computers					
A2	I like using computers					
A3	It is easy for me to use computers					
A4	I is easy for me to use a computer mouse					
A5	I can type on the computer keyboard					
A6	I can use a word processing program in my work					
A7	If I were better skilled, computers would make my work easier					
A8	I have easy access to a computer					
A9	I have easy access to a reliable Internet connection					
A10	I am afraid of computers					
A11	I usually need assistance while using computers					
A12	I believe my learners gain from using computers					
A13	I believe my learners are skilled computer users					
A14	Computers are useful for everyday life					
A15	I want to learn how to use computers better					
A16	If I worked harder, I would have been better at using a computer					
A17	Others force me to improve my computer skills					
A18	Please provide comments on some of the statements					

Section B:
Share your view on the following statements

B 1	**List the problems you have been experiencing in passing the module on computer literacy**		
B 2 **B 3**	**Where I grew up and went to school influenced on my learning of computer literacy** **Please explain your choice**	**Yes**	**No**
B 4 **B 5**	**I learnt to use computers well since I enrolled with the North-West University** **Please explain your choice**	**Yes**	**No**
B 6 **B 7**	**I look forward to using computers better** **Please explain your choice**	**Yes**	**No**
B 8	**In your opinion, which advantages are there for people in being able to use computers with confidence?**		
B 9	**What technologies are available at the school where you teach?**		
B 10	**I use computers, and other ICTs at the school where I teach for …**		
B 11	**In your opinion, what is the value of computers and other ICTs in education?**		
B 12	**At your school, what support do you receive to use computers and other ICTs in your teaching?**		
B 13	**How do you use the skills you learn in the Computer Literacy module in your teaching?**		