

An exploration to include asynchronous learning tools and Web2.0 applications in a short learning course, to enhance the learning experiences for part-time adult students.

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Abstract

This research article presents exploratory research that considers how the specific educational environment for a short learning course can be evolved with connections enabled by information technology. Probability of extended learning beyond the limited class-time of a short learning course, to support enhanced learning through the use of asynchronous learning tools and Web2.0 applications is explored.

The research methodology is non-experimental, quantitative research and results show the respondent's access to preferred technology devices, application usage and opinions on the benefits of technology incorporation. The findings indicate a positive response to using Web2.0 applications in and outside the classroom as well as minimum barriers to using technology. The results further indicate an aspiration toward connected learning experiences between respondents, fellow students and the lecturer, also a possible deficient amount of reflection on coursework by the respondents.

1. Introduction and Context of the Study

"If we teach today as we taught yesterday, we rob our children of tomorrow." J.Dewey (1944)

1.1 Purpose Statement

The purpose of this research is to consider the diversity and study/life challenges associated with part-time adult students as part of an exploration towards enhanced learning. The exploration considers extending learning beyond the limited class-time of a short learning course to support enhanced learning through the use of asynchronous learning tools and Web2.0 applications.

The research article is intended for adult, part-time students, enrolled in a specific short learning course at a selected private, Higher Education Institution (HEI).

1.2 Background to the problem

Schmidt (2013) explains the demand for adult education continues to increase, requiring educators to become more flexible in their response to the changing study/life needs of these students, including their time management, work and family responsibilities and diversity. Mishra et al. (2013) concur stating that not only are the demographics and needs of adult students changing but also the skills required succeeding in their studies. Both authors conclude that society demand 21st century skilled students that are creative, flexible and tech-savvy.

The need then to evolve as educators seems vital to create progressive educational opportunities. How can this be achieved? Abel et al (2013) states that tools and skills related to the use of technology are vital, connections and connected learning enabled by information technology, social media, mobile devices and importantly the use of Web2.0 technologies are most significant in the current era of higher education.

2. Problem Statement

Thorpe (2011) explains that educators need to expand their notion about technology only being used to deliver information. It can enhance students' ability to cross the boundaries between work and study.

The short learning course at the selected HEI in this research uses technology tools to a certain extent as part of class presentations and projects. An online portal is used to upload content and the course manual but Web2.0 technologies such as discussion forums, blogs,

skype and email are not fully and professionally incorporated as a standard form of communication or interaction.

The problem identified in this research is linked to the amount and quality of learning once a week in a short learning course. The contact time is minimal in providing support and guidance to students, further it does not deliver an interactive learning environment.

The aim of this research relates to determining if and in what way technologies can be used to create a collaborative interactive classroom environment.

2.1 Research Objectives

Related to the research problem, the research objectives include investigating if part-time, adult students enrolled in a short learning programme could benefit from the active use of asynchronous learning tools and Web2.0 applications to enhance learning, to support and motivate. Finding new ways to involve part-time adult students to interact and participate with the content, extending beyond the allocated, minimum class-time.

In relation to the above objectives, key questions that will be explored within the research include:

2.2 Research Questions

1. In what way do asynchronous learning tools and Web2.0 applications appeal to the multifaceted profile of the part-time student?
2. What online asynchronous and Web2.0 interaction is desired beyond the limited class time in a short learning course?
3. Are part-time adult students that are enrolled in short learning programme able to engage in activities beyond class, using asynchronous learning tools and Web2.0 applications and if so what may the scope of this interaction entail?

3. Brief Literature Review

The literature review identified three themes of exploration that relate to the problem statement. Brief findings of related research are provided below.

3.1 Study/life challenges faced by adult part-time students

Caschera (2013) recognises study/life challenges as one of the three most significant challenges faced by adult students. Research by Kember et al. (2005) show many adult part-time students do not cope because of time and motivation challenges, attending class,

studying the content and completing assignments. Other barriers identified by Caschera (2013) include work and family responsibly and accessibility.

Research shows that institutions are influenced by the challenges adult part-time students are facing. Accommodating the diversity and growing number of adult students including the changes in society, will ensure students are prepared and ready, states Trotter (2013). It is vital that institutions continue to develop and collect the necessary data to assess innovative strategies and technologies and the expectations of the students to best suit their circumstances according to Carmean & Frankfort (2013).

3.2 Connected Learning

Lepi (2014) describes connected learning as educational opportunities available to all, based on social connection and participation by all. Janicki et al (2002) agrees that the Web and many uses thereof have changed from technical to educational. Further stating that more technology isn't necessarily the answer, but rather new ways of connecting and using the Web's power to involve students to interact and participate. Grajek et al (2013) concurs that technology tools should be used to inform and transform education because the boundaries between educational institutions and the rest of the world have never been more porous.

Abel et al (2010) explains that connected students are continuously connecting with fellow students, educators, resources and the field of study. Connected to resources, people and ideas, students can more easily express themselves, contribute and participate in wide-ranging conversations to achieve learning goals. Connected learning ties together a once wide field of contexts, cultures and perspectives, implying that the line between social and study life becomes blurred and campus boundaries less significant.

3.3 Web-based technology tools and enhanced learning

Gravett & Geyser (2004) explain that the educational sector has extended due to the fact that the last decade has shown an explosive growth of the Web as an information, business and entertainment tool. Charlton (2012) defines Web2.0 technologies as an example of the use of technology to promote learning, a platform for communication, collaboration, participation and sharing. Further that even though a digital divide still exists, the use of Web2.0 technologies is abundant across all age groups and are being deployed across a broad spectrum of HEI activities.

Thompson (2013) defines technology in enhanced learning as the tools that support synchronous and asynchronous communication. Asynchronous learning tools is further defined by Hrastinski (2008) as media used between participants including email, discussion boards and support among learners and teachers regardless of the time and place.

Stephens (2013) explains that technologies are evolving quickly which means effective decisions need to be made choosing the best technologies that will work for the right course and students. The choice of digital devices can turn any space outside the classroom into an

informal learning space. Using web-based technologies to enhance learning as stated by Thompson (2013) means active students, cooperation and involvement in learning and reflective students immersed in problem solving.

3.4 Key Definitions

To ensure that the scope and context of the study is clearly understood the key concepts namely: Asynchronous Learning Tools, Web.20 applications and Connected Learning should be used as defined in the literature review.

4. Research Methodology & Design

A quantitative research paradigm is used to objectively explore and gather empirical and measurable evidence, to assist in finding answers to the research questions for this explorative study.

4.1 Worldview

Cresswell (2008) refers to the research paradigm as a worldview – a certain belief about the world and the nature of the research a researcher uses. The post-positivism worldview is described by Taylor & Medina (2013), as concerned with social patterns and the presence of universal properties, producing objective and generalisable knowledge and relationships amongst pre-defined variables.

This study uses a post-positivists paradigm to investigate technology and technology practices on education strategies and methods. Post-positivism is used as a foundation of knowledge about the adult part-time student and the habits of technology tools related to a short learning course. The research is grounded on a post-positivists paradigm by exploring, observing and measuring the objective reality of connected learning and learning influenced by technology tools and applications.

4.2 Quantitative Methodology

Within the context of applying the post-positivistic paradigm, Punch (2009) explains that although quantitative research is largely focussed on experimentation and measurement, development in research methods have evolved over time. The limited scope of experimental applicability, practicality and ethicality has introduced non-experimental methods, largely used in quantitative research today. For this research non-experimental quantitative research is used, described by Punch (2009) as the aim to describe what exists considering the variables and/or conditions in a current situation.

Linked to the views of Poni (2014), the aim of using a quantitative research methodology in this research is to explore, predict, explain and understand the incorporation of technology tools and connected learning as variables part of the 21st century skills acquired for enhanced learning. Other independent variables may include amount of studying, time constraints, internet access, usage and skills.

4.3 Applicable Survey Design

According to Fink (2003) surveys can describe, compare and explain in order to collect the data required from a range of diverse fields. Lodico et al (2010) explains that the reliability and validity of a survey revolves around the questions and the consistency of responses to the questions asked. To ensure the survey is accurately developed, questions are created that comprehensibly examine the research questions identified as part of the research aims.

Stringer (2008) defines cross-sectional surveys as focussed on the population and their response, gathering information at a specific point in time. This research is non-experimental with a small scope. Cross-sectional survey design is used, due to not only the research methodology and sample chosen but also to ensure the best possible response rate. The survey design recorded the information explored and observed in the form of a questionnaire in the groups identified; the questionnaire was completed and handed in, then and there on a predetermined time.

4.4 Data Collection Method

A questionnaire that included both closed-ended quantitative data and open-ended data, that was quantified and further discussed in the data analysis, was used to collect data pertaining to this research. Penwarden (2014) defines close-ended questions as conclusive in nature and explicit options for a respondent to select from, types may include ranking, rated, multiple choice and many more. Stringer (2008) defines Likert Scales as the level of response to a close-ended question and a more open version of a close-ended question. Anderson & Arsenault (2005) further explain the Likert Scale as useful for evaluating a respondent's opinion, a neutral option, creating a less biased measurement.

The questionnaire includes a variety of question formats, including open-ended questions for a rich quality of information and supporting the exploratory foundation of the research, possible due to the smaller population and scope of the research.

5. Population and Sample

The desired target population for this research is identified as adult, part-time students in South Africa. The defined target population characteristics are adult, part-time students enrolled in a short learning program at a private college or institution.

In this course and any other course with adult students, there will likely be students from different backgrounds, especially in South African higher education environments. The adult-student in this study refers to a student that is not enrolled directly from school, generally older than the average student and according to Abrahams (2013) the current legislative definition of a 'mature learner' is 23 years or older. Further characteristics of the population include students with additional engagements such as family and work responsibilities.

The principles that differentiate adult students according to Knowles (1980) include that they are focussed on relevant learning and have specific educational goals, influenced by individual environments and experiences. This research population also includes characteristics identified by Berling (2013) namely that adult students are concerned with convenience and flexibility, appropriate feedback and clear expectations from the educator. Support and motivation, as it might have been a while since they had to study or engage in learning or because of previous bad experiences in learning and studying.

From this population, a sample is selected for this research. Mouton (2006) describes sampling as considering population elements and producing a representative selection. The sampling frame for this research can be identified as adult, part-time students enrolled in a short learning course at a chosen private institution. Anderson & Arsenault (2005) identifies the main sampling methods as probability and non-probability sampling. Due to the scope of the research and the exploratory foundation, non-probability sampling namely convenience sampling is used based on access, the researchers' knowledge and experience of the group as well as the cost and time constraints.

A sample size based on a specific year, course and institution of adult, part-time students enrolled in a short learning program is used in this research to ensure precision of the survey outcomes based on the availability of participation to represent the target population. The number of the participants in the sample comprises of the February intake, Thursday class, part-time students enrolled in a design field, short learning programme at the selected private institution in Pretoria. The total intake enrolled is 20 students.

6. Limitations of the study

The nature of the research article is exploratory proving to be limited in scope; this is seen as a limitation as the findings cannot be generalised. Further the research article has sampled adult, part-time students enrolled in a specific short learning course at a specific HEI, also limiting the results as it cannot be generalised to all the part-time students at all educational institutions.

Due to the purpose of this research project and the aim of narrowing down the population and sample size, the results of the research article might not fully reflect the views of all the needs of adult, part-time students enrolled in a specific short learning course. In choosing a quantitative methodology the researcher also faced the challenge of presenting the results fairly and being unbiased as pointed out by Anderson & Arsenault (2005).

7. Ethical Considerations

In terms of confidentiality, all participants were ensured anonymity with regards to the questionnaires, information and answers required as part of the research. The participant's identity will not be revealed as participants had the choice of staying anonymous in their questionnaires. In relation to permission/consent all participants were informed of the research including the description, procedures and time it took before commencing. A written consent was completed by all participants. The higher education institution's Ethics Committee gave consent to the completion of this research.

All participants had the option to withdraw at any stage of the research. Therefore there was no pressure on individuals to participate in the exploratory research. The research took place at the educational institution with no risk to the participants whatsoever.

The research aims to report as accurately as possible and with respect toward the institution, the participants and research education.

8. Data Analysis

Stringer (2008) defines data analysis as a method of clarifying and understanding presented problems and topics by examining and deconstructing the data gathered in questionnaires. For this research the data collected includes Likert Scale data as well as quantified qualitative data.

Data analysis processes identified by Stringer (2008) include analysing key issues and the process of categorising and coding. This research includes both. Scores obtained from the Likert Scale data, categorising and counting in the open-ended questions to create charts of distribution across the population. Categories in presenting the data were organised according to the questionnaire design. These include: *Section A: Technology Access*, *Section B: Technology Preferences*, *Section C: Support and Motivation* and *Section D: Education and Technology*.

Anderson & Arsenault (2005) explain that computer software has simplified graphical illustrations and figures, which is more helpful to readers. For this research, Microsoft Excel was used to process categorized and coded data including tables and graphical illustrations to display important data.

8.1 Section A: Technology Access

To assist in answering the first research question regarding the appeal of asynchronous learning tools and Web2.0 applications, the exploratory research focused on access and preferences of tools and technology applications.

8.1.1 Devices

Linked to question 1 of the questionnaire, Figure 1.1 provides detail on the respondent's preference to technology devices. The Android Mobile Device was found most used by 45% of the respondents followed by the Laptop 30%, Tablet 20% and Desktop Computer 5%. The question was asked to determine what type of devices respondents use/prefer when accessing online information or communication online.

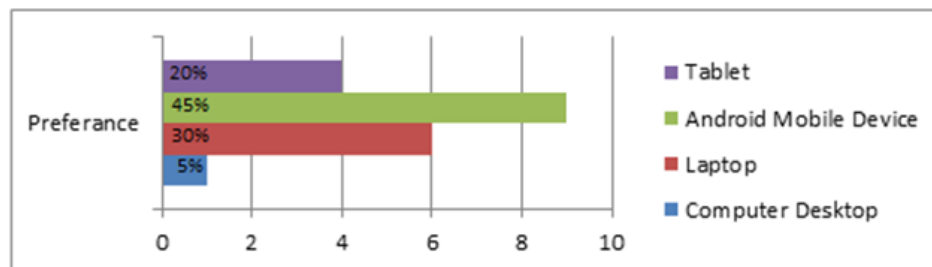


Figure 1.1: Preferred Devices

These findings correlate with the report by Education Week (2011) on Technology in Education, concluding that the use and preference of mobile devices in education is continuously increasing due to ease of access in relation to cost and availability. Respondents could therefore react positively to asynchronous learning tools and Web2.0 applications if they are able to access it from their mobile devices.

8.1.2 Internet Access

Related to question 2, to determine the type of access and barriers to access, Figure 1.2 and 1.3 provide detail on the respondent's access to internet. Figure 1.2 shows that 3G internet is used by most and Figure 1.3 indicates most of the access is at home.

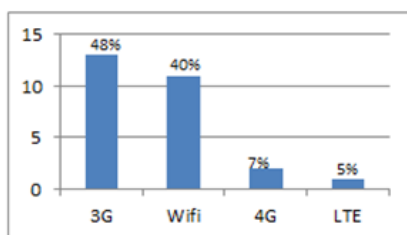


Figure 1.2 Internet Type Access

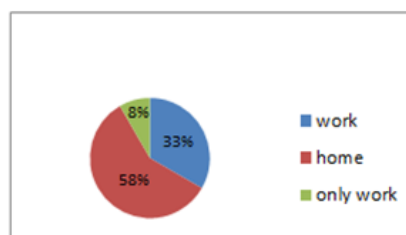


Figure 1.3 Sources of Access

Pitman (2012) explains there is no escaping the digital divide but that the current generation of students are more connected than ever. The findings confirm that today's students are part of a digital environment with access to the internet. They not only show a larger percentage of access at home but also mobile 3G internet which shows they are able to connect on the go. This correlates with the views of Oblinger (2013) that anyone with access to the Web can participate. Online course work and interaction outside of class-time online are therefore likely to be acceptable by respondents based on the results of access to internet and Web.

8.1.3 Online Activity

Figure 1.4 and 1.5 provide information on online activity related to Question 3 and 4, to determine time and purpose thereof. Figure 1.4 shows that 40% of respondents spend 1-2 hours a day using the internet, 25% spend 2-3 hours a day, 20% more than 3 hours a day and 15% up to 1 hour a day. Figure 1.5 show 47% of the respondents spend time on the Web for personal use followed by 28% study, 22% work and 3% other use. The significance of this information relates to the time respondents spend accessing the internet and using the Web.

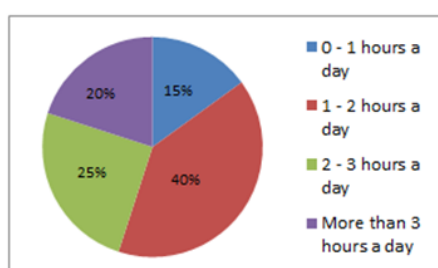


Figure 1.4 Online Activity

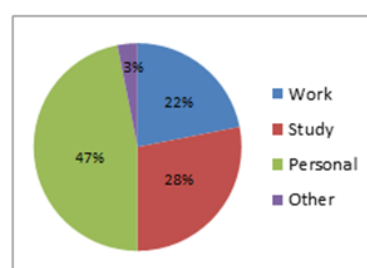


Figure 1.5 Online Purpose

Based on the results respondents therefore spend sufficient time online to have acquired the necessary skills that enable engaging in asynchronous learning tools and Web2.0 applications, should it be introduced into the course. This analysis is also based on the views of Charlton (2012), that information literacy is based on actions such as searching, retrieving and evaluating information all evident in online sessions.

8.2 Section B: Technology and Application Preferences

8.2.1 Applications

Linked to Question 5 and 6, Figure 1.6 and 1.7 provide information regarding the use of applications by respondents to determine preference and efficiency. Figure 1.6 focusses on the application preference and Figure 1.7 the applications used for Work, Study or Social purposes. Figure 1.6 shows a good balance across all the different applications used by respondents. Figure 1.7 shows that although as expected for social/personal use social applications such as Facebook and WhatsApp are predominant, and for work purposes email and storage applications are used, almost all of the applications are used close to equally for study tasks.

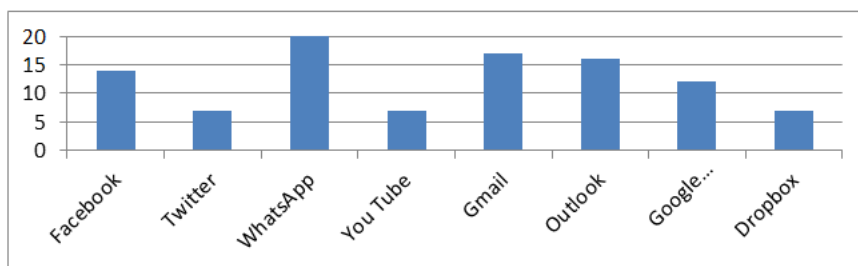


Figure 1.6 Application Preferences

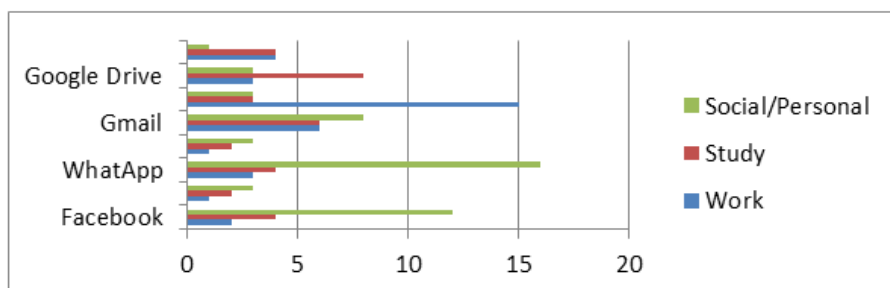


Figure 1.7 Application Use

The findings above assist in identifying which applications could be most effective as asynchronous tools and Web2.0 applications to be used in the short learning course, so that students can function efficiently. This is vital as the learning environment is influenced by the experience, beliefs and traditions students bring to the higher education environment as stated by De Jager and Nassimbeni (2005). The respondent's acceptance of tools that could enhance learning will therefore be more likely if they are familiar with the applications and the functions thereof.

8.2.2 Competence

Figure 1.8 shows how much respondents agreed or disagreed with separate statements asked in Question 7 – 10, to determine competence in using technology tools. Question 7 was based on the respondents being comfortable using computers, mobile devices and other technology tools. Here 50% Strongly Agreed they were comfortable and the other 50% responded with Agree. Question 8 asked respondents how comfortable they are using the student portal introduced for the first time in this course and here 90% responded Agree and 10% Strongly Agreed to being comfortable. Question 9 asked respondents if they enjoyed discovering and learning to use new technology tools to which the response was 60% Strongly Agree and 40% Agree. Question 10 asked if respondents would be interested in attending technology and online portal workshops at the institution, the response was 55% Agree, 30% Strongly Agree and 15% Disagree.

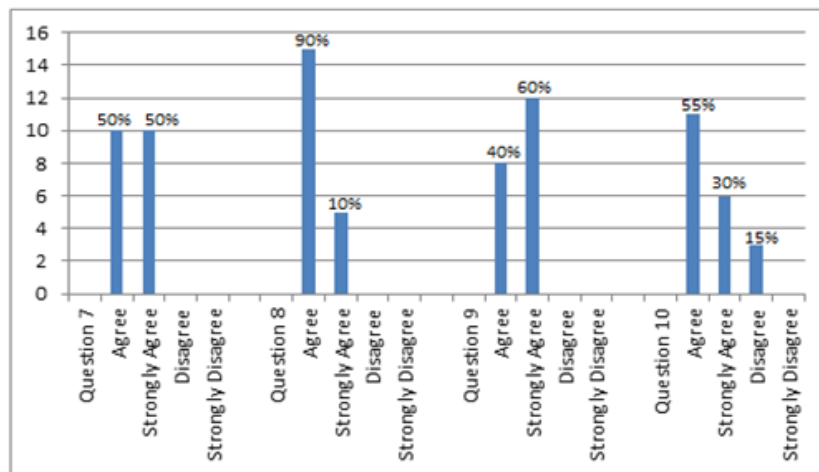


Figure 1.8 Responses to using Technology Tools based on Question 7 - 10

The results show that based on the respondents current state of digital literacy and the positive responses to further development to using new technology tools, that the respondents are likely to participate in the introduction of asynchronous learning tools and Web2.0 applications in a short learning course. This correlates with the view of Vega (2013), that digital literacy is vital in order to be active participants in a global information society.

8.3 Section D: Support and Motivation

Addressing the research question of desired interaction between students, educators and institutions, the findings show that respondents prefer an easy accessible application and tool that support communication and collaboration.

8.3.1 Connections

Figure 1.9 shows how much respondents agreed or disagreed with separate statements asked in Question 11 and 12 to determine their need for connections. Question 11 asked whether respondents want to be able to consult with the lecturer outside of class and shows 55% Strongly Agree, 40% Agree and 5 % Disagree. Question 12 asked whether interaction with fellow respondents outside of class time is important to the respondents and shows 65% Agree, 30% Strongly Agree, 5% Disagree.

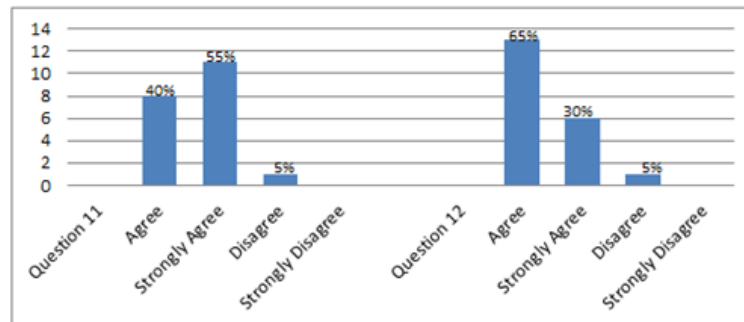


Figure 1.9 Responses to Questions 11 and 12 based on Connections

The results show that the respondents would likely accept engagement beyond the limited class-time to enhance the overall learning experience. This analysis is supported by Grajek (2013), who states that persistence and academic success are more likely to be pursued by students that has a sense of connection, not only to their campus and programme but also classmates.

8.3.2 Collaboration

Figure 1.10 relates to Question 13 to determine the frequency and different methods of communication between respondents regarding coursework. Figure 1.9 shows instant messaging is used by respondents predominately on a weekly and daily basis, apart from the face to face once a week interaction.

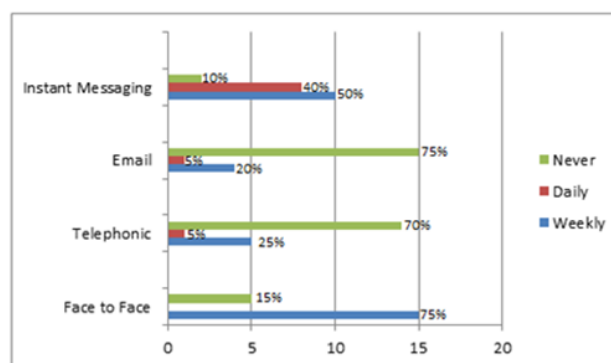


Figure 1.10 Communication between Respondents

Results show that respondents are likely to participate and collaborate in coursework with fellow students if tools and applications are easy to access and perhaps even mobile. This analysis is supported by the views of Abel et al (2010) that today's students are able to integrate various personal connections resources and collaborations, on and beyond campus in order to achieve personal educational goals.

8.3.3 Course Content

Figure 1.11 shows the data collected from the open-ended question 14 and the respondent's method of revision, to determine the contact with coursework. Here 50% of the respondents take time to revise notes by referring back to the manual, 20% prefer consulting other resources and 15% occasionally and never set time aside for revision.

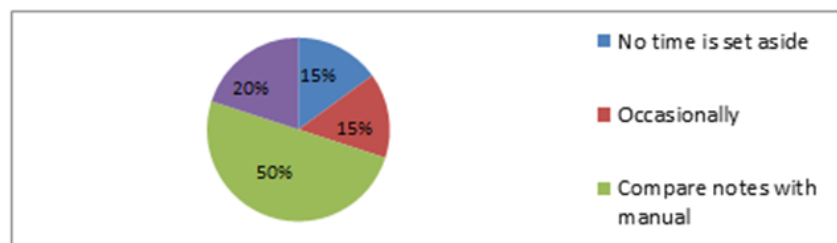


Figure 1.11 Contact with Coursework

The implication of the results may be that respondents are not connecting with the coursework beyond the class-time. Further exploration of these findings may be required. Oblinger (2013) states that students need to connect formally and informally, physical and virtual through education and exploration; enabling these connections is information technology.

8.3.4 Time Management

Figure 1.12 relates to Question 15 and the amount of time set aside for study outside of class time by respondents to determine time constraints. The results show 30% spend 1-2 hours a day on studies followed by equal 25% spending 2-3 hours and more than 3 hours a day. Lastly 20% indicated 0-1 hours is spent on studies a day.

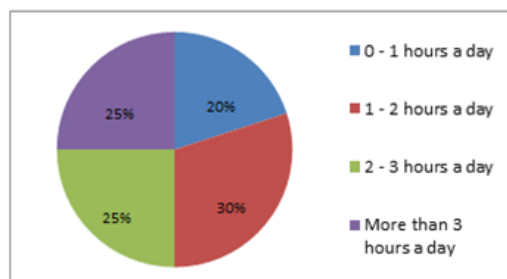


Figure 1.12 Time Management

Based on these findings, respondents are already spending some time outside of the class-time for study purposes. Online course work and interaction outside of class-time could likely be accepted if the respondents find it efficient and effective. This analysis is based on the views of Grajek (2012) that students can be guided toward mastery by including online features related to content review and assessment features in online design.

8.3.5 Communication

Figure 1.13 relates to question 16 and respondent's suggestions of the preferred method of communication from the college, to help determine whether respondents are open to asynchronous communication with the college as well as suggesting the tools for this form of communication. The results indicate clearly that Email is the preferred choice followed by Whatsapp.

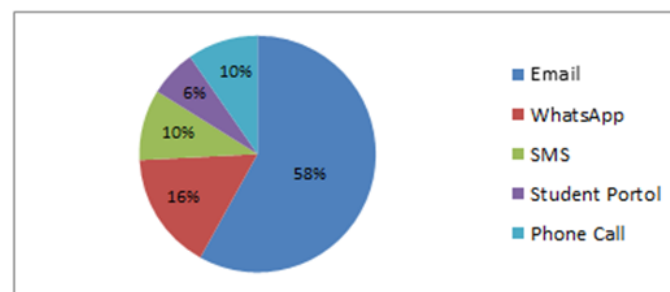


Figure 1.13 Preferred Communication Tools

The results show that respondents will benefit from flexible communication by incorporating asynchronous communication tools such as email, chosen here as a preferred method of communications. This analysis is based on the explanation of forms of communication by Hrastinski (2008) namely that asynchronous communication is regarded as a key component in flexible learning as it is facilitated by tools such as email to support work relations between students and educators when participants cannot be online at the same time.

8.4 Section D: Education and Technology

The findings in this category show that most of the respondents do not experience barriers to using technology tools and are open to using and learning new and current technology tools in education.

8.4.1 Additional Technology

Figure 1.14 show the results from open-ended question 17, respondents suggestions of additional technology they would like to use in the course to determine preference and

readiness. Here 50% had no suggestions, 15% suggested introducing additional course software, 15% the use of tablets, 10% suggested recordings as course material and 10% using the portal.

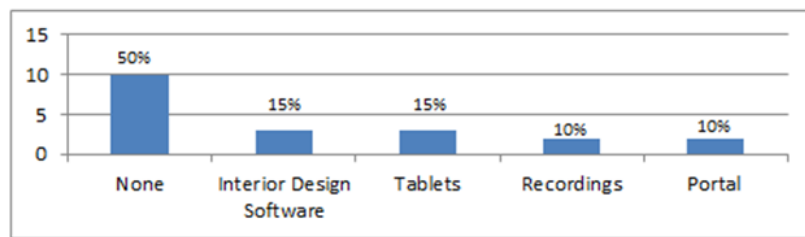


Figure 1.14 Technology Tools Suggestions

The results imply 50% likelihood that respondents would accept technology tools such Web2.0 applications as part of the course. It shows 50% see no need, whereas the other 50% suggest technology that that will enhance skills. This analysis is not only based on the suggestions by respondents but also as cite in Rosen & Manny-Ikan (2011), namely that technology in education should change learning and teaching as well as promote new abilities and skills needed for the information age.

8.4.2 Technology Barriers

Linked to Question 18, Figure 1.15 provides information regarding technology barriers to determine the possibility of a digital divide. The results indicate that mostly respondents experience no barriers at 39%. Time constraints and opportunity was selected by 21% each and 13% saw experience as a barrier, while 5% claimed no interest in using technology and devices.

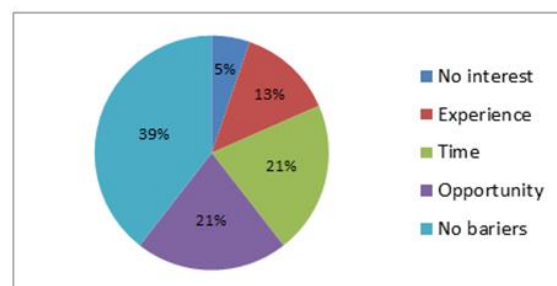


Figure 1.15 Barriers using Technology

These findings show that barriers to technology are influenced by the diversity of the respondents. The analysis is based on the views of Naidoo & Raju (2012), namely that equal access and exposure to information and technology resources don't exist when referring to students entering higher education institutions in South Africa. With respondents predominantly listing no barriers to technology it seems likely that incorporating technology tools should be possible.

8.4.3 Online Platforms

Figure 1.16 show the results from open-ended question 19 and respondents opinion regarding the benefits of technology and online platforms in and outside the classroom, to determine responsiveness to online activity. It shows 43% agreed that technology enables easy access to information, 21% stated technology is convenient and 18% stated technology enables sharing and collaboration. Another 18% of the respondents agreed that enhanced skills in technology are beneficial, while 4% saw no benefits.

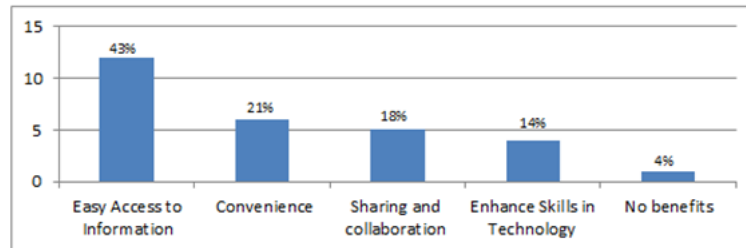


Figure 1.16 Benefits of Technology and Online Platforms

These results imply that respondents are likely to respond positively to incorporating technology in the form of asynchronous learning tools and Web2.0 applications especially if these tools provide easy access to information. This correlates with the views of Charlton (2012) that states learners in the digital age demand access to and usage of web tools and resources of information, entertainment and communications.

8.4.4 Course and Technology

Figure 1.17, linked to Questions 20 shows respondent's choices of the most important factors from a list of statements regarding the course and technology. Here 40% agreed that the lecturer's experience and skills were most important, 20% agreed using current technology to complete assignments and 20% contemporary software used by the lecturer. Lastly 20% agreed communication in and outside of classroom.

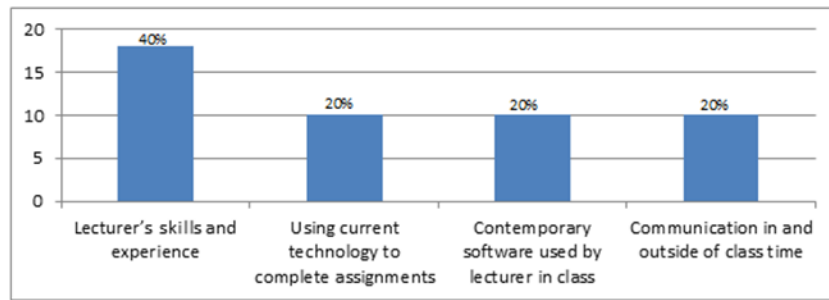


Figure 1.17 Important Factors in Learning

Diversity clearly influences the appeal to technology and learning experiences. The analysis is based not only on the findings but the report of Education Week (2011) on Technology in Education, namely that the challenge is not only to stay up to date with current educational technologies but also to conclude what works best to enhance learning and teaching.

9. Recommendations

Knowles (1980) has proven that adult students learn differently based on problem-based and collaborative teaching and learning. Based on the literature and findings it is recommended that innovative strategies are developed to include technology tools that suit the circumstances and expectations of the students.

As learning and as teaching tools, it is recommended that technology powered Web 2.0 applications are used to assist in communication between students and the lecturer, as a method of presentation and research. Further that the course introduces Web 2.0 applications that assist sharing, storing, bookmarking, networking and collaborating as explained by Charlton (2012).

The recommended Web 2.0 applications include using the online portal to its full potential by to introducing discussion boards and additional online tasks. Introducing a mobile social platform, that can be used between students, such as the Whatsapp application. Videos and streaming of class sessions can also be introduced and shared to ensure students are able to revise and reflect to further enhance the learning experience.

10. Conclusion

The present study is significant in its attempts to show the probability that exists to include asynchronous learning tools and Web2.0 applications in a short learning course, to enhance the learning experiences for part-time adult students. Not only has technology and internet opened the doors to higher education for diversity but it has creatively contributed to education.

The researcher agrees with Johnson (2014) as he states that we are indebted to educational pioneers such as Dewey, Knowles, Brooks and many others for the advances in student learning, but it is our responsibility to keep moving forward and continue our exploration in the new frontiers of education.

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Annexure A: Questionnaire

Dear Respondent,

Education is constantly evolving, innovative teaching and learning, including technology is important to use today so that it can be used successfully in every student's future.

Within the context of the above statement, the aim of this research is to determine your views on the use of online and Web 2.0 tools to further engage with the course content beyond the time spent in the classroom environment. The research is being conducted towards a Postgraduate Diploma in Higher Education. Your views and opinions on the matter will make a valuable contribution.

The questionnaire should take between 10 and 15 minutes to complete. It contains a variety of questions to be answered as honestly and accurately as possible.

Please take note your participation in this study is voluntary and you can at any point withdraw from the research. Participation in the research is also confidential; no names will be required on any questionnaire. Access to the research data will be open to all students that participated and in such, transparency is guaranteed. Under no circumstances will you be penalised if you choose not partake in the research.

I thank you in advance for your participation.

Section A: Technology Access

Question 1

Do you own any of the following devices?

If so please number the devices from most used to least used. (1 is most used and 4 is least used)

a. Computer Desktop

b. Laptop

c. Android Mobile Device

d. Tablet

Question 2

Do you have access to internet at home and/or work?

If so please specify the type of access such as 3G, WiFi, etc.

Question 3

How much time a day do you spend browsing the Internet?

Please tick the relevant box

☐

a. 0 to 1 hours a day

☐

b. 1 to 2 hours a day

☐

c. 2 to 3 hours a day

☐

d. More than 3 hours a day

Question 4

For what purpose do you mostly use the Internet?

Please tick the relevant box

a. Work

b. Study

c. Personal

d. Other

Section B: Technology Preferences

Question 5

Which of the following applications do you use?

Please tick the relevant boxes

☐	a. Facebook	☐	e. Gmail
☐	b. Twitter	☐	f. Outlook
☐	c. WhatsApp	☐	g. Google Drive
☐	d. YouTube	☐	h. Dropbox

Question 6

Please write down which of the selected applications above you use for the following:

a. Applications for Work:	
b. Applications for Study:	
c. Applications for Social:	

How much do you agree or disagree with the following list of statements?

Please tick the relevant box

Question 7

I am comfortable using computers, mobile devices and other technology tools:

☐ Agree	☐ Strongly Agree
☐ Disagree	☐ Strongly Disagree

Question 8

I feel comfortable using this short learning programme online portal?

☐ Agree	☐ Strongly Agree
☐ Disagree	☐ Strongly Disagree

Question 9

I enjoy discovering and learning to use new technology tools:

☐

Agree

☐

Strongly Agree

☐

Disagree

☐

Strongly Disagree

Question 10

I would attend workshops on using technology tools such as online educational portals and devices at this institution?

☐

Agree

☐

Strongly Agree

☐

Disagree

☐

Strongly Disagree

Section C: Support and Motivation

How much do you agree or disagree with the following list of questions?

Please tick the relevant box

Question 11

I want to be able to consult with my lecturer outside of class time:

☐

Agree

☐

Strongly Agree

☐

Disagree

☐

Strongly Disagree

Question 12

Interacting with fellow students outside of class time is important to me:

☐

Agree

☐

Strongly Agree

☐

Disagree

☐

Strongly Disagree

Question 13

How often do you use the following when communicating with your classmates about coursework?

	Daily	Weekly	Never
a. Face-to-face			
b. Telephonic			
c. Email			
d. Instant messaging			

Question 14

Do you take time to revise your notes after class?

If so please explain your method

Question 15

How much time is set aside for your studies during the week outside of class time?

☐ 0 to 1 hours a week

☐ 1 to 2 hours a week

☐ 2 to 3 hours a week

☐ More than 3 hours a week

Question 16

What would be your ideal way of receiving communications from the college?

Section D: Education and Technology

Question 17

Are there any types of technology that you would like to use in this short learning programme? Please specify.

Question 18

Please select only 3 factors from the list below that you feel are barriers to using technology as a student:

	a. I am not interested in using technology and devices.
	b. I don't have enough experience with technology and devices.
	c. Not enough time to use technology and devices.
	d. Not enough opportunity in the course to use technology tools and devices.
	e. There are no barriers to using technology tools and devices for me.

Question 19

What do you think are the benefits of using technology and online platforms in and outside of the classroom?

Question 20

Number the following statements from most to least important to you:

(1 is most important and 4 is least important)

	a. The lecturer's experience and expertise.
	b. Using current technology to complete assignments.
	c. The lecturer's ability to professionally convey lecture points using contemporary software (for example, PowerPoint).
	d. Communicating and interacting with students and lecturers outside of class time.

Thank you. Your participation in this survey is much appreciated!
