

Adult Literacy: Digital learning vs. Non – Digital Learning

An action research project submitted in fulfilment of the requirements for DTLLS

MKLC

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Abstract

This essay researches the effects of digital learning compared to non - digital learning in adult literacy. There is a huge demand for tutors of basic skills to incorporate digital resources into their lessons for learners. Equipment is provided such as iPods, projectors, laptops, cameras etc to support this type of learning. I would like to explore the impact digital learning has on adult literacy learners compared to more traditional approaches to learning. The traditional approach to learning utilises teaching and learning resources such as whiteboards, flipcharts, handouts etc. I chose to research this area as it is an issue within adult literacy that needs to be addressed. There is a demand to incorporate digital learning but the struggles are left with the tutor and the learners. Many learners are not able to spell their name and address let alone make use of a PC or type on an iPod. Also, not all teachers are skilled in the use of ICT and digital media but are great teachers regardless of this ability. There is a clear distinction between ICT classes and literacy classes and I feel they should not be incorporated for such a basic level of literacy learners who are in need of learner and tutor discussions. I feel that the foundation of literacy is extracted once digital use is involved as it can be time consuming and is unreliable within any classroom. I have explored information and content for and against digital learning for adult literacy learners to come to an overall conclusion. I have drawn on learner's experiences and taken into consideration their views and feelings towards this new integrated type of learning. Action research is appropriate for this study as it includes learners as part of the research. They are the purpose of the research as the findings taken from learners have been evaluated and have had an effect on the overall outcome of the research.

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Introduction

There are many adults in our community who are in desperate need of basic literacy lessons so they can communicate effectively in many aspects of their lives. This includes work, socialising, shopping etc. They come to the lesson with a purpose and that is to communicate effectively including reading, writing and speaking. Many of these learners have had negative educational experiences and as a result, did not complete basic levels of study when they were younger. Therefore, it is important as an adult literacy tutor to be aware of individual learners past experiences and current circumstances to create lessons that are aimed at the learners needs.

In basic literacy, there are different levels which range from pre – entry (lowest level of literacy), E1, E2, E3 and Level 1 (highest level of literacy). Literacy learners in pre entry or E1 classes can have difficulty spelling their full name and cannot confidently write their own address. This can be upsetting and frustrating for the learners as it is important for them to be able to confidently spell and write their personal contact details mainly for safety reasons. Therefore, it is important for literacy learners to attend lesson regularly and receive quality teaching that will enable them to progress and build confidence. Confidence building is an integral part of teaching literacy as many learners lack the confidence to attend each session. I have experienced learners who attend lessons sporadically due to lack of confidence and as a result do not gain any new knowledge or as much as they could if they were consistent with their attendance.

Digital learning is being incorporated into adult literacy learning and is forming part of the Learning Skills and Improvement Service (LSIS) funded project for 'Paperless RARPA'. It includes the use of both digital teaching and learning resources. My findings explore and find out how adult literacy learners are affected socially and psychologically as there is a debate as to whether this is an issue of concern, or one to be over-looked and put down to the changing digital world we are living in. It also states their preference of digital or non – digital learning. This topic developed from my own personal experience with learners and the outcome of lessons with use of digital learning resources as well as the growing concern amongst tutors. I feel the topic is important as digital learning is growing rapidly in all areas of education. It is also important for literacy learners to voice their experience and views for their progression to commit to the overall aim of learning literacy.

This research will discuss the pros and cons of digital and non - digital learning. It will compare both types of learning to draw a conclusion as to which is more suitable for the learners regardless of digital learning being seen as an improved way to learn. I will also consider the implications and objections to the statement, as this will help to define a realistic research outcome. The nature of my research is sociological, psychological and a technology based investigation. It is part sociological as I will present some of the issues and concerns of digital learning within a literacy class such as the interaction between tutor and learner as a social problem in lessons; it is part psychological as I will examine the data collected in regards to learner's feelings and how they are affected. Finally, it is part technology based investigation as action research will make use of digital resources and evaluate the outcome.

Literature Review

Digital learning is part of a modern system of learning and can be seen as an enhancement tool for learner's experience. Teaching, training and learning: Resources for teaching and learning (Ian Reece and Stephen walker, 2003) is relevant for researching my problem area as it provides useful information on digital learning. It mainly presents arguments for digital learning as part of a growing culture outside the classroom. It also presents findings linking effective learning to the use of digital learning in the classroom. Nevertheless, it highlights the effects digital learning has on teachers as some may not have the knowledge to utilise such equipment and identifies the ease of non digital learning resources. It will help us to understand the importance of digital learning and how it can be seen as a benefit as opposed to a hindrance to learning,

Another effective contribution to my research study is 'Teaching and learning in further and adult education' by L.Walklin (1990). This literature explores the psychological and emotional effects of digital learning for literacy learners. It explains present conditions of learners and possible responses to digital learning. It takes a realist approach to the learning practice and the issue of incorporating technologies by providing an outcome. It raises concerns that need to be brought to attention such as the possibility of such resources acting as substitutes for teachers. Although this is not a possible outcome, it is becoming part of our reality which is affecting the relationship between the teacher and learner.

I feel it is of importance, and significant to my research study, to acknowledge that digital learning can be problematic on a large scale. Integrating technology in learning and teaching (Pat Maier and Adam Warren, 2000) presents a downside to the use of technology tools to aid learning. This includes financial investments, technical support, software etc. This will help me to put forth a conclusion considering the implications of digital learning for adult literacy learners.

To put forward my ideas on the incorporation of digital learning for adult literacy learners; it is in my view that my findings may present some learners to find it exciting and interesting but will not be aware of the amount of progression that can be achieved without such incorporation. Other learners may be disinterested and feel to discontinue their program of study for fear of feeling inadaptable etc. To explain, many adult learners feel inadequate learning literacy as they are aware that many people including young children are advanced in the English language so they could feel challenged to learn ICT also as they are already in need of confidence building.

Chapter 1: Digital Learning Digital Teaching and Learning Resources

- Digital Camera
- Laptop / Computer
- Data Projector
- IPod

The Growth of Digitalization

Digital learning incorporates the use of technology into a lesson as a means to learning by use of digital teaching and learning resources. Digital teaching resources can be web based to combine both audio and visual to enhance understanding and memory such as computers which offer PowerPoint slides or data projectors used to incorporate TV and video into a lesson for the use of the teacher. Moreover, teaching aids can be digital and stored on computers which can be seen as an easier way to access and disseminate information or more so, ensures material is permanently available. Digital learning resources can include the use of IPods, digital cameras etc for the learners.

Reece, I & Walker, S (2003) explain that effective use of digital learning can really enhance your students' learning experience. They refer to OFSTED's inspection report which often links poor learning with the failure to use learning technologies and similarly link effective learning to the professional use of well designed multimedia activities. In view of this, it seems to suggest that effective learning was not apparent until technology was incorporated into the learning environment. This is not a fair statement and does not review or state progress prior to use of such resources.

Digital learning reflects the wider world outside the classroom where learners are used to more sophisticated presentations and productions which is the media, TV, internet etc therefore the teacher has to compete to engage learners (Reece, I & Walker, S, 2003). Although we are commonly exposed to digital presentations and productions on a daily basis it is important to decide whether it is necessary for basic literacy learners who are in need of reading and writing skills to communicate confidently and effectively in the wider world. As such learners still exist, it is necessary to say that such exposure to technology on a daily basis is not always encouraging learning but possibly distracting learning from learners as their response is to watch, listen but not to learn from it as it is simply for entertainment, commercial or news purposes. On the other hand, learners and teachers learn how to use different technologies but at what expense? For teachers, they simply have to be experts in knowing how to teach using technology as there is many material available online ideal for teaching purposes (Reece, I & Walker, S, 2003:80). However, there is no guarantee that teachers will be good at using technology and as a result, the students learning experience is not 'enhanced'. In a literacy class it could be seen as a distraction from the aim, becoming a technology class as students fiddle with cameras and iPods taking the attention away from the tutor and interrupting the communicative process. Nevertheless, Walklin, L (2000) makes clear that all teachers, eventually, will need to come to terms with the fact that technology is here to stay and will need to know how to use it. This is apparent as digital learning has rapidly evolved and has become integral in many social institutions.

Chapter 2: Non – Digital learning

Non – Digital Teaching and Learning Resources

- Whiteboard
- Flipchart
- Paper
- Handouts

Information is easily obtained online that encourages the incorporation of technology into literacy classrooms but rarely highlights the benefits of non – digital learning.

Reece, I & Walker, S (2003) make clear that non digital teaching resources such as boards are the most popular and useful visual aid as they are quick and easy to use and available in 99% teaching accommodation. It is possible for teachers to get more work done as points are seen as simple, to the point and interesting with quick stimulating activities such as brainstorming. Furthermore, they are also reliable and guaranteed to work when in use as tutors can alter and amend work easily.

Technical boards and use of PC connectivity can be frustrating when technical support is required for a loss of connectivity, computer freezes, power cuts or even light reflecting onto the computer screens which can cause a distraction. This can be time consuming and frustrating for both the tutor and learner. Alternatively,

Whiteboards can give the classroom a brighter atmosphere and tends to have steel backing to become magnetic and depict movement. This freedom of use can encourage creativity for tutors as they can build diagrams which lead into interesting topics of discussion to stimulate the learners mind and begin the thinking process.

An online article on digital learning mentions that Traditional models of ‘transit-receive’ when applied to multimedia learning, so far, has failed to engage learners in

meaningful learning (Scardamalia and Bereiter, Framework of TSOI model, 2003). In view of this, meaningful learning takes place through good communication practices between the learner and tutor as to why digital resources can prohibit interaction between student and teacher and cannot be seen as a substitute for a proficient teacher (Walklin, L, 2000:79). Meaningful learning is taking the time out to teach learners which can involve and should involve individual attention when necessary. For adult literacy learners, grasping technology can be difficult and the level of understanding required can bring about many sensitive issues. To elaborate, integrating digital learning resources such as iPods etc involves teaching the learners to use the technology. This process takes time which can demand individual attention in a class full of basic learners and should be part of an ICT lesson instead as the main focus is interrupted and class discussions on literacy are limited. The point made is that literacy learners cannot enrol onto an ICT course as they first need the ability to communicate effectively and confidently i.e. to read and write. Therefore, it seems confusing to introduce learning through use of technology to learners who are going to struggle with such resources who yet cannot communicate effectively without it.

Correspondingly, adult learners may feel they are getting too old to learn and fear they are made to appear dense relative to others as physical impairments such as poor eyesight or hearing would hold them back (2000:17). These current situations have not been considered with adult literacy learners as it is hard for many learners to grasp technology without having physical impairments. As a result, many learners can become unmotivated through lack of confidence to use digital equipment and end up dismissing literacy on a whole in fear of modern technology. This is a

possible outcome as learners are in need of confidence building. Another view of this is that impatience can breed amongst tutors as learners are slow to grasp the use of digital learning resources as it can easily become frustrating from my experience. This can affect the atmosphere and energy level within the classroom turning the environment into a negative one which in turn, relates to many learners childhood memories of teaching.

Non digital learning resources are still apparent in literacy classes today such as handouts which can be used to provide learners with data and facts. There are many different forms of handouts such as; worksheets, operation sheets, assignment sheets etc. These sheets can be worked on as part of a group or individually as learners are able to work on their writing and reading skills as part of an activity and encourages learner's feedback. It is important to note that digital learning resources can be seen as unreliable and when technical support is required and cannot be resolved, non – digital learning resources are needed to continue the lesson.

Eliciting, reflecting upon and responding to student feedback should be a necessary and integral part of a teacher's professional practice (Susan Wallace, 2001). This option offers qualitative feedback as it is possible to create an open environment for students to verbally express their concerns amongst other students who may share the same feelings. The teacher is then able to gain a general understanding of her performance on a whole and also have the opportunity to resolve or address any problems that have been stated. Alternatively, students may feel pressured to

respond in group discussions or uncomfortable with speaking out aloud and prefer a more confidential option.

Chapter 3: Results and Findings

Observation research with use of digital learning for adult literacy learners

Adult literacy participants were subjected to conditions of a two week adult literacy class which was purely digital learning. Having observed throughout the lessons and kept an account of my findings, on average, some learners were interested in using the digital resources but a majority did not feel capable. The learners that were interested took the whole lesson trying to complete the tasks such as writing a sentence on Microsoft word or complete learning apps on the IPod such as 'Word Sense' which is making words from a bunch of letters or 'Thrass' which is a bit difficult unless you know where to find things as the pictures etc are too small and there is no central Control Panel function. It was not always possible for the learner to complete the digital task in one lesson and therefore, completed the task by the next lesson. Those learners seemed to display intense concentration when using the resources and did not display interest in interaction with others or myself. Some learners did not want to have a go at using the equipment as one lady expressed that she was too old to use that sort of equipment. I could not encourage her to have a turn as she may have had a bad experience in the past and was certain of her decision.

On a positive note, for one of the lessons, I gave the learners a camera to share in groups of four to go around the building (inside or outside) for 20 minutes and take pictures of signs that they see. The idea was for them to return so we could view it on the big screen with a data projector and read the signs together so the learners can gain some understanding of the meaning and importance of the signs i.e. fire

exit. Once the learners had returned I tried to connect a camera to the laptop but had trouble getting it to project. There was no technical support available so I had to figure out how to make it work by trying different procedures. When I was about to give up, it then projected the image onto the big screen which was a relief as the learners were becoming distracted and had formed their own conversations. This task took ten minutes to correct. I did not feel that the use of such equipment connected all the learners or helped to improve their confidence with learning literacy. As a tutor, I felt that there was a lack of communication and interaction within the classroom between myself and the learners. A lot of time was wasted trying to get the equipment to work properly for example, learners needed assistance with the resources such as iPods when mistakes were made by learners and those that did not use the resources were awaiting my approval of a completed writing task. I could not share myself equally amongst learners and felt frustrated at times when attending to resources rather than learners.

Observation research with use of Non - digital learning for adult literacy learners

Adult literacy participants were subjected to conditions of a two week adult literacy class which consisted of non - digital learning resources. Having observed throughout the lessons and kept an account of my findings, I definitely felt a change in the atmosphere from the previous week of using digital learning. There was less stress and pressure to use such resources and more work was completed within the classroom. Learners appeared to have enjoyed the activities such as the dice and letter game where learners in a group took turns to roll the dice and land on a letter or word and sound it out in turns. Individual activities explored their creative side as learners had to cut out pictures from catalogues and stick them on paper and spell the chosen item. The idea was for learners to focus on images and words, learning how to make that connection. This activity was also fun for me as learners did not need assistance with the learning resources so I was able to help them with the spelling. Whiteboard activities seemed to engage learners as I had to prompt them to put their hand up when they were sure of the answer rather than shouting it out. It gave me a chance to acknowledge the lower level learners and target them encouraging their participation.

Questionnaire results from learners for digital and non digital learning

Chart 1

On average most learners enjoyed the two week non – digital learning compared to the two week digital learning.

Chart 2

On average, learners equally preferred the activities for digital and non – digital learning.

Chart 3

On average, it seems that learners were unsure of how they felt using digital resources or did not want to express how they felt. However, most were nervous when using digital resources and preferred non – digital lessons on average.

Chart 4

On average, most of the learners felt that digital learning was pointless in helping them to learn literacy mainly because they found it to be confusing. This was not the case in non- digital lessons where learning resources are familiar and can seem like second nature as to why the majority felt they learnt more literacy in these types of lessons.

Chart 5

After completion of all digital learning lessons, Many learners did not want to refuse future digital lessons as they felt that within time they would learn more literacy and be able to use digital resources in future lessons. However, after the completion of

non – digital lessons, most learners preferred this type of lesson once they were able to compare between the two.

Findings of Questionnaire for basic adult literacy tutors

Question 1

There was a mixed response as to whether digital learning should be incorporated in to basic adult literacy lessons as many tutors felt that the use of technology within a classroom can make the lesson fun, exciting etc. On average, tutors felt that this type of lesson should not be consistent because it takes time away from learners and tutors interacting as a group and only some of the learners are happy to partake in the use of such resources as there are always a mixed age class in adult literacy.

Question 2

A unanimous response of which type of lessons tutors found most effective for learners was non – digital lessons. Reasons expressed for this response was that they have seen major results and progression in these types of lessons over the years and as digital learning is new to literacy they are not sure of the long term effects in regards to learning literacy.

Question 3

The response I received from tutors asking if they found using digital teaching resources easy was that there are always times when something goes wrong. Most

tutors were very capable of using the resources but I did not receive a straight response stating that they found it easy. They expressed that there were a lot of hidden costs involved such as updating software, or purchasing apps which was not inclusive of their wages but could be claimed back.

Conclusion

This project has presented the use of digital and non – digital teaching and learning resources in a literacy class. It has compared both through theory and experience. It has studied the problem, enquired response by testing with observations and questionnaires to improve the adult literacy learning practice. The results have been evaluated for improvements so that future lessons can benefit both the tutor and learners. If learning is to be simple, to the point and interesting, then there would not be such concern for the integrating of digital learning into basic adult literacy lessons. It is clear that non – digital learning is favourable amongst a class of tested learners and tutors. Although digital learning is widely available in many subjects and institutions outside of basic adult literacy classes in community learning, it is fair to say that literacy learners are at the beginning of the learning journey as they are in need of basic communication skills i.e. read, write and speak.

It is not to say that some learners do not utilise digital equipment outside of the class, but to teach basic literacy learners through use of technology can be difficult compared to learners who already possess basic skills. Moreover, it would seem important for learners to have access to digital equipment outside of the classroom to practice and gain familiarity so that digital learning can be more effective for literacy learners. Unfortunately, such resources are not supplied to learners outside the classroom and therefore can only be utilised within the lesson. However, I had been given USB sticks for each learner to save their progress in class when using the laptop provided by the LSIS. Learners were also to be encouraged to take the USB home to practice and save work on their computers, unfortunately, this was not

possible as no learners had access to a PC outside of the classroom and preferred for the USB to stay within the classroom.

Overall it is fair to say that literacy learners should have a right to use digital learning resources but it should be a flexible one that gives tutors the freedom to consider learners needs and construct a lesson that they feel is suitable for the progression of the learner. This project has found that digital learning should not be fully dismissed from future literacy lessons as it can be enjoyable for learners but it is important to note that it does not satisfy learner's needs since one has to be somewhat literate to use technology as mistakes are easily made and would need to be corrected. Huge financial investments would have to be made for setting up technological communications to consider such type of learning on a long term basis which would be expensive for adult community learning.

Further research

Although the research has found non – digital learning to be most effective for basic adult literacy learners, further research can be done to include a wider population of literacy learners and tutors to generate more results and findings over a longer period of time to really define learner's progress. Alternatively, this research could be carried out with an adult literacy tutor who is skilled in the use of technology as he/she may be find it easier to deal with complications with technology.

Bibliography

- http://www.primaryict.org.uk/book_resources/ch10/choosing_digital_resources.pdf (Accessed 29th June, 2011).
- <http://www.prodait.org/approaches/research/features.php> (Accessed 29th June, 2011).
- users.actrix.co.nz/bobwill/arfeatures.doc (Accessed 29th June, 2011).
- Wallace, S. (2001) *Teaching and Supporting Learning in Further Education*. Great Britain: Bell & Bain LTD
- Reece, I & Walker, S (2003) *Teaching, Training and Learning*, U.K: Business Education Publishers Limited
- Walklin, L (2000) *Teaching and Learning in Further and Adult Education*. U.K: Stanley Thornes Publishers LTD
- Maier, P & Warren, A (2000) *Integrating Technology in Learning and Teaching*. U.K: Kogan Page LTD
- 'Framework of TSOI Model'
- http://www.digitallearning.in/april06/e_learning.asp (Accessed 27th June, 2011).
- 'Use of ICTs in Literacy and Lifelong Learning'

- http://www.unesco.org/education/aladin/paldin/pdf/course01/unit_14.pdf
(Accessed 27th June, 2011).
- <https://www.education.gov.uk/publications/eOrderingDownload/15012MIG2787.pdf> (Accessed 28th June, 2011).
- <http://www.nrdc.org.uk/content.asp?CategoryID=424&ArticleID=561>
(Accessed 28th June, 2011).
- <http://www.hastac.org/blogs/cathy-davidson/what-digital-learning>
(Accessed 30th June, 2011).
- <http://www.oppapers.com/essays/Digital-Learning-Vs-Traditional/532069>
(Accessed 30th June, 2011).

Appendix 1: Digital learning questionnaire results

Chart 1

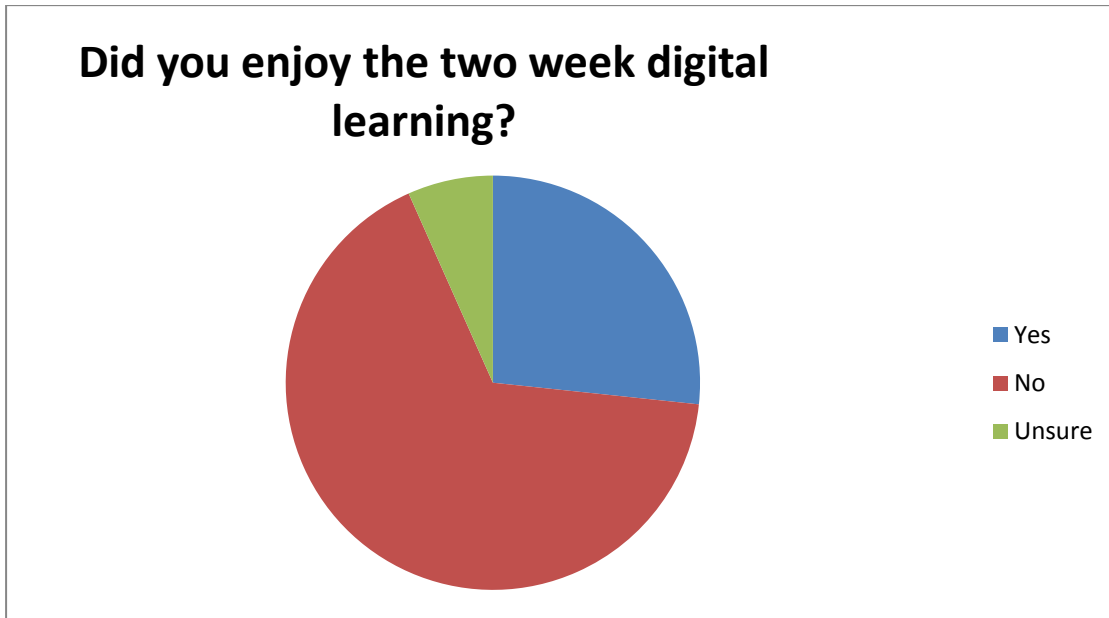


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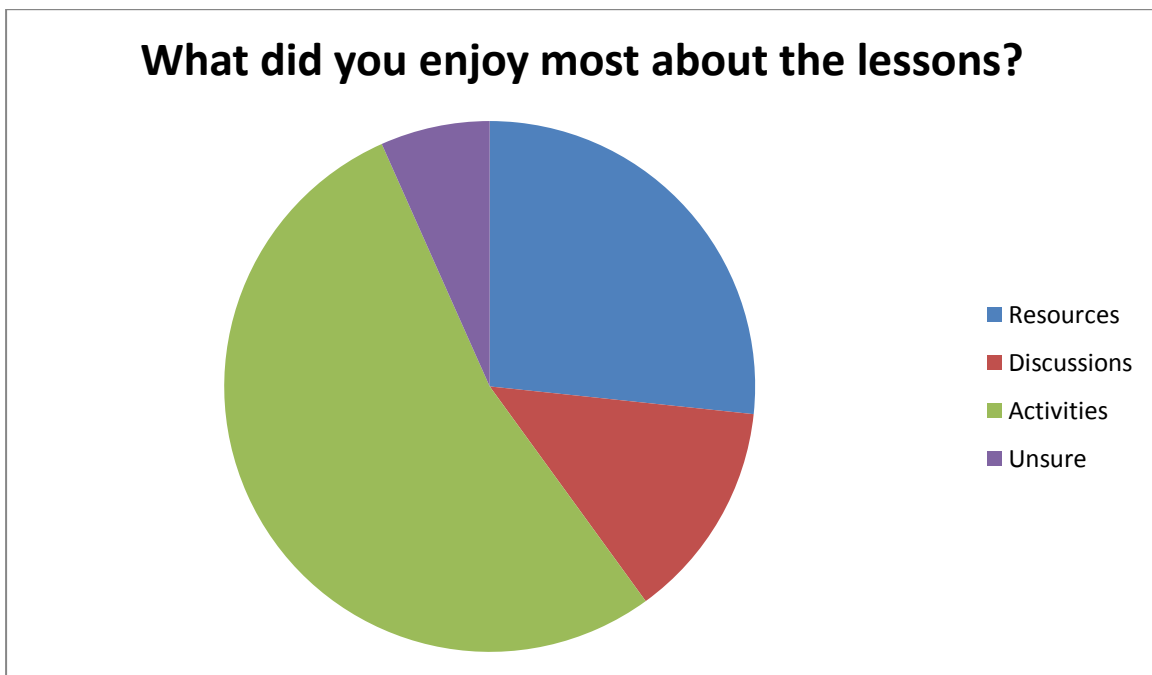


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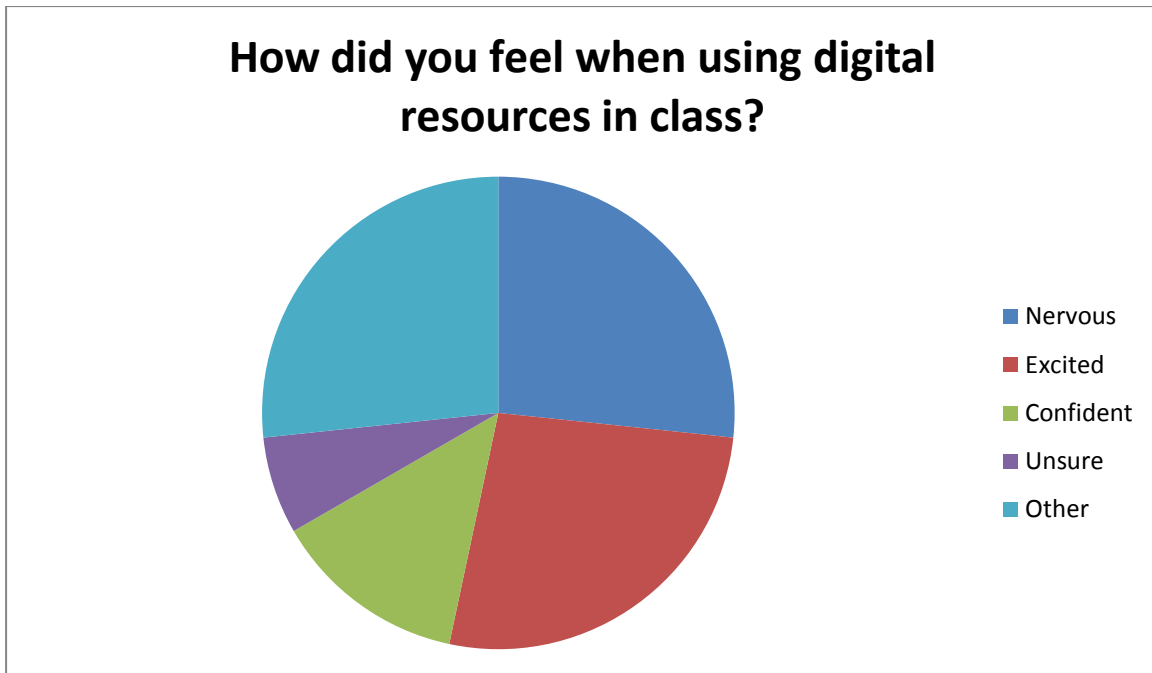


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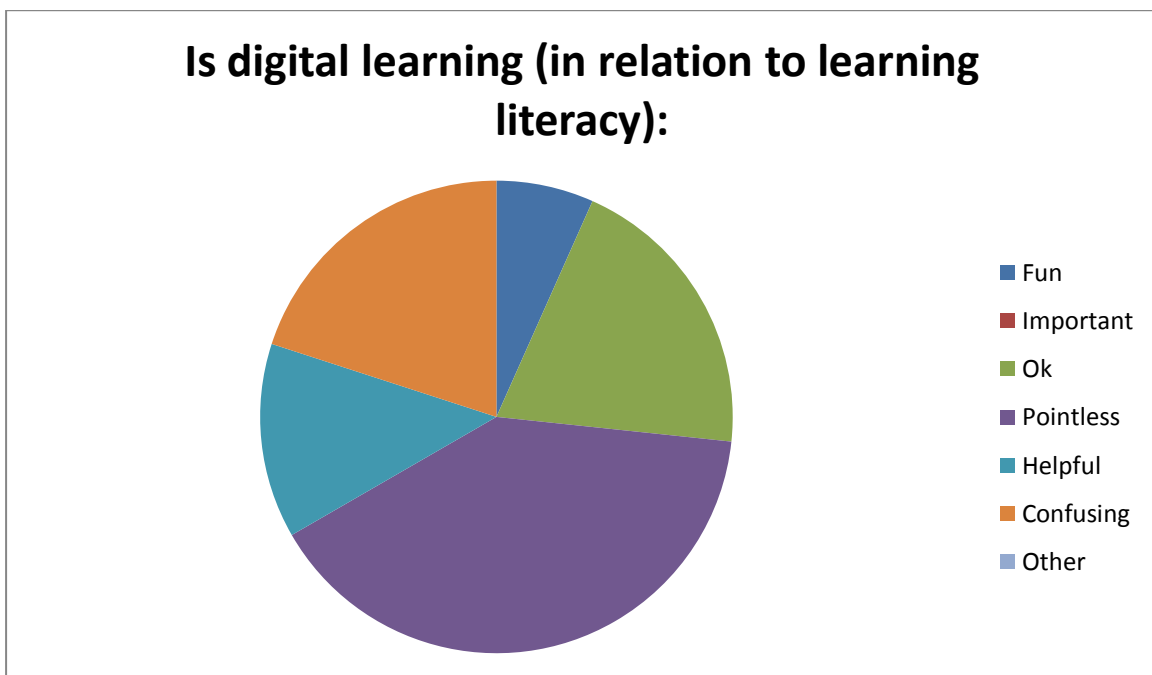
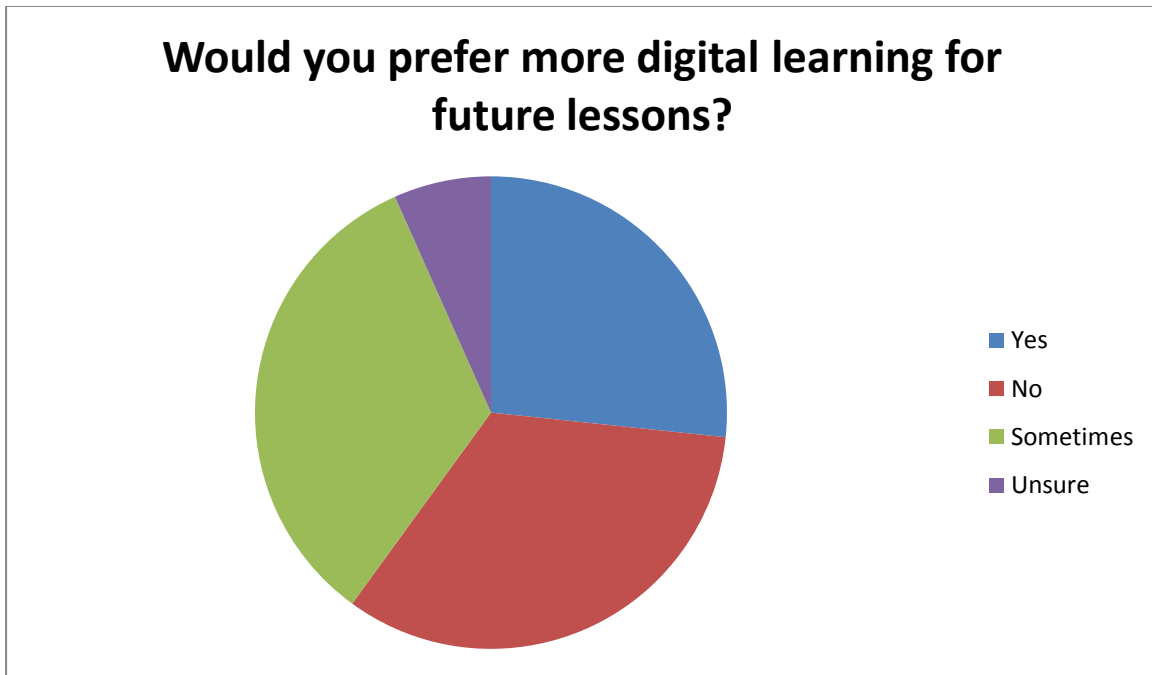


Chart 5



Appendix 2:

Non – digital learning questionnaire results

Chart 1

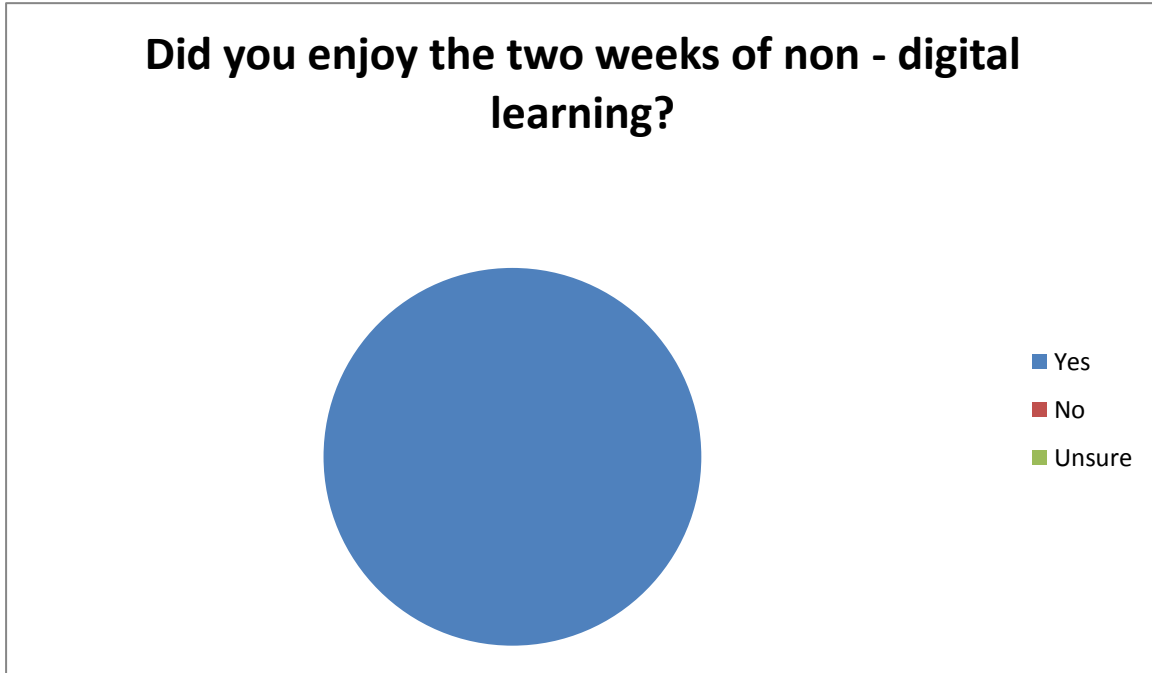


Chart 2

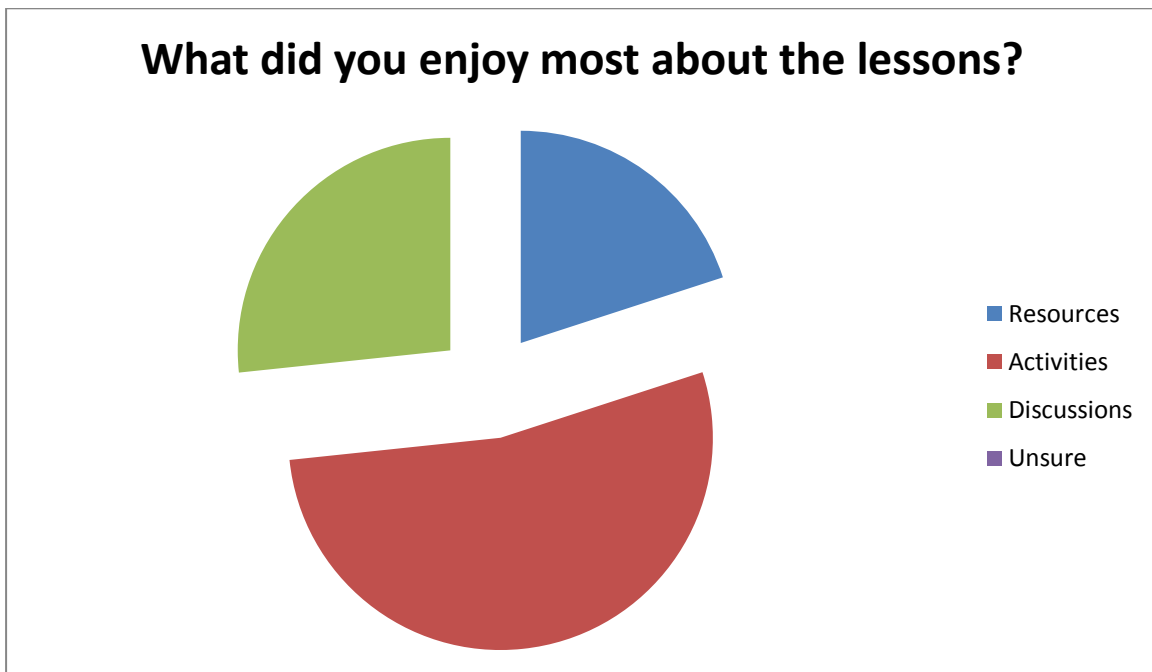


Chart 3

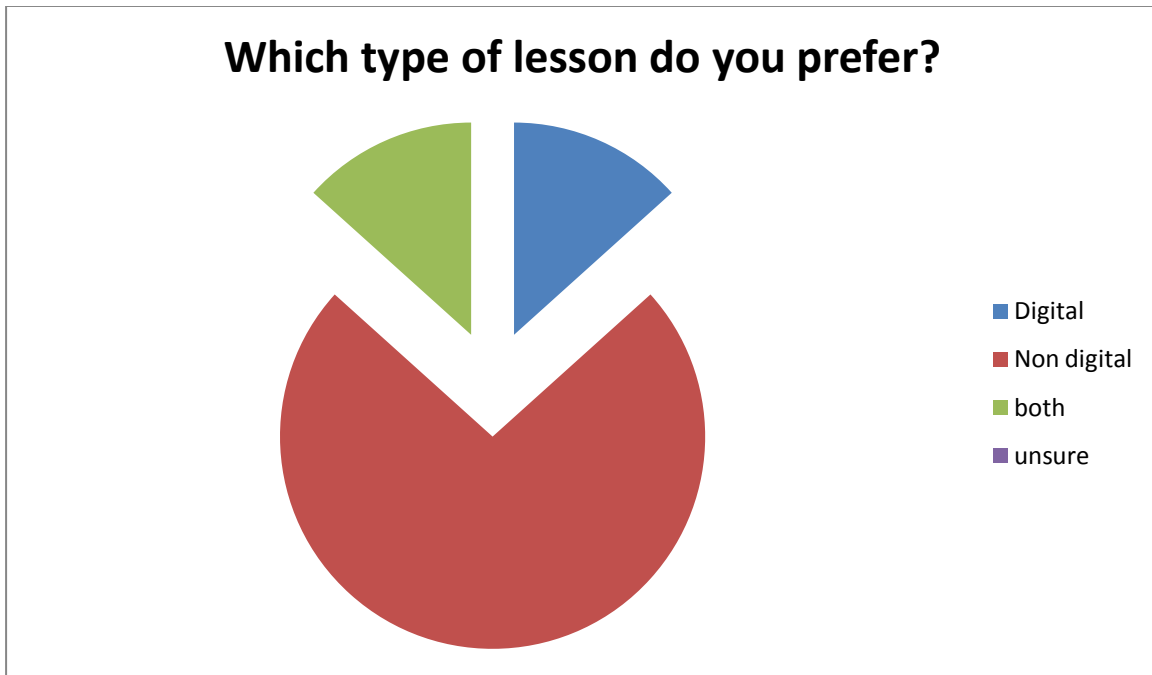


Chart 4

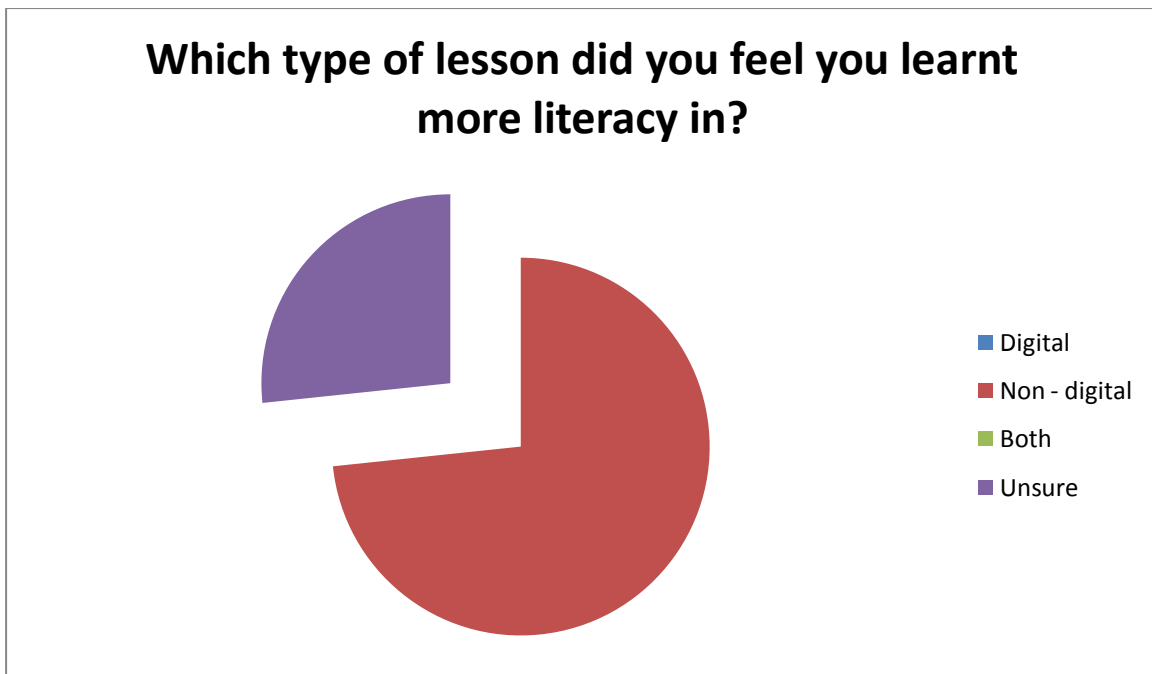
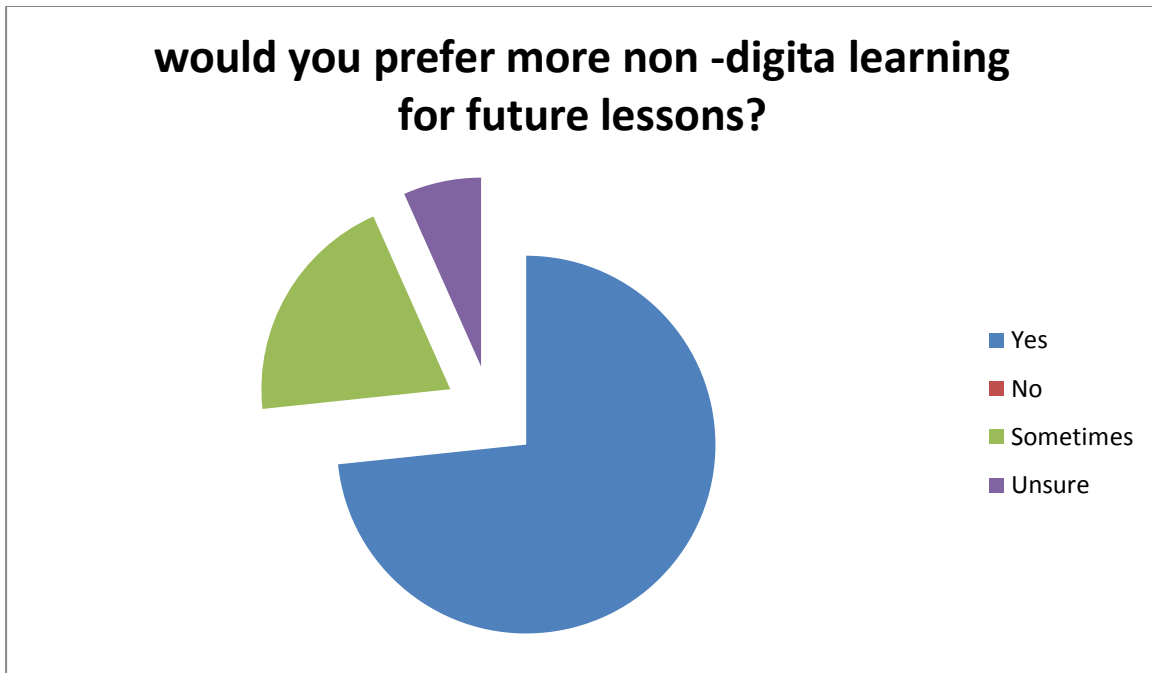


Chart 5



Appendix 3:

Questionnaire for basic adult literacy tutors

- 1) Do you think that digital learning should be integrated into basic adult literacy lessons? Please explain why?
- 2) Which type of lesson do you find most effective for learners and why?
- 3) Do you find it easy using digital resources when teaching? Please explain why?