



APPENDIX GA36c

LEVEL 6 ASSESSMENT SPECIFICATION

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Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Targed/Target 1	Ensure that all sources cited in the main body of the writing are listed in the reference list.
Targed/Target 2	Use more practical examples

How are Schools Supporting the Upskilling of Teachers in Digital Competency?



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Frontispiece

This is to certify that all work and investigation contained in this research project has been completed by the student, aside from where reference is made to work completed by others. This project, nor any element of it has been submitted elsewhere other than toward the degree of BA Primary Education with QTS at The University of Wales Trinity Saint David. The student understands that any work used without reference is regarded as plagiarism, which will result in the failure of this module.

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Introduction

Reflecting social and economic change, countries worldwide have created policies that encourage the use of technology in education (Vanderlinde, 2011). The importance of digital competency in Welsh schools has been raised through the implementation of Donaldson's (2015) curriculum. The aim of this study is to explore what support is available to teachers with regard to developing digital competency in schools, and if support has been made more accessible with the introduction of the new curriculum. The research captured the views of teachers and senior staff members regarding the support that they have witnessed in the school, and if they feel sufficiently supported to be able to confidently deliver the full range of digital skills.

The findings of this study will be used to improve my personal practice. Where appropriate, recommendations will be made to improve teacher confidence, which will have a direct impact on the delivery of digital skills in the classroom. It is evident that practitioner confidence has a direct impact on the digital competency opportunities that are made available to learners. Digitally confident teachers will be able to develop an array of meaningful activities that will improve the digital skills of their students. However, those who are less confident may avoid teaching digital skills where appropriate as they do not yet have those skills themselves.

It may be believed that as technology is advancing exponentially beyond the classroom, many practitioners are reluctant or unable to keep up. When learners leave education and enter the working world, they will be expected to be digitally competent enough to use these new technologies to a high standard. If these learners have not been taught sufficient digital skills, then they may find it difficult to adapt to new technologies in the workplace. Whilst many practitioners support this theory and aim to remain up-to-date in their digital abilities, many are not so forward thinking. If teachers are not being provided with the opportunities to develop their digital skills in the way of external courses and in-house training, they are less likely to encourage the learners in their classes to use technology in new and innovative ways, as encouraged in Donaldson's (2015) curriculum.

To explore this area, a range of research methods will be used. Initial background research will be carried out using academic journals, books, and websites, in order to develop a foundation of knowledge to base my study on. Later on, primary research will be carried out

in a local primary school using interviews, observations and questionnaires. The results of this research will be compared to the theories and findings of experts in the field.

The term 'Digital Competency' will be used throughout this study. Digital Competency is a concept that describes skills that are related to technology (Estyn, 2019). For the purpose of this study, 'training' will refer to any attempt to improve one's capabilities with regard to digital competency. This includes online courses, external courses, in-house training, and compiling ideas in staff meetings.

This area has been of a particular interest as Donaldson (2015) has highlighted the importance of digital skills in the new Successful Futures curriculum. Alongside this, rapid technological advancements outside of the classroom makes it vital that schools are able to support learners sufficiently, providing them with the skills required to succeed in later life. Donaldson has supported this, stating that high levels of digital competence is already demanded by modern society, particularly in the workplace. The education sector is currently preparing children to fulfil careers that do not yet exist.

Literature Review

Within Primary Education, it is common for practitioners to teach a multitude of subjects, many of which were not prevalent in their own education (Newton & Newton, 2001). This situation is common world-wide with many educationalists stating that subject knowledge is an essential segment of a practitioner's repertoire (Shulman, 1986; Hollon et al., 1991). It has been discussed that teachers delivering familiar topics base their teaching on central ideas, providing pupils with more opportunities to ask questions (Putnam & Borko, 1997; Ball, 1990; Clement, 1982). Harlen & Holroyd (1997) also state that a strong foundation of content knowledge increases the practitioner's confidence in the subject matter. When teachers are not confident in their content, there is a possibility that lessons will focus on passing facts onto pupils, rather than skills (Ofsted, 1994). However, there is a theory that teacher subject knowledge has dangers. There is a risk that those practitioners with all the answers may adopt an approach whereby learners are taught 'by rote' and are not provided with the opportunities to make mistakes and develop key skills (Russel, et al., 1992; Golby et al., 1995; Qualter, 1999). This emphasises the importance of pedagogy as a whole in education, with teacher subject knowledge purely being a segment of it (Newton & Newton, 2001).

With digital competency being one of the three cross-curricular responsibilities, Donaldson (2015) states that it is a key skill that is vital for pupils to be able to access the world of work post-education. Although Hathway (2015) embraces the idea that being digitally literate is a fundamental quality for modern life, he also states that education should not purely exist to fill the requirements of economic drivers.

Prensky (2001) suggests that children are born into the 'Net Generation', making them 'Digital Natives', whereas adults who were not born into a time of rapid technological development are 'Digital Immigrants'. A prevalent point made by Prensky is that Digital Immigrant practitioners, who teach in the language of the pre-digital age, are struggling to teach learners who speak a new language entirely. This suggests that teachers are not equipped with sufficient digital skills in order to promote digital competency in schools. As this information is nearly two-decades old, it could be argued that it is no longer relevant and that practitioners have since learned the digital language. However, Prensky's theory is supported by Hathway (2015), stating that often pupils are far more fluent in technology than their teachers, many of whom were teaching before the invention of the internet.

The implementation of the Digital Competency framework, as with most educational policies, has provided schools with the facilities to monitor the professional development of their teachers (Jones, 2003; Owston 2007). It is also argued that, by forming these policies, ICT support transforms from being based on funding and resources, to emphasizing pupil development through the integration of technology in lessons (Vanderlinde, van Braak and Hermans, 2009).

It has been suggested that developing digital literacy requires more than using technology as a motivational tool, learners should be provided with opportunities to use their digital skills to make sense of the world around them (Payton and Hague, 2010). Internationally, schools in Flanders, Belgium host an ICT curriculum that focusses on the integrated use of ICT in learning rather than on technical skills (Vanderlinde, 2011). Practitioners in Flanders are expected to adapt their teaching in order to implement the ICT targets, it has been suggested that how teachers perceive the innovation will influence its implementation (Fullan, 2001). This is similar to the proposed implementation of the Digital Competency Framework in Donaldson's (2015) Successful Futures curriculum where digital skills are interwoven into the teaching and learning of subjects in a cross-curricular way. Similarly to the Welsh Government, The Flemish Government anticipates that every child will need to be digitally literate when leaving education after the implementation of this policy, in order to meet social expectations (Vanderlinde, 2011).

It has been suggested that teachers who lack subject matter knowledge may choose to teach younger children, where the curriculum expectations are less daunting (Goulding et al., 2002). Estyn (2013) state that generally, teachers are less confident in delivering the full Key Stage 2 curriculum when it comes to ICT and digital skills. Estyn has recommended that schools should train teachers to be able to develop digital skills up to Year 6. However, Goulding et al. also state that less confident teachers may plan their lessons more carefully using a range of resources to ensure that they are not caught off guard in the learning process. It has been proposed that the willingness of teachers to integrate digital skills into their teaching is a fundamental factor that impacts on the success of a digital policy (Gess-Newsome et al, 2003; Ghaith & Yaghi, 1997).

In order for practitioners to effectively differentiate, Shulman (1987) explains that good subject knowledge is essential. This is further supported by Hanushek (1986) who theorises that more informed teachers perform to a higher standard in the classroom. Shulman defines subject matter knowledge as the amount of knowledge in the mind of the teacher and how it is organised. It may be argued that if practitioners lack subject matter knowledge, then they

are likely to avoid risky situations in the classroom where they may not be able to answer pupils' unexpected questions (Goulding, et al., 2002).

It has been suggested that, in order to ensure professional development, schools should remove the "one size fits all" approach to staff training and begin offering a larger variety of courses for staff to become engaged with (TDA, 2008; Graham, et al., 2006). Furthermore, EWC (2007) recommend that practitioners should reflect upon the professional development that they feel they need to undertake. EWC state that activities such as these reflect upon cultural change outside of the classroom whilst having a positive impact on pupil attainment. ERW (2020) also support the idea of practitioner self-reflection, explaining that every teacher must be responsible for their own professional development and should be encouraged to take advantage of professional learning courses when they are available. It is stated that Continuing Professional Development (CPD) should address each individual teacher's development needs in order to improve their practice and as a result, the performance of their pupils (European Union, 2019). The 'one-size-fits-all' approach has been rejected by the Welsh Government (2019), stating that the recently reviewed professional standards should be used as a tool to reflect on professional practice, both individually and collectively, against nationally agreed standards, promoting success in the workforce.

Conversely, it could be argued that one-day, in-house training opportunities are unlikely to improve teaching and learning, instead being more useful for transferring information (Thomas, 2016). Timperley (2011) maintains this theory, stating that the term 'professional development' has become interchangeable with delivering information to teachers. Instead, Timperley promotes the phrase 'professional learning', explaining that it challenges assumptions and transforms practice, evolving pupil experience. Thomas further discusses the importance of effective staff training, emphasising the impact that it has on the performance, effectiveness and efficiency of practitioners. This suggests that whilst it is universally accepted that professional development is vital for the future of education in Wales, discrepancies remain on how it should be carried out.

Davies (2017) recommends the sharing of professional practice, particularly across sectors, identifying the benefits that it would bring to learners in Wales as development stages are bridged, allowing for a continuum in education. Following this recommendation, Primary and Secondary practitioners would be expected to collaborate, sharing expertise and promoting best practice. However, it could be argued that such collaboration would not be as beneficial to Foundation Phase practitioners as the expected skills are less advanced than in Key Stages 2 and 3. Estyn (2018) state that many schools involved staff in the discussion of the

school's digital plan. Involving staff ensures that they are aware of the curriculum content and the expectations of senior staff. Estyn stated that many teachers developed a positive attitude towards the framework as a result of their involvement. Furthermore, Estyn explain that most teachers are more confident in strands such as 'Citizenship' and 'Producing', than they are with 'Data' and 'Computational Thinking'. This highlights the importance of practitioners self-evaluating their skills to ensure that they are able to confidently deliver all strands of the Digital Competency Framework.

Following the introduction of the transformational 'Successful Futures' curriculum in Wales (Donaldson, 2015), it is vital that practitioners are equipped with the skills required to implement it to its full potential. As Successful Futures focuses on preparing learners for an ever-changing society outside of school, practitioners must continue to self-evaluate their skills ensuring that the education that pupils are receiving is as relevant as possible to the current and future society. Furlong (2015) states that teacher training in Wales is also transforming in order to promote the future-facing practice that is advised by Donaldson. This follows a report by Tabberer (2013) who stated that Initial Teacher Training in Wales was adequate but insufficient to meet the needs of Wales at the time. Furlong states that Wales requires Initial Teacher Education and Continued Professional Development that is able to prepare practitioners for the challenges associated with education in the 21st Century.

This combination promotes best practice for the future as teachers entering the workforce are specifically trained for a transformed curriculum. All practitioners in Wales now have the responsibility of developing their pupils' literacy, numeracy and digital competency, no matter the subject matter (Donaldson, 2015; Furlong, 2015). However, Jones (2015) discusses the importance of ensuring that the language used in the classroom also evolves so new concepts are not taught using outdated terms. Again, this turns attention back to the professional development of the current workforce to ensure that all practitioners are working toward the same goal of preparing pupils for the future.

It has been said that past curriculum design, built on the top-down approach, has de-professionalised practitioners and reduced independent thinking and planning (Hathway, 2015). Hathway further discusses the importance of not expecting practitioners to be able to fully embrace a more flexible curriculum without support, after having served a prescriptive curriculum for a number of years. As Donaldson (2015) and Furlong (2015) state, teachers are also now expected to implement literacy, numeracy and digital competency in their teaching. These are skills that they many may not have focused on previously as there are

of the curriculum did not encourage it. For this reason, many will require additional support and opportunities for professional development, especially in the cross-curricular responsibilities. Again, Hathway recommends that schools support the upskilling of their teachers to ensure that all are able to use technology confidently and creatively in the classroom, further suggesting investment in professional development in this area. The source also predicts that investment will be spent on hardware and other resources to allow pupils access to quality, up-to-date resources, allowing them to be educated for the future. There are a multitude of courses available for practitioners who would like to develop their digital competence and their implementation of the cross-curricular skill in the classroom. Initially, Jisc (2015) offered a course running from January through until July 2015 that aimed to help teachers to understand the meaning of digital literacy and provide them with the knowledge, confidence and experience to deliver it to their classes. Practitioners who attended this course were then responsible for sharing their experience with the rest of the staff in the school. This course was in response to the introduction of the Digital Competency Framework (Welsh Government, 2014). It may have been beneficial to continue with the running of this course on a long-term basis, up until the introduction of Donaldson's (2015) curriculum. Argoed Cymru (2020) also offer a course to provide practitioners with the knowledge and skills to plan, deliver and assess digital competency.

Methodology

In order to complete this study, a range of primary and secondary research methods were employed. Prior to attending the Primary School, peer-reviewed journals, reliable websites, Welsh Government documents and Estyn reports were used to develop a secure knowledge base to build upon during the primary research element of the study. With relation to secondary research, the most relevant sources were found to be Welsh Government documents and Estyn reports as they were based on the implementation of digital skills in education in Wales specifically. Additionally, as government documentation, they are reliable and secure sources on which to base a study of this kind. Peer-reviewed journals were also found to be of use for academic theory as they have been written and reviewed by experts in the relevant field making them reliable information sources.

In order to answer the research question, primary research was carried out in a local primary school. Prior to attending the school, it was paramount that an ethics form was completed and submitted to the module lead (Appendix 1). Following this, consent forms were signed by the head teacher to allow for the research to take place (Appendix 2). This allowed for the primary investigation to be completed.

An online questionnaire (Appendix 3) was made to collect responses from staff with regard to their experience of digital competency and the support that they have received from the school. This was distributed via email to allow respondents to reply when they were ready to do so. Once submitted, responses were automatically collected by the software, producing graphs and statistics to represent the results that were received. The responses received were varied, with most respondents having had very different experiences in the same school. One limitation of this method of data capture is that very few responses were received. Of the 22 members of teaching staff in the school, 5 responses were submitted. This meant that the statistical results of many of the questions were not representative of the whole body of staff within the school, making the data unreliable.

In order to improve this area of the study and produce repeatable results, it could be recommended that hard copies of the questionnaire could be distributed for completion during the weekly staff meeting. This may increase the number of responses as staff are able to complete the form within an allotted time. Alternatively, email reminders could be sent out to staff throughout the week, asking them to complete the questionnaire if possible.

Observations were carried out in a range of year groups through both key stages (Appendix 4). Experiences such as these allow for the observation of the day-to-day teaching of

different classes within the school. Within these observations, the key focusses were how staff incorporate the Digital Competency Framework in their teaching as well as how digitally confident they were. Lessons were observed in Reception, Year 2, Year 5 and Year 6. These observations happened to take place on Safer Internet Day, the day on which all classes in Key Stage 2 were creating an advertisement for internet safety, this was beneficial to the study as pupils were using a range of digital skills to complete the task. Although the tasks observed highlighted the use of the Digital Competency Framework, it cannot be certain that a less digitally centred lesson would produce similar observations. It is unclear if practitioners are digitally confident as creative links to technology were not required.

As well as the lessons themselves, the digital links around the school were also observed. This includes displays, QR codes and hardware such as iPads and laptops (Appendix 5). Identifying such links allows for the identification of a whole-school approach to the Digital Competency Framework, as encouraged by Estyn (2018). Collecting evidence of such observations using notes and photographs allows the experience to be compared with results of other data capture methods, allowing a complete understanding to be built.

A selection of interviews was conducted throughout the study. The first interview (Appendix 6) was conducted with the school's team of Digital Leaders. Prior to the interview, the study was discussed with them and the aims explained, they were asked if they would like to be involved in my research and informed that they were able to withdraw at any time if they should so wish. This interview was conducted in a group to ensure that pupils felt comfortable in answering the questions. No names were taken during the interview to ensure anonymity. It was decided that an interview would be the best method of research for this group of pupils as it allowed them to discuss their answers together and provided the opportunity to ask for more clarity and explanation for some responses.

The next interviews involved the Digital Competency Lead Teacher (Appendix 7) and two teachers who were identified as having varied levels of digital confidence (Appendices 8 & 9). These interviews were on an individual basis as discussing professional development in front of colleagues may not be comfortable for less digitally confident teachers. The transcripts of these interviews were recorded anonymously so individuals could not be identified. Evidence collected from these interviews was compared to the results from the questionnaire, the observations made and the responses from the Digital Leaders.

The final interviews were held with two groups of Year 2 children (Appendix 10). Again, the study was discussed with the pupils and they were asked if they would like to participate.

Pupils were again informed that they were able to withdraw at any time and that their responses were anonymous. These interviews were conducted in groups to ensure that the children felt comfortable in answering the questions and that they were able to discuss their opinions with their peers. Upon reflection, it may have been more beneficial to interview learners who were slightly older as the context may have been too advanced for Year 2 learners. Alternatively, a mixed group may be beneficial to collect the views of a cross-section of learners who will be able to support each other's answers during the interview.

Results and Discussion

After a formal discussion with the school's Digital Competency Lead (Appendix 11), it was evident that whilst many teachers within the school were eager to embrace new technology and software to gain a new angle into learning, some are less enthusiastic. An example of a new software within the school was Minecraft for Education. As predicted by Hathway (2015), many children in the school had played the game for recreational purposes and are confident in its features, functions and controls. It was highlighted that some teachers were intimidated by the pupils having more experience in this software and were reluctant to use it in their lessons. However, during an interview (Appendix 8) one teacher stated that if they had pupils in their class that were confident using an app that they themselves were unsure of, they would feel more confident in introducing it as the pupils would be able to help them if required. It was further stated that if individual pupils were very confident in the use of a software, they would be supported to be able to lead that aspect of the lesson if they were comfortable to do so.

Despite this, it is not true of all teachers within the school, with 20% of respondents to the questionnaire (Appendix 3) stating that they would not use a software for learning if their pupils were likely to be more confident in its use than they were. Due to the low response rate, this figure may not be fully representative of all practitioners within the school. However, if this figure is to be believed, then 20% of staff in the school have stated that they may not feel comfortable in allowing pupils to lead the learning. This is significant as pupil-lead learning is a strong feature of Donaldson's (2015) curriculum.

It was brought to light that many practitioners believe that they are 'digital dinosaurs' as a result of requiring more digital support. These findings correlate with Prensky's (2001) idea of many teachers being 'Digital Immigrants' and finding it difficult to pass on digital skills to their 'Digital Native' pupils. Furthermore, the results of the questionnaire (Appendix 3) showed that 100% of respondents considered themselves to be digital immigrants, further affirming Prensky's theory. 50% of respondents to the questionnaire stated that they felt as though their knowledge of the Digital Competency Framework was out of date, with 100% of respondents stating that they would benefit from further digital competency training.

Estyn (2013) state that often, practitioners feel less confident introducing digital skills in Key Stage 2 than in Foundation Phase. This may be a result of the more complex skills that are expected in the different strands of the Digital Competency Framework. Results of the questionnaire show that 60% of respondents disagreed with this statement, however due to the low response rate, it could be argued that this is dependent on the key stage that these respondents teach. Further disproving Estyn's earlier statement, the Digital Competency lead stated (Appendix 7) that Key Stage 2 practitioners were more digitally confident.

However, it was also stated that this may be due to resources, as the hardware available in Foundation Phase is outdated making it difficult to use. As well as this, it was suggested that the Foundation Phase is naturally more focused on motor skills than digital skills anyway, as pupils are learning to write and draw.

Similarly, it has been recommended by Estyn (2013) that all teachers in a school should be trained to develop digital skills up to Year 6 standard. It was stated by the Digital Competency Lead that this is not the case in their school. Until recently, it was observed that Year 6 Staff were often reluctant to incorporate the Digital Competency Framework in their teaching. This was resolved using regular 1:1 training to ensure that these staff members felt supported in their development. It is suggested that teacher willingness to incorporate digital skills in their pedagogy has a fundamental impact on the success of the digital policy in a school (Gess-Newsome et al., 2003; Ghaith & Yaghi, 1997). This is significant as all teachers within a school must be fully supportive of the Digital Competency Framework in order for it to work. Many teachers would find it difficult to teach the Data and Computational thinking strands as the vocabulary is very complex. However, it is believed that all members of staff would be able to teach the Producing strand up to Year 6 level.

From the previous statement, it can be assumed that practitioners find some strands of the Digital Competency Framework easier to understand and implement than others. This is supported by the staff interviews as both stated that their strongest strand of the DCF is Producing and their weakest strand is Computational Thinking. The questionnaire also highlighted that Producing was the strongest strand for just under half of respondents. When asked to identify a weakest area, the most common responses were Interacting and Collaborating, and Data and Computational Thinking.

It has been discussed that professional development should be individualised (TDA, 2008; Graham, et al., 2006; EWC, 2007), for this reason it could be argued that it is not down to the school to upskill their staff, practitioners should control their own development. This view is supported by the school's Digital Competency lead, stating that staff must be proactive in

their own professional development. Upon discovering a course that interests them, it is their responsibility to arrange their attendance with the Senior Leadership Team. Each academic year, a spreadsheet of Digital Competency courses by CSC is distributed. Staff are able to ask the head to attend one of these courses. When they have completed the course, staff are then able to share their experiences with the school. Digital Competency training is held frequently in the school, often there is 1 DCF specific session per term, along with regular shorter slots in staff meetings. This is in addition to the aforementioned CSC courses that practitioners are able to attend.

In order to individualise professional development in the school, the Digital Competency Lead issued an audit for all teachers to complete so training could be done planned for the strands where it is most needed. A positive mindset was highlighted as being vital to developing digital competency as a willingness to learn alongside pupils is a skill that allows those pupils to lead their own learning. Completing an audit such as this and encouraging a growth mindset ensured that less confident practitioners were not made to feel inferior to others, instead focussing on their own personal development. However, a follow-up audit has not been completed in over two years, it is likely that the findings of the previous audit are no longer relevant. It could be recommended that an audit is completed at the beginning of every academic year in order to support teachers in their development in the strands that they would like to develop.

There are a range of ways in which the school supports their staff in their continued professional development in digital competency. The school's Digital Leaders team (Appendix 6) comprise pupils from Year 2 up to Year 6. The roles of the Digital Leaders are to meet once a week to 'tinker' with new and updated apps so they are able to use them to a standard where they are able to demonstrate their functions to their teachers, as well as acting as general digital support for their class teachers. The impact of the Digital Leaders has been felt by staff, as highlighted in interviews (Appendices 8 & 9). When discussing Digital Leaders, one staff member stated:

"I use them a lot. I work with a very good Digital Leader who comes up with some fantastic ideas for using in DCF lessons."

It could be recommended that schools should follow this approach in order to improve staff confidence. Having an 'expert' in every class may encourage staff to use new software to improve digital skills in a cross-curricular way as encouraged by Donaldson (2015).

It was suggested that digitally confident pupils may be key to spreading digital literacy across the school, especially in the classes of less confident teachers (Appendix 6). It has been observed that having been taught by a digitally confident teacher, pupils' digital confidence and competence improves. This improved confidence encourages practitioners to allow the pupils to lead their own learning when using technology.

There are still developments to be made in terms of Digital Competency in the school. It has been observed that some teachers reserve the use of iPads for 'Golden Time' and rarely for learning. Payton and Hague (2010) highlight that using technology in this way does not develop digital literacy as learners are not able to use their digital skills to make sense of the world around them. Payton and Hague believe that technology should be utilised in education more than as a motivational resource. However, it was observed that Foundation Phase classes in the school would benefit from new digital resources as the outdated technology was difficult for staff to incorporate in learning.

Results produced by the questionnaire found that 20% of respondents never differentiate the skills required for digital tasks to suit higher and lower ability learners, with 40% stating that they differentiated these skills occasionally. Furthermore, when asked if subject knowledge is required for effective differentiation, 60% of respondents agreed that it is. This affirms Shulman's (1987) theory that good subject knowledge is essential for effective differentiation. This also appears to support Hanushek's (1986) theory of more informed teachers potentially performing better in the classroom, for example, by differentiating.

A sabbatical-style training course was also discussed during the interview element of the study. The Welsh Sabbatical Scheme is an up to 11-week full time course where the participant is immersed in the Welsh language in order to improve their skills (Welsh Government, 2016). When asked if they believed that a similar scheme would be beneficial for raising digital literacy standards, it was mentioned by the Digital Competency Lead that often, the most beneficial way to develop digital skills is to practice them in the classroom with pupils. However, another teacher stated that they believed it would be beneficial for less confident teachers. After a teacher completes the Welsh language Sabbatical scheme, the use of Welsh across the curriculum in their school generally increases (Welsh Government, 2014). With Digital Competency being one of Donaldson's (2015) cross-curricular responsibilities, it may be beneficial to run such a scheme to increase its usage to the same level as literacy and numeracy.

Conclusion

This study aimed to discover how schools are supporting their teachers as they develop their Digital Competency skills to be used in the classroom. Evidence shows that pupils are born into the 'Net Generation' (Prensky, 2001). As 'digital natives' it may be beneficial to allow learners to lead some digital skills aspects of lessons as Prensky and Hathway (2015) agree that they may be more fluent in the digital 'language' than their teachers. Schools encouraging this method of teaching would be providing support to their teachers as there is less pressure on them to have all of the answers.

Additionally, practitioners are responsible for their own professional development. As professional development is personal to the individual (TDA, 2008; Graham, et al., 2006; EWC, 2007), schools should not be expected to find opportunities for development for each member of staff individually. However, the system of the school that the study was based in, allowed practitioners to be proactive in their own development, whilst also providing support to those that required it.

Similarly to how a teacher who has completed the Welsh Sabbatical Scheme increases the use of Welsh across a school (Welsh Government, 2014), introducing a sabbatical-style training course for Digital Competency may be beneficial in order to raise its profile as a cross-curricular responsibility, as advised by Donaldson (2015). A course such as this would be valuable for less digitally confident practitioners as it will allow them to become completely immersed in digital skills, allowing them to confidently use these skills in the classroom. The introduction of a scheme such as this would require further research across a range of different schools. A digital competence questionnaire could be distributed to schools as a means of finding out if schools and teachers would be interested in such a scheme.

As a result of undertaking this study, personal professional progress has been made. The author has developed a foundation of knowledge upon which further professional progress can be built. Digital Competency had previously been an area which the author struggled to incorporate in a cross-curricular way. Having studied this area and observing how it is promoted across the curriculum in its intended context, it is now clearer how it can be promoted in the classroom. Throughout this research, support strategies have been uncovered that will be used to improve personal practice, for example, allowing pupils to lead elements of the learning where they may be more confident.

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