

LEVEL 6 ASSESSMENT SPECIFICATION

Student name:	Molly Green	Student ID number:	1701043
Programme:	BA in Education with QTS		
Module:	Cross Curricular Responsibilities: Literacy, Numeracy and Digital Competence		
Module code:	ECAD6012	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Rachel Wallis	Internal Verifier:	Rachel Wallis
Assignment Title:	Looking forward: A critical analysis of literacy, numeracy and digital competence as cross-curricular responsibilities.	Word count (or equivalent):	2, 500
Submission deadline:	20.12.19 (23:59)	Return date of provisional marks & written feedback:	31.1.20
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark. Penalties for late submission: Up to one week late, maximum mark of 40%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
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.		

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
2. Knowledge and Understanding Skills		
3. Cognitive and Intellectual Skills		
4. Practical Application Skills		
5. Transferable Skills for Life and Professional Practice		

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		%
	Up to 1 week late (40% Max)		
	Over 1 week late (0%)		

This assignment aims to recognise the advantages and restrictions of literacy, numeracy, and digital competence as cross-curricular responsibilities within the evolving curriculum in Wales. Literacy, numeracy, and digital competence are the three cross-curricular responsibilities which “must be embedded in the areas of learning and experience as appropriate” (Gov, 2019, p.4). It is crucial that these responsibilities support children’s learning to allow them to gain skills that will equip them ready for life in the modern world. Despite documents updating in Wales to prepare for the new curriculum in 2022, the Literacy Numeracy Framework (LNF) and the Digital Competence Framework (DFC) were released in 2013 and 2008 showing that these responsibilities are not relatively new concepts and that cross-curricular learning should already be being practiced in schools despite the upcoming changes.

There are many reasons why the Welsh Government are promoting a cross-curricular approach for the new curriculum. Barnes’ (2011), defines a cross-curricular approach as “when the skills, knowledge and attitudes of a number of different disciplines are applied to a single experience, problem, question, theme or idea we are working in a cross-curricular way” (Barnes, 2011, p.10). He believes that a cross-curricular approach is the key to prepare children for an uncertain future. Both Donaldson (2015) and Dewy (cited in Barnes 2011 p.45), discuss the importance of creating societies where rights and needs are respected due to the personal, and enriched experiences which were promoted through children’s education. Dewy, also suggests that children should play a role in the planning process. Even though this method may appear difficult as it is more time consuming and it might be challenging for teachers to value all the children’s ideas, I believe that children should always be involved in the lesson planning process to build on their problem-solving skills, creativity and independence. These are all aims of the cross-curricular responsibilities. The guide to the new curriculum for Wales 2022 also discusses the importance of using a cross-curricular approach. Applying the three cross-curricular responsibilities is considered “essential for learners to participate successfully and confidently in the modern world” (Gov, 2019, p.11). These responsibilities play a key part in the new curriculum for 2022 and it is the school and the learning setting which is accountable to ensure they are included in the planning process throughout the school.

As mentioned previously, literacy, numeracy and digital competence are all cross-curricular responsibilities of the current and future curriculum. Literacy is a skill which can be applied to almost any other area of learning and experience (AoLE). The National Literacy Trust defines literacy as “the ability to read, write, speak and listen in a way that lets us communicate effectively and makes sense of the world” (NLT, 2017). This questions whether literacy should be prioritised over other cross-curricular responsibilities as they might not offer such valuable outcomes. Supplementary guidance from Estyn states; when inspectors are observing literacy, they look for “opportunities for discussion, uses probing open ended questions to improve pupils’ understanding...and when appropriate includes direct teaching of reading and writing skills” (Estyn, 2014, p.9). These are skills which teachers can incorporate into History, Science or Welsh lessons. It should be considered that by 2022, these lessons would come under, Humanities, Science and Technology, and Language Literacy and Communication as the six areas of learning and experience are introduced. This demonstrates how simple it is to build literacy into any lesson using a cross-curricular approach. For example, discussions are often carried out in History lessons and writing skills can often be practiced in Welsh lessons. Building the cross-curricular skills into lessons where they already belong is an example of good practice. A potential drawback of cross-curricular learning is that skills can often be integrated with lessons which are not a good combination. However, this is less likely to occur with literacy as most of the skills can be adapted to combine with the six areas of learning and experience

to benefit the children's learning. It is questionable if using literacy as a cross-curricular approach would be beneficial for those have English as an additional language (EAL). These children may already struggle with literacy, then combining this with other areas of learning may cause further confusion leading to lack of motivation. Didau (2014, p.16) recommends that the only way to overcome this issue is by "explicitly teaching them" which does not relate to a cross-curricular approach. Explicitly teaching literacy to children with EAL would not involve other AoLE's. Unfortunately, for children with EAL, a cross-curricular approach may not be the best option to maximise their potential. Despite Didau recommending this method, I would disagree. I believe children with EAL should receive additional support; nevertheless, literacy should still play a role in other AoLE. Children may have preferred interests in other AoLE which may encourage interest in literacy and to support their learning. This idea is supported by the Hierarchical cross-curricular learning model (Barnes, 2015). In hierarchical learning, one subject is used to support another. For example, literacy would be used as the 'superior' subject, then supported by science and technology, or music etc, this would be the 'inferior' subject. Unfortunately, "Often, little progress is made in the inferior subject" (Barnes, 2015, p.67), yet this subject would be used to promote interest for these children. For example, writing a story may appear difficult for these children. However, using digital competence to support literacy such as reviewing a new video game might make it more appealing.

In comparison numeracy and digital competence might be considered more difficult to incorporate into any type of lesson. Despite this, all the cross-curricular responsibilities are equally as valuable and should be allocated the same amount of time and effort. National Numeracy believes that "numeracy is an essential skill...the success of the UK and well-being of people individually are dependent on it" (National Numeracy, 2014). Numeracy should be regarded as important as literacy to prepare children for their future. Numeracy has the potential to promote cross-curricular learning in areas of learning such as science and technology. The what matters statement for both numeracy and science technology draft curriculum for 2022 have a strong correlation. The what matters statement for numeracy recommends that "computational fluency is essential for problem-solving and progressing" (Gov, 2019, p.6) and the science and technology statement suggests that evaluating "scientific claims help us make informed decisions that affect our world and well-being" (Gov, 2019, p.6). Overall, solving problems and making decisions come under both areas of learning, which are significant skills for children to learn. This link makes it simple to implement a cross-curricular approach between numeracy and science and technology. There are other advantages to numeracy as a cross-curricular responsibility. The Literacy and Numeracy Framework (LNF), focuses on four strands of numeracy. These are: numerical reasoning, using number skills, using measuring skills and using data skills. Not all the strands, particularly numerical reasoning, are solely based on improving mathematical skills, but how numeracy can be applied to a real-life context. Numerical reasoning allows children to understand "what processes are needed to solve a real-world problem" (Gov, 2013 p.22). Reinforcing numeracy into other areas of learning by applying a cross-curricular approach will teach children life skills by achieving the strands of numeracy promoted in the LNF. Despite the benefits of using a cross-curricular approach to incorporate numeracy into lessons, there are potential drawbacks. Teachers may become concerned that they are unable to monitor and assess children's progress to an accurate standard in more than one AoLE at the same time. This may affect their confidence to promote a cross-curricular approach and achieve the three cross-curricular responsibilities. Donaldson (2015) states that assessment approaches in Wales "are not well understood and embedded", though, "informing the next steps in teaching and learning by identifying whether children and young people are progressing as intended" (Donaldson, 2015, p.73) otherwise known as assessment for learning (AFL). This is the assessment method which he recommends for our future curriculum to allow children to improve. Assessment for learning

includes methods such as, sharing criteria, giving effective timely feedback, peer assessment and identification of difficulties. These AFL strategies can be applied to any cross-curricular lesson, which will enable teachers to monitor progress to an accurate standard.

The final cross-curricular responsibility is digital competence. The Digital Competence Framework was released in 2008 to state the skills children should be achieving from nursery through to year 11. Qualifications Wales states that the Digital Competence Framework was introduced to support teachers of all subjects and “removes the need for ICT being viewed as a ‘stand-alone subject’” (Qualifications Wales, 2018, p.49). This would promote teachers viewing digital competency as a useful cross-curricular responsibility. Confusion can often occur between the differences of digital competence and digital literacy. E-safety Support (2014, p.2) defines digital literacy as “the ability to locate, organise, understand, evaluate and create information using digital technology”. Digital literacy is the skills learnt as a result of using Digital Competence as a cross-curricular responsibility. Estyn suggest that the Digital Competence Framework was released to develop both digital literacy and numeracy skills (Estyn, 2018). Fortunately, teachers in only a minority of primary schools are have not started to offer pupils enough well-planned opportunities to practise their digital skills in meaningful contexts across the curriculum. However, a few staff still have “negative attitudes towards the preparation for releasing the DCF...and that too many initiatives have been brought in” (Estyn, 2018, p.15). To overcome this problem, a case study within the report shows how a pioneer school has implemented a Learning Triads scheme to upskill teachers in order to help them to develop the DCF across their school. They use strategies such as “teachers given freedom to choose a specific element of the DCF as a focus” (Estyn, 2018, p.50). This resulted in raising their awareness and confidence in teaching these skills. This raises the question, if teachers should always be able to select their own elements from the DCF to focus on. Despite digital competence being a cross-curricular responsibility, it is debatable whether digital literacy should be taught alone or as a key skill within other areas of the curriculum. It is important that digital literacy is not forced into areas of learning where it does not belong. When using a cross-curricular approach it is important that teachers try to avoid the ‘Bland Broth’ (Roth, 2000). This type of lesson has no specific outcome which can be a result of combining too many areas of learning. Both Barnes (2015) and Alexander (2010) recommend that to avoid this, both teachers and children need a clear understanding of the skills needed in that lesson to enable a challenging and stimulating mindset. The ‘bland broth’ theory can be applied to all the cross-curricular responsibilities; however, it is particularly important to consider it when applying the DCF. The Bland Broth can also be avoided by using short-term specific targets for the learners. Teachers might often use technology in lessons such as iPads and interactive whiteboards and claim that the children have sufficient skills because this has been used within a cross-curricular approach. When really, the children have not been taught how to use the equipment properly as this is not the main objective of the lesson. This is an example of bad practice.

Arthur, et al. (2013) proposes that a new subject called Computing should be created to replace ICT and carried out from foundation phase onwards. Within Computing there will be two main areas, Computer Science, and Information Technology. I believe it would be beneficial to use these two areas as children will be equipped with all the skills needed for a world full of technology which continues to develop. Computer Science would be used as a cross-curricular responsibility to promote digital competence across the curriculum. Information Technology would be used to support children’s well-being in technology where they would learn about online safety and cyber bullying etc. The Byron Review (2008) highlights that despite new technologies providing new opportunities, it is also a result of social problems. By educating children the consequences of these problems would help to tackle this. There are potential challenges that digital competence might face in comparison to literacy and numeracy. If schools allow children to achieve every element of

the DCF, it is difficult for them to prepare them for a world where technology continues to change. Teachers will be educating children how to be safe using equipment that is yet to be invented. Another concerning point to be addressed is the last time the DCF was updated was in 2008. This is a significant time for technology to advance without adapting the curriculum. This means that the curriculum being used may no longer be relevant. Due to the quick improvements being made in technology, it is important that the DCF is updated regularly to keep up with the modern world.

To conclude, I have considered these points to improve my teaching strategies when applying a cross-curricular approach. The ICT Steering Group discusses how digital competence “should not primary be predicted on rapidly changing technologies but should focus on pedagogy, deeper skill development, transferability and understanding” (2013, p.16). Demonstrating, rather than continuously updating the DCF to fit current technology, teachers should focus on the pedagogy and the transferrable skills to allow children to adapt to new equipment. I will focus on the skills such as creating class ideas and presenting work opposed to understanding how to change text font and how to adjust the volume settings which are settings which may have to be readdressed every time technology updates. These are all skills from the current DCF, yet, promoting creativity and confidence in presenting are transferable skills whereas adjusting volume is not. I am also going to ensure that my digital competence is advanced enough to sustain children’s learning. It is my responsibility to keep up to date with new technology as Donaldson recommends, “ All teachers and other staff should have responsibility to support the development of digital competences, and the skills and knowledge to do this” (2015, p.41). Without training and research, my skills will not be valid. Another point to consider is inclusiveness when using a cross-curricular approach. Regarding literacy as a cross-curricular approach, children with EAL and children with additional learning needs (ALN) need to be considered. Using a cross-curricular approach with a topic child already struggle with may cause further confusion. To overcome this problem, I will ensure that extra support is given to these children in the areas they may struggle in, however, the cross-curricular responsibilities will be promoted when it is beneficial for them. It is my aim to use a cross-curricular approach to benefit these children opposed to letting them fall behind. Overall, I aim to use these targets to implement the three cross-curricular responsibilities successfully.

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