

This professional and pedagogic study investigates that association between teachers and their experience to different types of learning experiences and the degree to which they reflect on teaching. This will be done through examining three pedagogical principles from Donaldson's Successful Futures Report (Donaldson, 2015) and three examples of using the pedagogic principles themselves. Through collective data and a critical reflection examples of how three pedagogic principles are implemented, this study will focus on the progression in planning and implementing the three principles within lessons. By examining multiple principles it enables categorisation of strengths and weaknesses, allowing an understanding of the relationship between teacher's engagement in reflection and in their learning experiences that vary across different types of lessons. Within this study a critical analysis will take place to evaluate a range of literature and research on the pedagogic principles and learning from academics. Through applying this knowledge and understanding practices this study will reflect on the impact that the principles have within a professional community. Additionally, a conduct of practice research on the effectiveness of specific teaching and learning techniques that support pupils will be used in order to help develop the role of the teacher. A professional teacher will see to adopt a strategic approach to improve the learning and teaching within in class, taking into account the evidence and effective practice that is available. This study will undertake research as to whether this has a significant impact on pupils learning in a classroom.

Assessment for Learning (AfL)

Assessment for Learning (AfL) has been defined by the Assessment Reform Group as a "process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there" (Group, 1999).

Therefore it's understood that in order to promote learning and ultimately achievement, assessment has to be a part of classroom activity as a fundamental in order for efficient learning to take place. However, learners need to understand the following:

- What is the aim of their lesson?
- What is the aim of their personal learning?
- How can they achieve their aim?
- Where are they in achieving their aim?
- Why do they need to achieve their aim?

Research suggests that when learners know and understand the principles regarding their aims, the clarity and quality of work progresses. Sharing information with learners will not only create a sense of responsibility between the learning and the teacher for achieving particular aims but it would also promote a sense of ownership for the learner, creating a drive in order for learner to achieve their aims. Improving a learner's confidence and self-esteem has a direct positive impact with the learners work that they produce when their motivation is improved.

Professor John Hatti as an educational researcher, investigated the impact of teaching and learning strategies on pupil attainment. Hatti assesses how to maximise achievement in schools in his book 'Visible Learning for Teachers' which suggests that there are three major feedback questions (Hatti, 2011):

- Where am I going? (*Learning intentions/aims/success criteria*)
- How am I going? (*Self-assessment and peer assessment*)
- Where to next? (*progressions/ new aims*)

Hatti implies that there is a direct link between pupil attainment and Assessment for Learning strategies. Assessment for Learning (ALF) is considered to be about informing learners of their progress so that they have been given the right information and guidance to take the necessary action to improve their own performance. Thus, teachers are needed in order to create different learning opportunities where learners and progress at their own pace and still achieve their given aims. Feedback is considered to have a positive impact on learner achievement. In recent years it has been highlighted that teachers have become more adapted to aid the less able learners, unfortunately that has been to the detriment of the more able learner. Assessment for Learning strategies have the power to provide quality feedback to the learners of all attainment if implemented in the correct way. These strategies would then provide the opportunity for more able learners to be challenged and stretch their learning to new levels of achievement. Individuality as a key to feedback has the ability to support both the weaker learners and challenge the higher attainment learners, giving everyone a chance to reach their full potential.

Figure One: An Example of differentiated work:

LITERACY Who were the people of Gower? ??			
Name	Brief Description	Time Order	
Maud de Broose	My husband William de Broose was made Lord of _____ in medieval times. Our family is originally from _____ The Normans had already built some _____ on Gower		
John Lucas	I am from a family who have been on the Gower for _____ years. I am a _____ and a smuggler in illegal goods.		
Sir Rice Mansel	I am from _____ times and am well known for rebuilding _____		
Jessie Ace	I am the daughter of the Mumbles _____. In January 1880 with my sister Margaret I saved two members of the _____ who themselves were trying to save a crashed vessel. Sadly four of the lifeboat crew died.		
Siwan Davies	I am a Penclawdd _____. I gather the _____ at low tide. -I work for _____ hours a day in the cold and wet against the tide. We keep our spirits up by singing hymns in _____		
Sweeney	I am a fierce _____ warlord. Some people think that I gave Swansea its name 'Sweeney's' which means Sweeney's Island. There were pirate raids on Gower from Vikings and they even burnt _____ to the ground in 986AD.		
Ifor Thomas	I am a _____ volunteer in World War Two. Since the gunnery emplacement was set up at the top of Mumbles Hill, I have been placed there and have helped to man the anti-aircraft _____		
Oswin Glyndwr	I was named Prince of _____ in medieval times and led my army against the English. I controlled most of Gower due to loyal support. I made sure most of the Gower _____ were destroyed.		
Betsan Jones	I am a Penclawdd Cocklewoman. I take the cockles _____ miles to _____ market. I walk barefoot with baskets on my head and at my waist. We stop at 'Yn Olchfa' (a stream) to wash our _____		

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Ifor Thomas			
Oswin Glyndwr			
Betsan Jones			
Red Lady			
William Arthur			

Figure Two: An example of a 'Bridge in the Gap Sheet' in use along with a marking grid for when source evaluation questions are being answered.



Generic Marking grid for Source Evaluation

G1 Go back and read the three sources really carefully.	G2 Answer all the questions on the sheet.	G3 Work more quickly so you finish the task in the time available.	G4 Finish the task following the success criteria carefully.	
R1 Add more details about the content of each source and how this affects reliability.	R2 Add more details about the author of each source and how this affects reliability.	R3 Add more details about the purpose of each source and how this affects reliability.	R4 Make sure that you have discussed all the areas of CAP for each source.	R5 Link the points you make to 'reliability'. (Does what you say make the source more or less reliable?)
D1 Extend your answers by adding much more detail to back up what you say.	D2 Add more details from the sources to back up what you say.	D3 Use short quotes from the sources.	D4 Add more details from your own knowledge to back up what you say.	D5 Explain all your ideas as fully as possible.
C1 Finish with a conclusion which answers the question.	C2 Rewrite your conclusion in much more detail to give your ideas about your answer to the question.	C3 In your conclusion link your thoughts to what you have said about the sources: whether you trust them or not.	C4 Remember to consider the wider historical context when reaching your conclusions about reliability.	C5 Remember to include your own research/ extra knowledge in your conclusion.
L1 Proof-read your work to check for spelling inaccuracies. Make changes in green.	L2 Proof-read your work to check your use of CAPITAL LETTERS. Make changes in green.	L3 Proof-read your work to check you have used apostrophes accurately. Make changes in green.	L4 Proof-read your work to check you have written in proper sentences. Make changes in green.	L5 Use more of the key words e.g. BENTO/ BURNHF.

 Bridging the Gap 

WWW (What Went Well): *Ardderchog!! Well done Lily this is an amazing piece of work so far Keep up the good work.*

EBI (Even Better If...)		
Targedau Target	Copiach y targedau mewn linc gwyrdd Copy your target in green ink	Cynhaeddiad y targed Target Met ✓
 D4		
 C4		
		

To meet these targets you need to:

Redraft your work	Add more detail to
Add to/complete your work	Complete target practice questions

RTF (Response to Feedback):

Monday 18th November
71 - First lesson at the Tower

Good start to the lesson to engage learners. Pupils seem very keen to learn about the topic. Clear explanation of the task and good circulation of the room. Differentiation of resources for some pupils was very useful too. Would some key words on the sheet help? eg. 'smuggler'. Some pupils will need constant encouragement to engage. Perhaps give them a target of how many people to find. They may find filling in the whole sheet too difficult. Perhaps shorten the activity as some pupils had finished the work and therefore had nothing to do. I like that you gave them the chronology task; this helped. Perhaps you could have gone through some of the characters as they packed away quite quickly before the end of the lesson.

Figure three: Feedback from teacher about a lesson where AfL was used.

In the forms of a mixed ability History class AfL is an extremely important pedagogical principle to implement in a classroom. Mainly because it provides access to differentiation. A clear example of differentiated work that was produced for a mixed ability history class is shown in Figure One. Within a class of mixed ability students it was essential to be able to provide differentiated work in order for all pupils to have the best chance at learning, regardless of their weaknesses, strengths or abilities. Differentiation is key in order to keep a full class of different learners in the 'struggle zone' where there is high challenge and effective learning with low stress (Runeckles, 2018).

Every learner needs to be kept from falling into the comfort or panic zone. However, this can only be done through teacher monitoring the learners and making adjustments to their workload when necessary, thus differentiation. Without this key skill, high achieving learners would be at risk of falling into the comfort zone without their learning ever being stretched and those who are less able would fall into the panic zone as the work would be overloading.

Moreover, planning a lessons with differentiated tasks is always a challenge as there are a number of different resources that need to be made for the lessons. Additionally in the planning of a lesson, what needs to be considered is the time that a teacher would need to explain the different tasks to the learners. This can be difficult to implement with a full class where a selection of learners are carrying out different tasks.

However, successful implementation of differentiated tasks can be achieved when a teacher is well prepared for a lesson, without bombarding students with sources and information (Runeckles, 2018). Teachers need tasks and extra resources available for those who needs them and stretch and challenge tasks available for MAT students that need further work. An example of when differentiation was used well within a class in referred to in figure 3.

Additionally AfL is also an extremely important skill for teachers as it provides learners with a chance to access and develop their aims, to see where they are going, how they are going to get there and what they needs to do next (Hatti, 2011). This is vital information that learners needs in order to make significant process with their learning and the work that they produce. For example, when a 'Bridge in the Gap' is implemented half way through a piece of written work (as seen in figure 2), students are able to see what they have done well and what they need to do next in order to improve their work. This form of feedback can be implemented easily and has a direct effect on the effectiveness of learning and work that is produced.

Overall implementing the pedagogical principle has been a challenge but one that has had continuous improvement with practise and getting to known the learners individually.

Cross-Curricular Responsibilities

Along with supporting AoLEs, there are numerous cross-curricular responsibilities that frame and unite learning across the curriculum. As Successful Futures states, there are three components for Cross-Curricular Responsibilities which are seen to be at the foundation for all learning. These are literacy, numeracy and digital competence. The cross-curricular responsibilities are designed to support learners because these skills are becoming an essential aspect of everyday life. Therefore, it's becoming increasingly important for learners to develop these skills in order to participate successfully in lessons and become confident in the modern world (Donaldson, 2015).

Literacy, numeracy and digital competency are areas that have been designed to become a part of a school curriculum across all areas of learning. They have become embedded within the Curriculum for Wales 2022, where they are responsible for supporting the learning set out within the area of experience and learning in a classroom. It is the responsibility of all schools and school settings to organise and plan progression across a full range of literacy, numeracy and digital competency in an appropriate and flexible manner developed for the needs of individual learners. To ensure that all learners are able to develop high levels of competence in these skills and have numerous opportunities to develop and apply these skills across a whole curriculum, the National Literacy and Numeracy Framework (LNF) and the Digital Competence Framework (DCF) continue to be an aspect of every school's curriculum.

Digital competency (Hicks, 2006) finds that young learners are increasingly interested in new technology, in particular communications technology such as social networking and mobile phones. It's clear that technology is increasingly becoming a massive part of society, socially and educationally. Thus in order for successful futures to be able to prepare pupils at school for the opportunities, experiences and responsibilities that present themselves in later life, they will also have to have implemented a curriculum that incorporates digital competency (Donaldson, 2015). This must be incorporated in a way that suffices with every day modern life.

Trenches were arranged in zigzags so that bombs didn't affect the whole trench.	There were front line trenches, support trenches and reserve trenches.	Soldiers spent 1 week on front line, 4 in support trenches and 8 in reserve.
Trenches were lined with sandbags to stop them from collapsing. They also had a duckboard, a fine step, and a dugout.		Soldiers didn't fight all the time. Some were on guard while others did small jobs. It was boring.

Statistics of British Empire Soldiers	
No. of soldiers who fought	8,904,467
Total Casualties	3,190,236
% of those who fought	36.8%
Killed/ Died	908,371
Wounded	2,090,212
Prisoners/ Missing	191,662

How bad were trench rats?

- How many rats were there in the trenches?
- Explain why there were so many rats in the trenches. (Give at least three reasons).
- Give two other animals whose size was compared to rats.
- How did soldiers try to deal with the problem of rats?
- What could happen to a soldier who tried to shoot a rat?
- CHALLENGE:** How could they have dealt with the rat problem more effectively??

Other interesting facts about the Trenches.

Challenge - try and find some Welsh links

What were the Trenches like?

Analyse and summarise the information about food in the trenches

Trenches were arranged in zigzags so that bombs didn't affect the whole trench	There were front line trenches, support trenches and reserve trenches	Soldiers spent 1 week on front line, 4 in support trenches and 5 in reserve
Trenches were lined with sandbags to stop them from collapsing. They also had a duckboard, a fire step, and a dugout.		Soldiers didn't fight all the time. Some were on guard while others did small jobs. It was boring.

No. of soldiers who fought	8, 904, 467
Total Casualties	3, 190, 236
% of those who fought	35.8%
Killed/ Died	908, 371
Wounded	2, 090, 212
Prisoners/ Missing	191, 662

Dear Diary,

How bad were trench rats?

- 1) How many rats were there in the trenches?
- 2) Explain why there were so many rats in the trenches. (Give at least three reasons).
- 3) Give two other animals whose size was compared to rats.
- 4) How did soldiers try to deal with the problem of rats?
- 5) What could happen to a soldier who tried to shoot a rat?
- 6) CHALLENGE: How could they have dealt with the rat problem more effectively??

Other interesting facts about the Trenches.

Challenge - try and find some Welsh links 

What
were the
Trenches
like?

 Analyse and summarise the information about food in the trenches

What was Trenchfoot?

Attacking a trench

Weapon	Advantages	Disadvantages	Cost
			£250 each
			£1,500
			£5 each
			£175 each
			£15 per canister
			£1,750

Trench Attack Report

Name of the Platoon Commander: _____

Tasks

1. Complete the table below to show what weapons you will use.

Name of weapon	What will it be used for?	Number needed	Total cost
			£
			£
			£
			£
			£
			£
			£
Total:			£

2. Label the map below to show where you will position your weapons and troops.

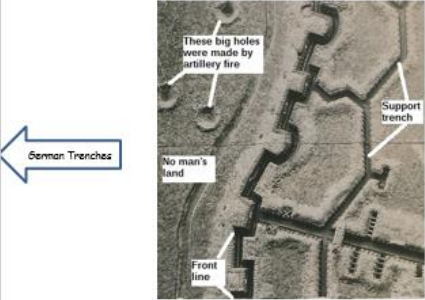


Figure five: an example of worksheets where numeracy skills are crucial in order to complete successfully.

Figure six: A lesson where students are required to plan an online interactive game in order to find out about the life and death of William Cragh.

- 4 
- 5 
- 6 
- 7 
- 8 
- 9 

10 minutes

What really happened to William Cragh?



You are going to play an interactive game to find out for yourself about the hanging of William Cragh

www.medievalswansea.ac.uk/en/game/ or google 'William Cragh'

Cross-curricular responsibilities are crucial even in a history classroom. It is essential that most lessons have at least one aspect of literacy, numeracy or digital

competency within a lesson. However, when it comes to planning a lesson it is a struggle to ensure that cross curricular responsibilities are met, particularly when referring to numerous skills. However, a main way in to include numeracy in a history lesson is to use money. When incorporating money and prices in a lesson, other numeracy skills can then be applied and placed into tasks. Figure five is an example of a World War One weapons lessons where students were given the task to find the advantages and disadvantages of weapons used in WW1. Students were then tasked to create their own platoon where they would need spend a budget of £3,700 on weapons to attack a trench in WW1. Students needed to consider how many of each weapon they wanted without going over their budget. Therefore, within lessons such as these learners able to use a range of numeracy skills in order to complete their set tasks, whilst learning about history.

Nonetheless, incorporating digital competency within lesson has not been as much as a challenge as once anticipated. Digital competency has been made achievable with the wide access to digital resources such as Chromebook, iPads and laptops. The vast amount of information available through digital resources and online makes incorporating digital competency into lessons easy for teachers and enjoyable for learners. Additionally, online there are substantial historically educational resources that can be used during history lessons. An excellent example would be in figure six, where students were able to play an interactive online game, learning about the life and death of William Cragh. This online game was able to educate learners about William Cragh and medieval life in the Gower, whilst enhancing their digital competency skills.

Overall, cross curricular responsibilities can be achieved, with some more achievable than others. However, there are certain subjects where cross curricular responsibilities are easier to incorporate, for example war. Lessons surrounding war, WW1 and WW2 have a natural element of numeracy, literacy and digital competency that can be applied during lessons. Figure Three is a lesson task sheet for a trenches during WW1 lesson. The aim of the lesson was for learners to complete every little task on their sheet within the lesson and every task used a different cross curricular skill. Within this lesson it was suitable to use a range of cross curricular skills as it was coherent with the lesson subject.

Good teaching and learning sets tasks and selects resources that build on previous knowledge and experience and engage interest.

One of Donaldson's pedagogical principles refers to teachers selecting resources that are able to build on the learners previous knowledge and experiences whilst engaging an interest within the lessons. Through the strong prominence on progression encouraged by the Review this suggests that teachers will need to select and create tasks that build on previous experiences of learners and previous knowledge that the required through prior lessons and additionally engage the interest of their learners.

Donaldson implies that this principle is important as it covers a wide range of needs for a variety of different types of learners (Donaldson, 2015). Learners attend school with different sets of aspirations, experiences and interest and so evidently will thus approach learner in different ways. An approach that tries to approach all learners will not meet the specific needs of a wide group of learners. However, teachers have to be aware that there is a danger is separating children into groups according to ability which has been a technique that has been encouraged to avoid. The Progression Steps that were suggested by the Review were proposed in order to be able to provide a context where teachers are able to select learning and teaching approaches that are able to build from step to step and are still able to provide a significant aspect of freedom in order to offer engaging experiences that match the learners needs.

Figure seven: an example of a KWL grid used during a year 9 lesson on the Moon Landing.

What I already KNOW	What I WOULD like to know	What I've LEARNT

The Moon Landing		
WHAT I already know	What I WOULD like to know	What I've LEARNT
- When all astronauts came back from the moon scientists were worried of space germs affecting the earth. - The picture looks fake because there is no stars. - The landing was watched on the television by 600 million people. - Went on the moon in 1969. - Neil Armstrong was first.	- How many people think it's fake? - How much did it cost? - What did they eat? - If you stand at the bottom would you fall off?	- You don't need wind to make the flag. - When Neil Armstrong put his foot on the moon it stuck with the moon dust. - It would cost more to fake the moon landing than actually going. - It would be hard to make because they didn't have any electronics.

Figure eight: a game of Taboo used to help learners to build on the key words that they have learnt during the previous lessons.

The moon maps produced by Wilkins were used by the Americans when they landed men on the Moon. A crater on the Moon is known as the Wilkins Crater.

Taboo!

You have a set of cards between two. One person takes the cards and gives clues to the other person. If they guess the word they get to keep the card. If they can't guess or you don't know put it at the back of the pile. We'll swap after 2 minutes.

Can you explain the key vocabulary?

Taboo!

You have a set of cards between two. One person takes the cards and gives clues to the other person. If they guess the word they get to keep the card. If they can't guess or you don't know put it at the back of the pile. We'll swap after 2 minutes.

Figure nine: a section of a lesson plan referring to when a map of Gower was used during a lesson in order for pupils to recognise and build knowledge upon.

Opening phase (with links to prior learning)	Map of the Gower on the boards with the question. What is this? Watch a video of a sky view of the Gower,	Pupils role is to recognise what the image on the board is. Then some students will be selected to point to where they live on the map. Recognise the area of the Gower and what is in the landscapes.	Map of Gower, computer, PowerPoint and projector YouTube Video, computer and projector
Teaching & Core Learning	Information cards will be given out the the students with a character from the Gower on. Each pupil will be given the task to become the character on the card they have been given. Pupils will be given a worksheet that they will need to note down a brief description about their character. Cards will then be taken away and pupils will be tasked with going around the class to speak to their fellow pupils, learning about the characters	Pupils role will be to learned the information in the cards given to them and then be able to realise the significant information about their character and share it with their fellow pupils. They will have to recognise that people lives where different from what life is like today and that people from the past had jobs or roles that are non existent in todays society.	Character cards, PowerPoint and worksheets

Selecting resources that build on previous knowledge and experience is an essential part of a history lessons. Therefore this principle is implemented during nearly every lesson, whether it be through sources, tasks, starter activity, plenary or through the main task itself.

Figure seven highlights a tasks which is carry out often over the course of history lessons, this is filling out a KWL grid. This is where a leaner fill out boxes on a task sheet labelled, 'What I already know' where they inset what they already know about the topic at hand, they then move onto the next box, 'What I want to Know?', where leaners write down what they would like to find out by the end of the lesson about the topic they are learning about, and finally at the end of the lesson they come back to their KWL grids and fill out they box 'What I have Learnt', where they write down what they have learnt throughout the lesson. This is a useful of when previous knowledge is implemented during a history lesson and how learner about taught to build on their own knowledge to investigate new information.

Moreover, Figure eight is an example of a game of Taboo which is used frequently during history lessons in order to learn them key words that regularly come about over the course of a particular topic. Figure eight is an example of when Taboo was used for learners to see what key words they already knew and were able to define and what words they needed more work on. This is an effective way for learners to understand what they already know and what they needs to find out over the course of the lesson.

Additionally. Figure nine is a section from a lesson plan that refers to a year 7 class having to recognise a map of the Gower and the landscapes that where on it. During the course of ten lessons year 7 were learning about the history of the Gower ad thus, frequently used was a map of the Gower as a starter activity. This activity would mean that learners would have to look at the map of the Gower and remember what information they learnt about the Gower from their previous lesson, essentially building up a body of information over the course of several lessons. This types of

exercise is frequently during history lesson through source based work. However, most learner found it very engaging as they would building on their own experiences.

Recommendations

In relations for further recommendations and development, it's evident that AIF can be used in numerous differently ways which should be explored and developed more within my lessons, especially with emphasis on questioning. Additionally, I believe more can be done in order to stretch the MAT students within mixed ability classes, perhaps through designing them tasks that make them practice thinking hard, for example, using diamond nines or elaborating their answers. Furthermore, with cross curricular responsibilities focus needs to be obtained in relation to numeracy within more history lessons in order to be able to enable learners to participate in a modern world. Numeracy needs to have a bigger role within a history lesson in order for learners to be able to use numeracy skills within other context other than mathematics. Finally, a selection of resources for a history lesson always continuously needs to be chosen to build on learner previous knowledge in order to learners to grow and continue to be engaged.

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