

Overview

Monday, December 16, 2019 10:54 AM

Student Name: Aaya Aldulaimi

Student Number: 1903726

Assignment Title: A portfolio which illustrate a critical reflection of progress made on planning and implementation of three pedagogical principles.

PGCE Secondary Mathematics

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Assessment for Learning

Monday, December 16, 2019 10:56 AM

“Good teaching and learning means employing assessment for learning principles”

The pedagogical principle is of the 7th principal of Donald that states that “Good teaching and learning means employing assessment for learning principles”. The study arises the question of the process of learning and for learning, which classifies both as summative and formative approach, in the summative approach the method teaches the students what they have learned, and the formative approach is used to find the weakness of students in helping them to progress further. This theory was founded by Donaldson, he maintains that merit is not just about assessment such as a written exam or an oral test but somewhat the use to which it is put. The theory has been well supported by schools and maintained that outputs regarding the improvements have shown up using this method (Suzukida, 2019). However, some schools complain that students are not happy to face challenges and show up late for classes and do not work hard.

For the pedagogical study, I have chosen few examples by using the 7th principle of Donald's theory.

1- Lesson Plan

This is a feature of the ideal which agrees to the intellectual capability of knowledge and thinking. Lesson plan is an essential part in teaching; it serves as a guide for the teachers. Lesson plan helps teachers to accomplish in time management, effort and possessions in a good way. It gives teachers an over-all idea of things that are to be taught and learned every day. Lesson planning also offers teachers many ways in keeping the teaching process interesting and not outmoded. A lesson plan is well defined simply as a teacher's comprehensive description of the course of teaching for a class (Khujavev, 2019).

Lesson plan makes the teacher more structured while teaching. Lesson plans can easily help teachers to accomplish their aims plus objectives, and the same can be said on the part of the students.

Success Criteria (clearly linked to each Learning Objective and related to the process and/or product of learning)	Assessment of Pupils' Learning Evidence (What have the learners to say/write/do/produce – to demonstrate learning)
• The students must write up: title, date, and do the starter. • Share the objectives of the lesson. • Several worked examples about finding out the nth term of many sequences.	• Ask questions on what the objectives are. • Bounce questions of understanding from one student to the other.

Teaching & Core Learning	• Worked examples about how to find out the pattern that a given sequence follow, how to find the nth term of the sequence • Exercise to do by the students about finding out the nth term of four sequences. • The teacher will go around the class for support. • The teacher will share the answers for the exercise questions. • The teacher will assess students understanding by asking generally how many questions done correctly. (AFL). • Worked examples about how to find out the pattern that a given diagram follow, how to find the nth term of the diagrams • Exercise to do by the students about finding out the nth term of 2 diagrams.	• Pupils to try a few exercise questions individually, but with help from those around if necessary. • The student should mark their answers.	Pen and notebook
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This section shows sections of lesson plan prepared by the teacher. For assessing pupils' learning bouncing questions is important strategies to follow to assess students' understanding

2- RAG System

By RAG rating system used by some school as strategy that allow the teachers to check the student's academic profile to know the performance of student in all the subjects. The system is good as it introduces the student to see how they have been rated after log in.

The RAG system is shown by the colors red, amber and green in the subdivisions as a traffic light system. This strategies used at the end of each lesson as plenary. The students are not only assessing their understanding by choosing one of the colour system, they have to do one question that related to each colour. This can help the teacher when she/he will mark the students' bookes. The images below shows how is RAG system used during delivering the lesson.

Plenary

G What is the area of shaded region?

A What is the radius of the tyre if it has an area of 188cm^2 ? Round the answer to the nearest whole number

R What is the area of road sign of radius 20cm ?





Have you met the learning aim?

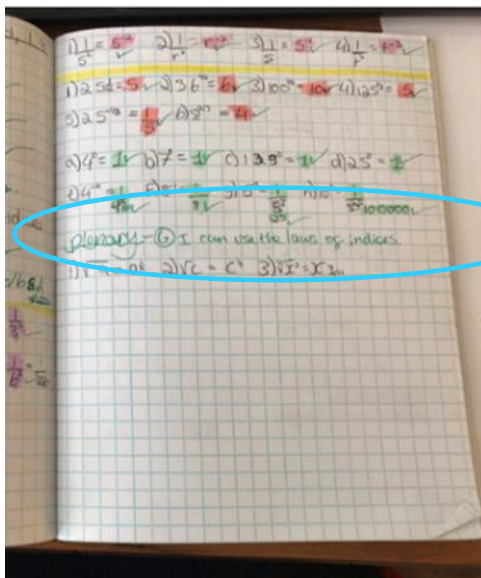
Go back and traffic light the lesson aim

R I have not met the aim

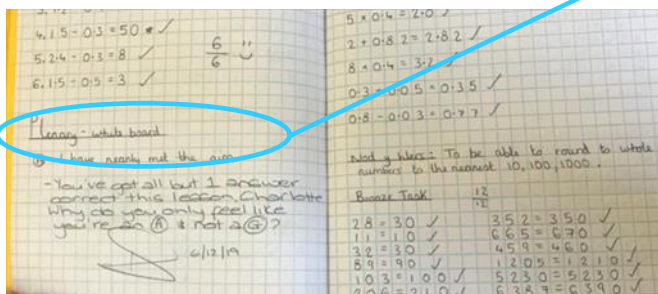
A I have nearly met the aim

G I have met the aim

Here are some examples showed students' use of RAG system.



This is two evidence from student book showed the use of RAG for plenary accompanied with question. This encourage students to assess their level of understanding of the lesson



3- Low Stake Quiz

Memory can be stated as the learning that has been persisted over time, to remember a fact our brains have to get through a process of encoding an information from the source it has learned, from our short term memories to our long term memories. Low stake quiz is used as an effective activity in the starting of the lesson to assess the students performance that has been taught in the class. It is named as low stakes because the score does not matter, it is the tracking process that matters (Top, 2018). I have used few diagrams as examples. (Norton,2018).

Gwaith dosbarth
Starter - Low stakes quiz

Dydd Mawrth 10 Rhagfyr 2019

Low stakes quiz (Thursday 10th December)

Topic list

- 1) Standard form
- 2) Indices
- 3) Area of 2D shapes
- 4) Area of compound shapes

"You have the right to an education"

The LSQ starts with set up one page at the back of the book. The topics then will be shared with the students.

Question 1

Put the following number into standard form:

3,500,000

Question 2

Write this number out in full:

6.981×10^3

Question 10

Find the area of the compound shape below:



10 questions then will be given to the students with various time limits.

Year 8

Quiz SOLUTIONS
(peer assess)

Peer assessment then happened after the students swap book with the peer next to them.

Question 1

Put the following number into standard form:

3,500,000

Answer: 3.5×10^6

Question 10

Find the area of the compound shape below:



Answer:

$A = 2 \times 7$
 $= 14 \text{ cm}^2$
 $B = \frac{1}{2} \times 2 \times 3$
 $= 3 \text{ cm}^2$
 Total area = $14 + 3$
 $= 17 \text{ cm}^2$

Answers will be shared for peers assessment

Self assessment

I got $\frac{\square}{10}$.

I can:

1. *(Find 2 things you did well)*
- 2.

My target moving forward:

*Give yourself 1 target from a question you got incorrect.
If you got everything correct, your target can be to "keep up this high level of work"*

Q1 - Q3 Standard form
Q4 - Q6 Indices
Q7 - Q8 Area of 2D shapes
Q9 - Q10 Area of compound shapes

Self assessment will come up last. The students will be able to set out targets for their own personal learning from the questions they did incorrectly.

If children are to ever build the capability to study through their lifetime, they need to be capable to see and identify their own development and additional learning wants. BY increasing the services of self-assessment and to arrange and act on the times that are learned. Self-assessment is hence an essential technique of serving youngsters to be interested in the learning process. By understanding and presenting in a clear manner, children can identify the parts of effort that are not seen simply by someone who is observing externally. Children can introduce evidence of how they perform in relation to the picture given (Sergeeva, 2018).

Cross Curricular Responsibilities

Monday, December 16, 2019 10:57 AM

“Good teaching and learning regularly reinforces Cross-Curriculum Responsibilities, including literacy, numeracy and digital competence, and provides opportunities to practice them”

Pedagogy is more than just teaching in the classroom. Teaching is represented by choosing and selecting those methods for the purpose of development in children. It combines both practical and theoretical skills. To fully engage in the learning process, children need inspiring surroundings from wherever they can discover and experiment with their thoughts and possessions, cooperate actively with their children of the same age group and make lively influences with a clarity in purpose constructing meaning (Björklund, 2018).

Good teaching in the perspective of the syllabus applications will strengthen and spread the application of broader services and be able to ascertain doings and policies that can promote problematic solving, serious and imaginative discerning and make sure that these processes can be checked and measured in terms of positive learning outcomes. There are some beginners who may need extra support, few examples, more training and so on, but it is essential that, anywhere possible, teachers take the accountability for their own learning and set themselves determined aims. The spirit of initial learning dishonesties in dealings between children and teachers (Khujaev, 2019). Such connections should be considered by elasticity in method and receptiveness to evolving needs.

For this principle I used three different examples showing the cross-curriculum responsibilities including literacy, numeracy, and digital competence within the Mathematics Department and school in general. The key stage 3 and 4 is termed as three years of schooling in England and Wales.

1- Functional projects for key stage 3:

Functional Skills: World Statistics
Ystadegau Byd



How could we compare different countries?
What things could you look at?

How could we compare different countries?
What things could you look at?

Language
Life expectancy
Population
Religion



present data on world statistics

How will we get there?

- Choose 5 countries to compare.
- Choose 3 pieces of data to compare from these 5 countries.
- Copy the information for each of the 3 pieces of data into a table to be included in the poster.
- Display the 3 pieces of data using different graphs.
- Create a poster.

Task: Comparing countries

Your teacher will be assessing you on 4 numeracy skills:

BDNR1 - Transfer mathematical skills across the curriculum in a variety of contexts and everyday situations

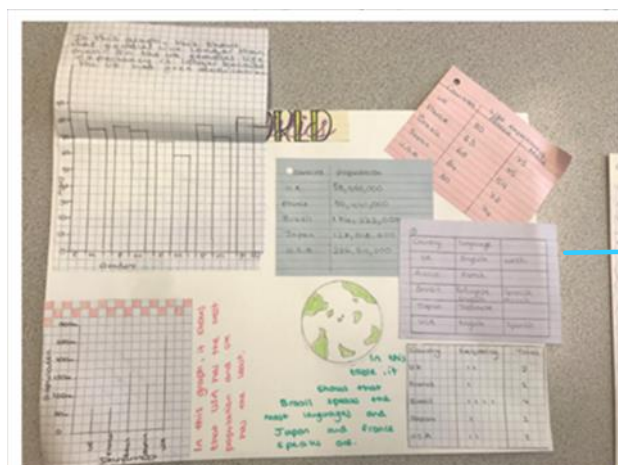
BDNR6 - Identify, measure or obtain required information to complete the task

BUDS2 - Construct a wide range of graphs and diagrams to represent discrete and continuous data

BUDS5 - Interpret diagrams and graphs to compare sets of data

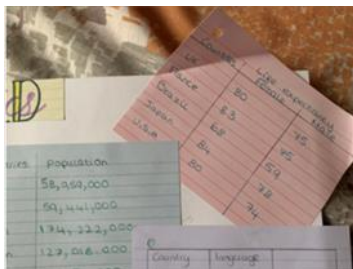
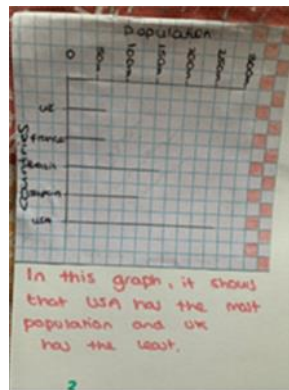
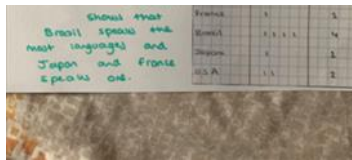
This is a year 8 functional project where students were asked to create a poster about the world statistics. The poster will be about compare different countries of their choice, they will need to collect 3 different data to compare, for example population, hair colours, age etc. The project includes:

- 1- Collecting the 3 different data.
- 2- Copy the information for each of the 3 pieces of data into a table to be included in the final poster.
- 3- Display the data using different graph.
- 4- Create a poster.



These are strong evidences for reinforce literacy, numeracy, and digital competence responsibilities within Mathematics subject. The students used the literacy to explain the chosen data and for conclusion. While the numeracy and Maths skills used where the data are collected and tabulated into table and plotted into graphs. The digital competence used to search for each country data as well as some groups used computers' programs to tabulate the data and to plot the graphs.





Task: The average year 7 pupil

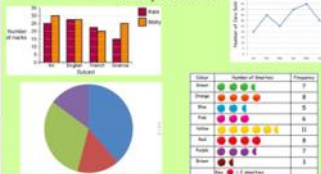
What data could you collect from pupils in your class?

- Favourite sport
- Favourite colour
- Favourite school subject
- Number of pets
- Number of siblings
- Height
- Shoe size
- Hand span
- Arm span



Task: The average year 7 pupil

Now that you have collected your data, you need to decide how you are going to represent it. What sort of graphs do we already know about?



The Average Year 7 Pupil

Mod y wers: To be able to use my data skills to collect and present data collected from year 7 pupils.

- How will we get there?
- Collect discrete/continuous data
 - Display data using an array of graphs
 - Calculate averages from a set of data to compare pupils

Mode

Mean

Averages

Median

Range

Task: The average year 7 pupil

Your teacher will be assessing you on 5 numeracy skills:

7DNR1 - Transfer mathematical skills across the curriculum in a variety of contexts and everyday situations

7DNR6 - Identify, measure or obtain required information to complete the task

7UDS1 - Collect own data for a survey, e.g. through designing a questionnaire

7UDS2 - Construct frequency tables for sets of data, grouped where appropriate, in equal class intervals

7UDS3 - Construct a wide range of graphs and diagrams to represent the data and reflect the importance of scale

Task: The average year 7 pupil

Your teacher will be assessing you on 3 literacy skills:

Reading (2.2.3)
Identify different interpretations of facts and information and evaluate their relative merits

Writing (3.1.4)
Make imaginative choices about content and presentation of writing, using ICT with discrimination

Writing (3.2.1.2)
Use a wide range of technical terms, language and expression consistent with the subject content

Year 7 Literacy task

We are now going to complete an extended piece of writing where you explain how you completed this task. You can present your findings however you wish. Laptops are available!

- You should explain yourself thoroughly, step-by-step, so that someone who was absent could easily understand what you did.
- What did you do first? How did you split the work between you?
- What data did you collect? How did you collect the data?
- How did you decide a way of representing your data? Why did you pick this method?
- How did you analyse your data?
- If you did this task again, how could you improve it? What would you do differently next time?
- What did you think of the task? Enjoy? Hate it? Why?

Finally, you will need to display your data tables, graphs and averages on a poster.

You will be given a piece of A3 paper by your teacher and it is up to you how you decorate it

This is a year 7 project where students asked to create a poster about the average. The poster will be about finding out the average of 3 different data from pupils' in the class. They will need to collect 3 different data to find out the average, for example favourite colour, shoes size, number of siblings etc.

The project includes:

1- Collecting the 3 different data.

2- Copy the information for each of the 3 pieces of data into a table to be included in the final poster.

3- Display the data using different graph and tables.

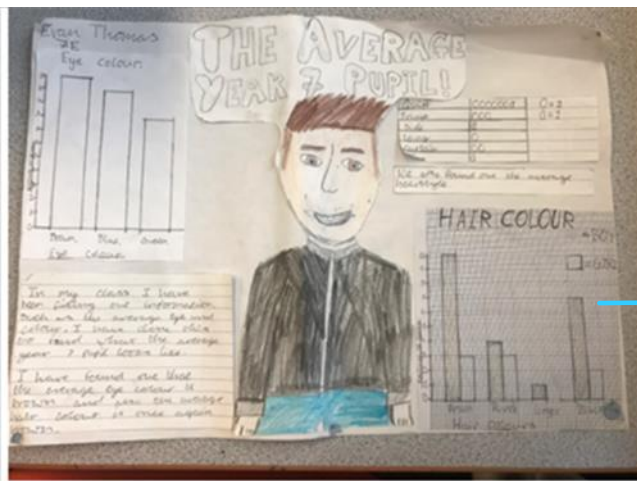
4- They can choose from different type of average measures. (Mode, Mean, Median, and Range).

4- Create A3 poster.

The teacher will be assessing students' work on 3 literacy skills:

1- Reading: Identify different interpretations of fact and information and evaluate their relative merits.

2- Writing: Make imaginative choices about the content and presentation writing using ICT with discrimination



The project outcomes have clear indication for reinforce literacy, numeracy, and digital competence responsibilities within Mathematics subject.

The students used the literacy to deliver the presentation for the chosen data, writing the reason of their choices and for conclusion. While the numeracy and Maths skills used where the data are collected and tabulated into table and plotted into graphs. The digital competence used to present the presentation as well as some groups used computers' programs to tabulate the data and to plot the graphs.

Studying numbers and numerical capability is "Cross-curriculum Responsibilities" for all instructors and parents that are interested in working with children and young people. The syllabus structure needs to make sure that children and young people progress in high stages of competency in these features and have numerous chances to develop, lengthen the time and use them through the syllabus. As maintained by Zvarych (2018), the study anticipated that how each member completes a sample group with their tasks, during the study such question were answered like

1. What changed during the pre-task, the Mega-day responsibilities, and the post-tasks?
2. Did the students work differently in the tutorial room to the way they worked during the Mega-day? Can you account for this?
3. Did you find any differences in the way the students of different abilities responded to the tasks?

The outcome was that the students cooperated in an effective manner and there was constant improvement, particularly among students that remained isolated and remained quiet (Danovich, 2018).

Good teaching and learning sets tasks and select resources

Monday, December 16, 2019 10:58 AM

“Good teaching and learning sets tasks and select resources that build on previous knowledge and experience and engage interest”

For this principle, three main examples will be explained with evidence about sets tasks and select resources that build on previous knowledge and experience and engage interest.

1- The plenary system allows the teacher to evaluate the whole class's results at once (Ní Chróinín, 2018). They are scheduled into a lesson where suitable to digest, learning and this is not necessary to be at the end. They are differentiated to the needs of your class. The plenary usually used to assess students' understanding. The following example showed GCSE questions given to year 8 students to test their understanding of the lesson topic.



The image shows a screenshot of a digital task sheet titled "Plenary". It contains two questions, (a) and (b), each with a horizontal line for the answer and a mark value of [1].

Plenary

11. (a) Write down 7168.8 correct to 3 significant figures.

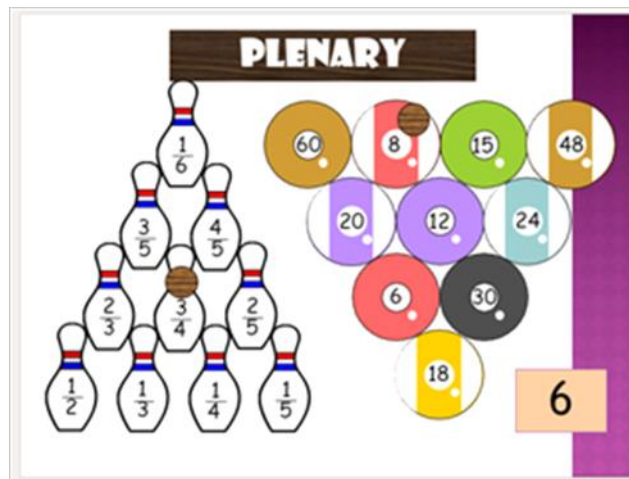
_____ [1]

(b) Write down 0.04136 correct to 2 significant figures.

_____ [1]

Everything has a connection to math, and math is connected to everything, as jumping, walking, and even climbing the stairs. For instance, these are the practical ways to demonstrate counting. In recognizing how to draw and play with shapes, children not only learn geometry, but they might be experimenting with logic, even though logic might look like the most abstract, but it is the least likely field of mathematics for kids to learn, children have shown an impressive ability to think innovatively. By encouraging the child to think in a mathematical way rather than just compelling him/her to solve a problem, such activities are an excellent way to build a creative activity. By helping children in solving their own way, we help them to enhance their skills with more formal mathematics that they learn (Heidegge, 2018).

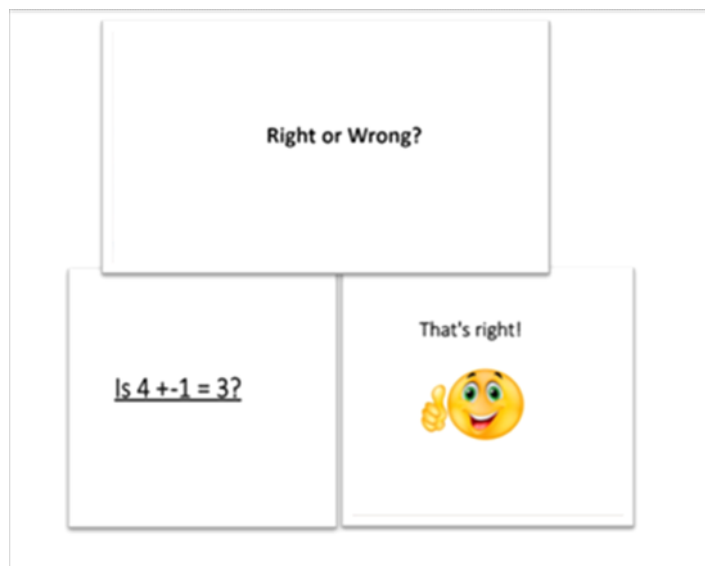
Here are some examples of Mathematics activities used as plenary to encourage child for engagement and make maths an interesting subject rather than dealing with numeracy and solving problem questions.



Bowling activity used in delivering a fraction lesson



Bingo activity used to improve the skill of math times tables



Right or Wrong? Used with delivering negative numbers lesson

2- The self assessment or the RAG system helps students to evaluate themselves and rate them in their future academic career, the demonstration is shown in the diagram below

Plenary – Have you met the learning aim?

Nod y wers: To be able to round to a given number of significant figures

G	I can round to a given number of significant figures
A	I can round whole/decimals to a given number of significant figures but struggle with ...
R	I need more work on rounding to a given number of significant figures.

3- Differentiation in the classroom is considered as one of the main important skill that any teacher must have. It can give the learner the best opportunity to learn, regardless of their abilities as well as it helps in creating the best learning experience. In Mathematics specifically, differentiation can be by using scaffolding in the lessons, such as hand out calculators, timetable grids, providing worksheets with different types of questions or task with progress in difficulty etc. Here is example showed differentiation in using questions for starter. The teacher can ask the students about how many boxes they can manage to solve. Differentiation can help in improving interests of the underachiever and build a report with the learners in need of help.

Starter – Expanding Brackets **Dydd Llun, 18 Tachwedd 2019**

 Red	 Amber	 Green
1. $5(t + 2)$	1. $2(8b + 2)$	1. $2(8b + 2)$
2. $6(k + 1)$	2. $3(2j + 4)$	2. $3(2j + 4)$
3. $8(r - 20)$	3. $7(2a - 2)$	3. $7a(2a - 2)$
4. $-3(u - 2)$	4. $-3n(2n - 8 + 6b)$	4. $-3b(2n - 8 + 6b)$
5. $7(12 - z)$	5. $2(8h + p - n)$	5. $2p(8h + p - n)$
	6. $y^3(1 - y)$	6. $2y(3z - 4t + g)$
		7. $2tz(3t + 4)$
		8. $4t^2(t + 1)$

The reason behind the pedagogical principles makes it clear to guide and stimulate students, faculty and managerial staff who are included in planning, implementing or valuing teaching and knowledge based activities (Hedges, 2018). Good teaching depends on learning activities that includes in instructional approach more than the theoretical method such as active participation to learning, constructive method, students meetings; teaching to many learning styles, and variety of calculations. Students learn math's by the experiences that teachers give to the students in the class. Tutors must know and understand totally the math's they are teaching and comprehend to be committed to their pupils as learners of math's and as human beings (Haslip, 2018).

In my opinion, students that are engaged in deep learning and active participation in the class by such practical activities in the class room are not passively taking the information from the instructors, but they are interested and have shown progress in reading, writing, and solving problems. Following this process it is also essential to follow a proper way of communication, that refers to the activities that are used to emphasise and develop skills in their context. To make every student an active player in the process of learning, a study environment must be created where opportunities for students must be offered. Such type of learning like class activities in the class and outside the class are

essential for promoting students to use language in a good way and develop their thinking skills (Tamakloe, 2018).

Critical Reflection

Monday, December 16, 2019 11:03 AM

Pedagogy is a method and practice of teaching. It includes the teaching style and theories. The pedagogy is the technique of how the teacher delivers the content to the class by using different techniques (Brownell and Tanner, 2012). There is a different perspective of the pedagogies in the teaching system. When a teacher plans a lesson, he or she goes through the different teaching techniques according to their experience and the context they teach. Choosing the appropriate pedagogy depends upon the audience that it is for. It differs in terms of age and academic disciplines. An assessment is not only meant to ensure student learning, but it also helps in learning the student. Assessments used to enhance the learning capabilities of students. In this pedagogy, the mentor learns how to prepare the curriculum, instruction, and learning making assessment a more natural and useful part of teaching. These learning techniques used to create a better understanding of learners. It settles the process of learning by setting achievable goals and objectives. The pedagogy has three main essentials of planning, teaching, and assessment. The most important is planning. If the pedagogy planned right then, it will be implemented right. And the results will be according to the expectation. The pedagogical model lies in, to begin with, the end in mind. The Three pedagogical approaches to be used in this study are:

1. Good teaching and learning mean setting an assessment for learning principles.
2. Good teaching and learning reinforce Cross-Curriculum Responsibilities, including literacy, numeracy, and digital competence.
3. Good teaching and learning set tasks and resources that build on previous knowledge and experience and engage interest.

The system of learning in humans is constantly under research and tight scrutiny. Many studies have concluded that human learning begins with the interaction of ideas. To obtain the optimal level of human potential, the exchange of information and experience in a productive and propitious environment is essential.

In terms of effective teaching and learning, constructivism is the approach that of a big idea in the education system, which implies the methods of how teachers teach and learn to teach are enormous. Its effectiveness judged when the results evaluated by observing the reforms in the children's performance. Constructivism learning is a model for learning. It is a concept of psychology that explains how people might acquire education and learn. This model has a direct application to education. The important aspect of knowledge is that teachers cannot transmit it to the minds of the students. The students need to construct the pattern to the knowledge provided to them. Constructing their mental perception is the quality of the student. They continuously update the information with time to reflect the new information. Constructivism compels the student to reinvent the knowledge wheel. It is a technique in which the student forced to brainstorm new ideas and produce something new out of it other than rote memorisation (Bada and Olusegun, 2015).

In my opinion, teachers preparedness is an essential part of teaching the students. The teachers enter this field without preparedness which has created chaos in today's education curriculum (Bayar, 2014). The effective professional developments should include activities that match the teacher's of today needs, a match upon today's school needs, teachers involved in developing and making professional

innovation elements, participation opportunities, long-run engagement, and good quality instructors.

Although the sharing of poor ideas also leads to trigger a surrounding of understanding, thereby, developing new situations. This design emphasises the special curricular activities and involves paying attention to the long term plans that intend to the outcomes of their curriculum

Some studies suggest that cross curriculum is best suitable for the medium term and short term. It also focuses on the appropriate selection of principles of pedagogy planning model according to their circumstances and their children. Planning the learning for students is the manifestation of teachers about what he hopes children will learn and achieve by the end of the session. All the teachers collaborate to plan the pedagogy to enhance the maximum learning skills and capabilities of the children. In this way, they will conclude the skills and expertise in different subjects. According to Volk et al., (2017), Planning and developing the ideas through critical thinking and consultation, which acts as a guide for the lessons for children. The approach should be flexible because that will allow the unexpected or any change in the interest of the children to be fixated. Cross-curriculum is effective only when the teachers are capable enough to form a link between different subjects. It can be built by the teachers who have a proper understanding of the class and have advanced teaching skills in classroom processes.

When these skills backed by creativity and innovation, it creates a better plan and enthuses the professionalism of teachers and the learning of the pupils. Teachers learning in a more supportive environment have a greater potential than those teachers working in a non-supportive environment (Stronge, 2018).

Donaldson's pedagogical principles state that good teaching and learning means employing an assessment for learning principles. This pedagogy raises a question about the difference between the assessment for learning and assessment of learning — the first step used to identify the weaknesses in the students and find appropriate next steps to overcome. And the second step is summed up meaning giving an evaluated result of what the students have learned. The scholar emphasises that the distinction is not in theory but the use of it. Hence, the assessment can be used in both perspectives, formed and summed up. The student's assessment is done by giving priority to the formed learning processes. The government emphasises on anything related to assessment. It wants it to be about the precarious audit. That is how the government is involved in assessment for learning (AFL). It means that assessments from AFL went from being formed to be summed up. But in an assessment evaluation at Wales, the conclusion drawn showed that the precarious uses of assessment might result in distortion rather than in improvement in productivity. The pressure of precarious and undesirable efforts minimised. According to Donaldson, the explicit assessment criteria have compromised the reliability and have serious adverse effects on the curriculum.

Schools know better about what will appropriately work for their environment — teachers' appetites for the new teaching and learning methods for improvements in productivity. The differentiation point is when the teachers know how to execute change. The effectiveness reflects in how you do the job, not what you know about the job.

The purpose of this study was to clear the professional practices of execution and to record the information that the schools take to manage the change. The course of interaction is what supports in making the teachers acting upon the true by evidence decisions drawing upon the recommendation in the model (William, 2016). In my prespective, successful planning happens in stages, and its effect remains for a longer time. There is no single event that can happen in the planning of a day and be successful. Execution of plans is better described in the stages with activities relating

to exploring, preparing for, delivering and sustaining the change.

The phases of exploration and prepare describe the overall feature of the implementation guidance before actually implementing the new program in the practice. (*Foundations for implementation - implementation climate | School's Guide to Implementation online course* 2019). Creating the content and having sufficient time to implement is very difficult. These theories are hard to tackle in the practicality. In implementing the change teachers play an important role in making the education system better through high-quality execution of the plan. The teachers actively support in planning the change, arranging the resources, delivering the quality and monitoring the refinement of the implementation process. During the planning phase, it is important to take into consideration that the climate is inductive to change. Implementation of the change is easier when the staff is flexible and trusting.

Even though when they make changes, the staff should be able to learn and cope with the mistakes as they will all be backed by good resources, training and cheering to keep trying and improving.

Good teaching and learning regularly reinforce Cross-Curriculum Responsibilities, including literacy, numeracy, and digital competence, and provides opportunities to practice them.

Many competencies are practiced in the world confidently and successfully to learn. When we look into the numeracy and literacy. Priorities have already been set for literacy within the Welsh curriculum through the National Literacy and Numeracy Framework (LNF). Digital competencies are very important and basic to learn. It has the same status as in literacy and numeracy. Literacy, numeracy, and digital competence are the core cross-curriculum responsibilities of all the teachers and also for people who work for children and young people. These curriculum structures are there to make sure that the children develop a high level of competencies to have future opportunities to develop, extend and apply across the curriculum. According to *Cross-Curriculum Responsibilities (CCRs) – Portfield School* (2019),

Competencies in literature spoken words, spelling and arrangement of words are essential; to learn the cross-curriculum but not because of the importance of language. The development of these qualities lies in the sound understanding of the essential components supported by developmentally appropriate teaching and learning and rich context with which they can be reinforced extended and applied but not in the repetition of enough time during the school. One of the scholars has remarked that we are creating chaos by giving the students nothing to write. Young people need an equal chance to think and write about things that have their skills at an appropriate level.

The mathematic and data analysing skills are widely employed over the curriculum and competency in numeracy is necessary for work. Children need equal and recurring opportunities to keep in practice with the numeracy to learn in-depth their understanding of numbers as with literacy, to fortify their skills and use in different circumstances. The students and teachers better know the understanding of how to take these opportunities and consolidate learning appropriately.

According to me, in today's world, digital capability plays a very essential role in networking, communicating, entertainment and leisure in addition an increasing range of transactions and educational applications. The use of technological skills creatively is a common feature in the modern workplace.

Lastly, good learning sets the tasks and resources that build knowledge and experience. Good teaching always leads to better performance and improved achievements of the children using the outcomes that will help them achieve success

in the future. It's said that the student's achievements are the yardstick by which the teachers' quality is assessed. The progress of the students says about the trustworthiness and effective teaching of the teachers. There are further six features of teaching, i.e.

The content knowledge following the pedagogy which has strong evidence of impact on student's outcome, quality of instruction followed by strong evidence of impact on student's outcome, classroom climate followed by moderate evidence of impact on student's outcome, classroom management following the moderate impact on the student's outcome, teacher's belief followed by some evidence of impact on student's outcome and professional behaviors followed by some impact on the student outcome. There are different approaches to teachers' assessment. First one is the moderate signaling effectiveness:

- Classroom observation by principal, external evaluators and peers
- Value-added models
- Student ratings
- Three other approaches have limited evidence:
- Principal
- Teachers
- Analysis of classroom artifacts and teacher portfolios.

In conclusion, a constructivism approach is an approach in which the learner has an individual impact and he tries to create a perception in his mind to improve his creativity and performance. It is one of the big ideas in the education sector. It implies that how teachers teach and how the learners construct that information. If the focus of the institute is to reform education for all students, then the trainer should focus on the students. Today student-centered learning is the most important contribution of constructivism. These principles are highly in conflict with the traditional methods of teachings. Teachers need to reflect upon their practices to apply these ideas to their work. In constructivism, the teachers always encourage the students to evaluate themselves that what are they gaining out of these practices.

This practice gives the students an ever-broadening tool to the environment which encourages the learners to learn more. The drawback is that the teachers have lost the trust of their students and having scarce time resources has limited the implementation of od creativity in education. The World still needs good teachers who not only have good knowledge and teaching techniques but are sincere to their work with courage and compassion. The task of framing the curriculum in terms of big ideas and broad competencies will not have an intended effect on increasing the depth of learning if the assessment requires memorisation of multiple facts.

As a recommendation, The critical reflection of the learners is dependant upon their knowledge and they should show that their reflections are effective as by discussing and conversing that knowledge with their peers and teachers, so that will be easier for the leaders to evaluate the establishments of the students with new horizons. Before this critical reflection. Every student thinks that it is their doing. However, the students after the training had reflected that they have transformed due to the learnings provided to them by their teachers. They have just reported to the teachers. There is power in reflective thinking; it is resulting in the transformed minds of the students after w evaluated them. The reflective analysis is a transformation of the classroom environment and the curricular activities in the education system. It is not enough to have all the knowledge about what is happening in the surroundings of the class. Rather it is imperative to have all the 'whys' and 'whats' answered as well. These understandings are developed by continuous practice and by reflective thinking.

From the study above, I have learned that constructivism is the way of influencing the learners to be more productive and persistent in that learning. A reflection

becomes critical when two distinctive purposes follow it, one is to understand how consideration of power distorts so many educational processes and interactions. The other purpose is to question and brainstorm the practice that seems to make our lives much easier, which eventually ends up working against our long term interest those are hegemonic. To help the teachers need to have a friendly conversation with the students to know the mind of the students. A student speaks up his mind when he is in a friendly zone. Give the students the confidence to speak up about their strengths and weaknesses so that they can polish their strengths more and overcome their weaknesses I order to improve the personal performance which has a direct impact on the environment.

Reference

Monday, December 16, 2019

11:03 AM

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