

LEVEL 6 ASSESSMENT SPECIFICATION

Student name:	Amy Franklin	Student ID number:	1800666
Programme:	Secondary PGCE		
Module:	Principles of Teaching, Learning and Pedagogy in the Secondary Sector		
Module code:	ECSP6001	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Alison S Evans	Internal Verifier:	
Assignment Title:	Part B, (i) and (ii)	Word count (or equivalent):	(i) = 1,500 (ii) = 2,000
Submission deadline:	26 November 2018	Return date of provisional marks & written feedback:	17 December 2018
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.		

Introduction

The scheme of work I proposed covered 5 lessons, intended to be taught to a year 9 set 2 mathematics class (with set 2 being those learners predicted B-C grades at GCSE). My allocated topic, fractions was split between 5 lessons to ensure each prerequisite is adequately covered prior to more complex ideas being introduced. The lesson taught was the 3rd of this scheme of 5, the objective of the lesson was for learners to be able to solve problems using the addition and subtraction of fractions. Preceding lessons covering fraction skills required to meet this objective as well as covering the syllabus requirements for a higher pathway mathematics set. I used literature to inform and support my scheme of work and lesson plans as well as support the reasoning behind my use of certain approaches within the 30-minute micro-lesson I taught.

Supporting Literature

The learning principles that underpin my scheme of work, lesson plan, teaching session and resources for my microteach were chosen due to their reliability and focused nature of the literature.

The learning theories I used to support and inform my micro-teach drew key elements from multiple prominent academic resources and avenues of learning development study. My use of the cognitive constructivism throughout both the taught aspects of my lesson and the subsequent work sheet are evident as it informed my use of multiple examples for learners to attempt following the teaching of an aspect of the topic. This not only worked to provide AFL (assessment for learning) through both questioning and self-assessment when answers are subsequently given (Welsh Assembly Government (2010)) to ensure learners had understood a principle of the fractional methods shown before progressing but also as a form of practise. More specifically to practice the application of mathematical methods to a given type of questions, in and out of contextual settings. As this was used as a repeated exercise (with multiple examples of one type given as well as multiple types of question examined in this way), the cognitive constructivist theories behind it allowed for better individual learner growth and development in a monitored and adapted way. (Ó Siochrú (2018)) (Powell, Kalina (2009)(A)). In addition to cognitive constructivism, I made sure to incorporate the most effective and beneficial aspects of social constructivism. This informed my lesson as I would refer to the zone of proximal development (ZPD) (Vygotsky (1962)) this meant that example or independent work, though more difficult than any work done before on the same topic, were still attainable once additional scaffolding was put in place as well as being in relatable and referenceable contexts for learners. This theory also leads to my greater inclusion of social development during my teaching through the use of discussion and peer support as well as teacher led support or scaffolding as this allowed more learner driven development while also insuring the ZPD was being catered to in addition to the social development of the learners. (Powell, Kalina (2009)(A)). The behaviourist learning theory informed the scheme of work and lesson planning as I made a conscious effort to use the praise of learners to effectively manage behaviour. I used the praise of learners as it is an easier way to manage to behaviour of a

class with which I am unfamiliar while also allowing focus to firmly remain on the academic content of the lesson. The positive reinforcement also allows me as a teacher to support the good behaviour and good practise seen within the classroom this allows expectations to be emphasised for the class as well as providing peer role models for learners. (Ó Siochrú (2018))

While planning the scheme of work and micro-teach session within that wider scheme, I focused on the relational understanding approach as discussed by Skemp (1976). I steered away from the “rules without reason” methods of instrumental understanding as it can limit the application of knowledge as learners struggle to apply rote learnt methods to a new presentation of a topic in a question, without the explicit declaration of terms. To move away from this type of teaching I turned my focus on to a more driven lesson formula with larger focus on building on prior knowledge and providing concrete examples for mathematical processes where possible. The use of the relational understanding methods in my teaching plan and lesson meant that I tried to draw key ideas from the learners themselves where possible however this has its limitations as certain rules are too complicated to provide the background understanding for. In these situations, an instrumental understanding or what is sometimes referred to as a more “traditional” approach is required to develop a learner’s understanding at an attainable level.

The scheme of work for the five lesson course on fractions and the specific lesson that was planned for my micro-teach session (the 3rd of the aforementioned scheme) were primarily developed for a year 9 set 2 class however even with this high ability class I had to ensure the inclusion protocols outlined by the Welsh Government were in place, (or at least planned for, in regards to those lessons on the scheme of work that were not explicitly planned in full). To ensure that all lessons would be accessible to all types of learners with individual and specific learning needs I consulted the “Inclusion and Pupil Support” guidance document released by the Welsh Assembly Government (2016). This ensured that the “United Nations Convention on the Rights of the Child” is adhered to with strict confidence within the Welsh educational landscape and allowing pupil safety and academic support to be at the forefront of teaching practise.

When planning my scheme of work, I worked to include bilingual aspects to my teaching through the use of the Welsh language during my teaching through the inclusion of the date in Welsh and the Nod y Wers in place of lesson objective. This helps to further develop the Welsh language skills of the learners and allow the Welsh language to be better represented across the curriculum. (Welsh Assembly Government (B) 2014-2015) (Donaldson (2015))

As I planned my lesson I ensured I followed the National Curriculum for Wales (C)(2016) which dictates that at Year 9 (the third year of Key Stage 4):

“Learners are able to:

- Use equivalence of fractions, decimals, percentages and ratio to select the most appropriate for a calculation
- Use, interpret and calculate with different representations of fractions, e.g. mixed numbers and improper fractions”

With a focus solely on the fraction requirements of the curriculum as this was the topic I was assigned, and my focus was on the year 9 requirements of the curriculum as this is the age range and academic level which I chose to focus my micro-teaching session and preparation on. This gave me clear expectations which my scheme of work and lesson must fill to prepare the learners for the following years of study as well as national attainment tests.

Evaluation

In regard to the learner's academic progress during the lesson pupils were directly involved as they were asked to engage with discussion and were invited to give examples or fractions with the same and different denominators as well as the definitions of these terms. The evidence of interest and involvement by learners is that examples were volunteered and questions I posed were answered with little additional scaffolding. Following my Practical Teaching Experience 1 I would change the way in which I went about my exposition as I would ensure key facts were kept more concise and ensured my examples though remaining "concrete" ((Kolb and Kolb(2005)Figure 1) were simpler and did not distract learners from the mathematics. As I feel that some of the examples, I used during my micro-teach became convoluted and confusing due to the context I used.

While teaching my lesson pupils stayed on task well, with little disruption to exposition and examples. While some isolated cases of attention of the learners slipping were seen, with direct engagement from myself, attention was easily and attentively regained. If I was to repeat the micro-teach, I would ensure I knew the names of all learners to allow me to use names to help keep learners on task and to improve the effectiveness of in-class behaviour management.

Pupils understood expectations required in the classroom as they showed a manner both respectful and reasonable for the tasks and instructions given. This is how I expected pupils to perform in general although I was surprised at the lack of additional more "off topic" interjections and that the class were quite quiet even during allowed discussion time, although this allowed a more fluid lesson to take place. It also stemmed the discussion and led to more prompting from myself at times. However, if I were to repeat the micro-teach lesson, I would outline these expectations clearly to pupils at the top of the lesson (or works scheme) so expectations within the classroom are known to all, with consistency across all lessons in the scheme of work and therefore more easily upheld by pupils. The greater the clarity I can give to the learners the more effective the behaviour management techniques I use will be, as learners are aware of the expectations in the classroom.

During my micro-teach I did not give any explicit explanations of why each task was done however I did give a clear lesson objective that remained on the board (and would be written in pupil work books at the beginning of the lesson) which helped to prevent any confusion as to the aims of the session. The tasks set during the lesson were completed by learners however those done during the micro-teach were primarily discussion based due to time constraints. However, during a full lesson, time considerations would need to be given to the written tasks I have planned for this lesson. This should fit well with both the capabilities of the pupils and pace of working within the classroom as well as any ALN (additional learning needs) of pupils within a class.

The learners were able to access the lesson appropriately and in line with my own expectations as any misconceptions were minor and easily dealt with through the tasks planned and additional explanations by myself or elaboration of ideas by other learners.

Learners responded to challenge well, ensuring to question any problems they encountered. Although this showed a confident dynamic between myself and the class, in the future I would like to ensure a (3B4Me) three before me policy in the classroom (Ask one's partner, ask another class member then ask the class teacher) as this would free up more time for myself to circulate and help other pupils during time of high traffic questioning. During my micro-teach session my white-board management was poor. As issues were raised by pupils, a "star" was placed next to a particular question as a way to draw attention to it for completion by pupils. In future to alleviate this problem I would use PowerPoint slides to ensure clear representation of questions with a timer given on the slide to allow learners to see the time it should take to complete the question.

Regarding my own teaching during the micro-teach session I kept pupils motivated with the use of praise which I feel allowed me to encourage the active learning of the group as well as gain a better understanding of the misconceptions in the classroom. However, following further teaching

experience this could be done more effectively. Both my motivation of pupils and keeping their attention, by reducing the time I spent with my back to the class while writing on the whiteboard, this will be done in future using PowerPoint slides to aid and expedite diagrams and longer question types. The momentum of my lessons can also be improved by breaking down my lesson objectives in to smaller objectives which can be highlighted within the “chunks” of my lesson as a “to do” list of what has achieved by completing set tasks this will also allow all pupils to feel successful in their learning during these lessons.

The resources I used contributed heavily to the success of my micro-teach session, however with improvements to these resources the learning during the lesson would be maximised.

As with the fraction table I referred to during my micro-teach session, a laminated and wall mounted version of the fraction table would have been a more effective format for the resource and allow a better access to the resource for learners. My use of the dry-wipe whiteboard, though effective, proved a disadvantage. This choice of resource also meant I was more reliant on written notes to prompt me which meant I had to keep going back to read them drawing my attention away from the class. Following the use of more effective techniques during my teaching experience, if I was to repeat the micro-teach session, I would use the interactive and dry-wipe whiteboards in conjunction with one-another as this would allow additional exposition while also helping to structure the lesson and provide more accurate and timely diagrams and questioning. My use of only the dry-wipe whiteboard during the micro-teach led to paper prompts being required, however they were poorly organised when translated on to the whiteboard due to both the haste with which it was done and my own poor knowledge of the classroom layout before the lesson, this led to messy and poorly structured whiteboard presentation and a rather “manic” nature to my teaching as I attempted to work between two whiteboards at the same time. My teaching experience has shown that in future to better deliver the lesson I had planned for micro-teach session the use of Power-Point slides would help eliminate issues regarding both the presentation and organisation of the lesson and individual task resources, this would in turn led to a greater clarity to my teaching and therefore the understanding by pupils as it would give a more organised structure to resources.

The “chunking” method I used to section off my lesson meant that the larger topic of addition and subtraction of fractions was broken down in to smaller learning steps that were then tested informally to ensure understanding before proceeding which was the basis of my AFL (assessment for learning) during the lesson. This helped to structure my lesson and a clear time management system to take place across the lessons elements, I would also develop this technique further by incorporating the key features of 3-act maths (Dan Meyer (2011)). As a greater narrative thread would help improve conceptual bases of questioning and develop a greater consistency within the lesson.

During my micro-teach session I did not outline the content in depth at the beginning though it was outlined in brief and then each chunk was individually outlined to give more clarity on the movement of the lesson. However, I feel giving a more detailed outline at the beginning of the lesson when the lesson objective is first introduced would be beneficial in future as it would give a similar result and save time throughout the lesson, the use of broken down class objectives would aid in this as they give a clear path of progression that the lesson will follow.

My use of non-verbal praise and encouragement stems from my observation of the room I used this both as a form of encouragement and as a form of praise, this allowed little disruption to my lessons as I could continue to speak while also praising work done by pupils. Following my own teaching practice I find this is more effective in classrooms where pupils are silent and working independently as it causes less disruption, it was less effective in my micro-teach as learners had been encouraged to work together this lends itself better to public praise as this would also help keep other learners on track as I highlight good practise which can be followed as an example.

During both my micro-teach and in to my teaching practise I have ensured my use of names for questioning and praise and discipline have been strong as in both cases this is the most effective way of keeping individual learners on task as well as highlighting those meeting or falling short of the expectations of the classroom. However, due to the time spent with my back to the class in the micro-teach due to my choice of resources, my use of names, for both praise and behaviour management

were poor as I was less observant within the classroom hence less able to call upon those who would have benefited from great interactions with myself.

Regarding the monitoring of progress and assessment for learning that took place within the classroom I was satisfied that the three short questions following exposition allowed me to better understand and deal with misconceptions and monitor the attainment of the learners through direct and indirect questions to the class. However, in future this would be more effectively developed and implemented had I used mini white boards during individual questions. This is more effective for in class progress monitoring as it can give me a clearer picture of those understanding the task and those requiring additional scaffolding and support in following tasks.

My micro-teach saw appropriate challenge and extension of pupils' thinking through further questioning such as asking a pupil to explain how they came to a certain conclusion or answer, I also looked to do that by then bouncing the question around the room if when directly asked a learner was unable to answer a question fully, I then asked another member of the class to develop and build on that answer. I feel this helped not only problem solving and communication skills within my lesson but also developed a more "relational" learning environment, however the use of this technique can result in individual learners not being able to fully develop their own understanding as the question is "bounced" away, this can lead to weaker pupils being unable to access higher tier work as their thinking has not been properly and fully developed in the lessons.

The misconceptions encountered came regarding the addition of fractions with the same denominator as some went to add the two denominator values also, this could have been dealt with more effectively by myself as although I attempted to re-affirm the need for them to remain the same, a further example and simpler explanation through a led example would have been a more effective and long-term answer to this. The lack of clear instruction given during the micro-teach session by myself regarding the simplification of fractions within the lesson caused misconceptions of when and how to simplify, a clearer lesson outline would allow me to state this and ensure it was understood by all before progressing, an improvement and more developed AFL protocol would also ensure understanding of the initial material was attained by all learners before these basic ideas were developed further.

In personal feedback I was told I "You have a clear presence at the front of the class. Good clear tone." Which allows me to more certainly assess, the use of my voice and tone within the classroom were effective. Following my teaching practise this could be more greatly developed as my tone is used to more effectively portray the action and whether it meets the expectations of the class room, this differing in tone will also allow my classroom and behaviour management techniques to improve as it more openly shows my own reactions to the behaviours of the classroom but also the expectations I have of learners. However, the use of more closed than open questions as I tried to remain in complete control of the lesson's direction meant there was less effective teaching and more misconceptions, I would use a better lesson structure with slides and simple example to prevent such a need for control in the future and hence allow more open questions.

Following a question to the learners I didn't always use their own contributions in regard to the more open questions I posed. In future I need to use the examples brought forward by pupils as this will help their developing understanding of the topic as well as make them feel included in the lesson and hence more engaged with the learning process as a whole this would better develop the understanding of the topic both in and out of context.

The pacing of my lesson was appropriate as I was able to complete the tasks in the time available however I fear my lesson was too fast pace in regards to the speed with which the exposition was given particularly if I was to repeat the lesson in a scheme of work for a class of lower ability as they may need more time to process the exposition, following my teaching practise I would ensure time was allocated to pupils to allow them to full develop their responses to questioning.

The use of my 1-2-3 plenary helped to summarise the key ideas and help pupils to consolidate their learning through reflection question to the pupils to complete, I feel this was effective and well done

by the learners however more time should have been dedicated to it, to allow a true and more comprehensive reflection to be seen, with discussion to follow.

Following my teaching practise though effective this type of plenary proves more beneficial to myself as the teacher, as it allows me to see misconceptions and development within my lesson however for the learners it is less effective as they are not challenged in the plenary to meet the lesson objective or to develop what they have learnt. In future I would use a differentiated set of questions to be completed by learners at the end of the lesson.

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ACTION PLAN - Objectives and programme for Term 1

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Subject: Mathematics

Date 24/11/18

OBJECTIVES (relate to QTS Standards where appropriate).	ACTIONS TO BE TAKEN	SUCCESS CRITERIA	TARGET DATE
To improve the use of resources during my exposition S2.6 Using information and communications technology (ICT) S3.1.3 Using Resources S3.3.10 Using ICT	(i) Develop digital resources for use in the classroom, with special attention to PowerPoint or other "slide" based presentations. (ii) Effectively and competently use digital resources to support and motivate learning. (iii) Observe teachers with effective practices. (iv) Ensure all resources meet the required specifications for specific needs within the classroom by liaising with class teachers and support staff. (v) Plan resources to enhance and develop teaching without detracting from core mathematics.	• To use PowerPoint slides alongside conventional dry-wipe whiteboards. • Competent and content appropriate use of ICT and digital resources in the lesson • Resources met the needs of all learners • Digital resources added to teaching. learning experience.	February 2018 (END OF PTE 1)

To improve engagement in and response to whole class questioning of pupils in lessons S1.3 Inspiring Learners S3.3.1 High expectations S3.3.3 Delivering effective lessons	(i) Observe effective teaching practices and methods of questioning within the context of mathematics (ii) To set clear expectations and routines for questioning on a whole class basis (iii) Demonstrate the enthusiasm and professionalism (in tone and presentation) to engage learners (iv) To establish a purposeful learning environment that makes learners feel secure and confident (v) To use interactive teaching methods (vi) Promote active learning by learners	• Questioning methods are effective and used appropriately • Routines were set and followed with expectations understood by all • Manner and tone were appropriate and consistent through out the lesson with Standards met • Learning environment was appropriate for learners • Teaching methods used enhanced the teaching and learning within the lesson	February 2018 (END OF PTE 1)
To Improve and more effectively manage behaviour in the classroom S1.2 Consideration for learners and mutual respect S2.7 Promoting good behaviour S3.3.9 Managing behaviour S3.3.14 Equal Opportunities	(i) Improve relationships between members of the class and class teacher themselves from mutual respect and trust (ii) Demonstrate professionalism (iii) Setting high expectation of behaviour within the classroom (iv) Following through with behaviour management policy of the classroom (against the expectations) and the school as a whole (v) Be consistent in behaviour management	• Expectations were clearly outlined and met with consistent management when expectations were not met • Professional manner and tone through out the lesson • Consequences of actions not meeting expectations were dealt with appropriately. • Effective use of praise	February 2018 (END OF PTE 1)

	(vi) Ensure an equal academic environment for all (vii) Praise the positive work practices and behaviours seen within the classroom (viii) Observe effective management methods used by other teaching staff (ix) Develop additional knowledge of behaviour management technique through literature and research		
To better outline and enforce expectation in the classroom S3.1.1 Setting objectives S3.3.1 High expectations	(i) Outline expectations for behaviour as pupils enter the room or before a task is set (ii) Re-enforce expectations through the use of praise and sanctions (iii) Set academic expectations against objectives of the lesson (iv) Set behaviour expectations against school policy	• Expectations outlined clearly • Effective use of praise and sanctions where appropriate • Academic expectations in line with academic attainment of the class	February 2018 (END OF PTE 1)
To improve and effectively use AFL (assessment for learning) throughout lessons S3.2.1 Assessment strategies S3.2.2 Assessment to support learning	(i) Use a range of assessment methods through out lessons (ii) Develop class specific assessment types that best suit attainment of the class (iii) Effectively manage and monitor AFL		February 2018 (END OF PTE 1)

	techniques used (iv) Observe effective AFL methods used by other teaching staff (v) Develop additional knowledge of AFL technique through literature and research		
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