

Please note!

See attached some examples of work for the ECAD4003/C assignment. Remember that these are parts of assignments and are not perfect examples. The intention is to offer you further guidance.

The examples should not be copied verbatim on any account. Doing so will appear as a plagiarism within Turnitin and you could fail the assessment as a result.

Example of introduction:

Teacher subject knowledge has long been a topic of debate and currently, within Wales, there are clear governmental guidelines on the entry requirement for trainee teachers that relate to both language and mathematics (_____, _____). This suggests that the minimum grade requirement at GCSE level for core subjects such as English and mathematics, is seen as a means of ensuring a certain degree of subject knowledge in these areas within the workforce. _____ (_____) argues that it is essential for each teacher to be competent and confident in the subject that they are teaching. This view is echoed in the work of _____, _____ and _____ (_____) who state that the teachers' knowledge and understanding of subjects underpin effective teaching. Additionally, teacher subject knowledge is becoming increasingly important due to the national drive to promote and improve pupils' numeracy and literacy skills (_____, _____). Others in the education community, such as _____ (_____) argue that having excellent subject knowledge is of little benefit if you are unable to impart that knowledge effectively to your pupils and, in this case, improved teaching skills would be of greater benefit. However, _____, _____ and _____ (1993) describe the equal importance of teachers' subject content knowledge and subject pedagogical knowledge.

Within this assignment there will be an opportunity to discuss both the subject and pedagogical knowledge of teachers by critically reflecting on a series of language and mathematics lessons observed and taught during a recent Professional Teaching Experience (PTE) at a large primary school based in south Wales. The experiences took place in a year one class, with thirty-one pupils aged five and six. The class theme during the experience was 'Community Explorers'. Within the Mathematical Development Area of Learning the skill being developed was subtraction. DCELLS (2015, p.33) state that pupils in year one should be able to '*understand and use the mathematical symbols for addition, subtraction and equals*'. Within the Language, Literacy and Communication Area of Learning the focus skill was developing pupils' reading and writing using phonics. DCELLS (2015, p.19) state that pupils in year one should be able to '*recognise and use an increasing number of phonemes*

and their corresponding graphemes when blending and segmenting words up to two syllables'.

Example of language discussion:

Within the subject of language, when asking children to describe a picture of a character using nouns, adverbs, adjectives and verbs, I initially introduced the activity with a whole class discussion where the children were asked to explain the definition of these words before giving examples. Some discussion took place between the children and myself and they were encouraged to use their example words in a sentence. They moved on to describing a picture of a character from a story as a class, offering appropriate words and defining whether they were adjectives and so on. This used a social constructivist approach and, by guiding the children with directed questions and linking to previously learned material, elements of scaffolding were introduced for the children. This strategy supports Vygotsky's approach and helps the children to see how their individual learning is related to the group learning (_____, 2014, p.78). The scaffolding (_____, _____) continued throughout the activity as each group had their own differentiated sheets to work from with greater scaffolding for the lower ability than the higher ability. The word levels expected of the children increased throughout the abilities and adjective word mats were provided to prompt ideas.

Although I used a social constructivist approach in my introduction and through my scaffolding of the activity, there were also elements of constructivism in my teaching. The main activities of describing a picture of a character and later innovating the story of the Three Little Pigs were differentiated and targeted to the children's levels based on a stage of learning and development previously assessed by the class teacher. I had planned an activity I believed to be appropriate to the children's assumed developmental level rather than accelerating their learning as recommended by Piaget (_____, 2014,p.43) and consequently, the outcome of the activity varied for the children, with some finding it quite challenging despite it being targeted at their expected level. This result made it clear to me that although children were grouped by ability, that ability was still very varied and needed to be considered more carefully when planning activities, their resources and the support needed by specific children to enable them to succeed.

Using these two different learning approaches, I had hoped the children would be able to express themselves and clarify their understanding of the language to be used before applying it practically. While this proved less challenging for some children than others, it enabled me to not only observe but also interact with the children and assess their learning throughout. This gave me the opportunity to try to plan more effectively for subsequent activities based on my new knowledge of the children's abilities and their response to the different approaches I had used.

The subject knowledge that was required for this activity was challenging for me. Knowing the definition and meaning of adverbs, adjectives, verbs and nouns as well as how to describe, identify and use them appropriately needed a lot of research and revision for myself as this was an area that I lacked confidence in. I used crib notes, that contained the definitions of the terms and some example words, to prompt myself throughout the activity and practiced identifying the different words through a text marking activity at home in preparation. The children had completed a text marking activity themselves in a previous class teacher led lesson and this had highlighted quite clearly to me my lack of skills in this area, giving me something to focus on to improve.

Example of mathematics discussion:

The skill being developed within the Mathematical Development Area of Learning was subtraction, with a focus on understanding subtraction and having the ability to identify and use its mathematical symbol. The teacher introduced subtraction using a number line, identifying a number, and modelling to the pupils how to subtract one from that number. Modelling is seen as an instructional strategy used by a practitioner to demonstrate an activity, and students learn from observing the practitioner (____ and _____, 2001). _____ (2007) would agree with this approach as he states that it is essential for practitioners to model mathematics to pupils as it allows them to understand how to solve problems in a specific way. The teacher used the 'count-back' method, using a number line, to visually show pupils how to subtract. She began by subtracting small numbers, such as one, then progressed to subtracting larger numbers, such as 5. After modelling several subtractions, she questioned pupils, asking them to show the class how to subtract using a number line and the count-back method. _____ (2015) describes how oral and written questioning is designed to test pupils' understanding and informs the practitioner of the next steps to

continue their learning. This means that the teacher would receive direct feedback from the pupils and would then have the information to gauge whether the pupils had understood how to use the count-back method. When the practitioner introduced the mathematical symbol for subtraction she encouraged pupils to create the symbol using hand gestures. The pupils had previously learned hand gestures for other mathematical symbols, such as addition and equals. This enabled the class to build on their previous knowledge and make connections between mathematical language and written symbols, whilst also linking this to their concrete experiences of using the number line when subtracting. As a result the teacher could be seen utilising all four aspects of the Connections Model (_____, _____), enabling the pupils to make connections between the different aspects of the model and deepening their mathematical understanding. The mathematical concept of simple subtraction did not require advanced teacher subject knowledge in mathematics, however the pedagogical choices seen within the lesson highlighted the teacher's awareness of the need to transform her understanding of the subject to the pupils in a variety of ways (_____, _____).

Jerome Bruner (_____, _____) believed that learners build their knowledge from information they are currently learning and information they knew prior to learning the latest information. This learning theory closely links with the practitioner's decision to build upon pupil's knowledge of number using their prior knowledge. _____ (2013) writes in her online article that using hand gestures as a learning aid in mathematics has been seen to improve pupils' learning ability. This idea links to the constructivism learning theory. _____ (2018) states that in a constructivist classroom the learning should be an active process and that the pupils are involved with the learning. This suggests that when pupils have a more active role within the learning process, such as performing hand gestures when reading number sentences, they have a greater ability to learn.