

Cynllun Gweithgaredd <i>Activity Plan</i>		
Gweithgaredd: Activity: This activity will be a role play game of shop. The game of shop will teach children simple addition and subtraction while engaging in a fun activity.		
Nifer o blant: <i>Number of children:</i> 4	Oed y plant: <i>Age of children:</i> 5-6	Nifer o oedolion: <i>Number of adults:</i> 2
Lleoliad: <i>Location:</i> Inside	Amser paratoi: <i>Preparation time:</i> 15 minutes	Amser gweithgaredd: <i>Activity time:</i> 40 minutes
Adnoddau: Resources: - Fruits such as apples, bananas, oranges, packs of raisins, bottles of water and small cartons of milk. - Play money which includes coins and notes. - Laminated cards with different prices labelled for different items. - Plastic box to keep money/change in for cashier.		
Amcan/ion y weithgaredd: Aim/s of activity: The aim of the activity is to enable children to understand simple addition and subtraction through role playing 'shop'. Each child will get to practice giving the correct amount of money to the 'cashier' and the 'cashier' will be able to count the correct change needed to be given. Playing shop allows the		

children to gain a mathematical understanding while having fun, this sparks their intelligence without them realising.

Cysylltiadau â deilliannau:

Links to outcomes:

- Develops creative skills,
- Mathematical skills,
- Personal and social skills
- Knowledge and Understanding of the world
- Develop communication skills.

Gwahaniaethu:

Differentiation:

In order for the children the children to feel intellectually challenged, at the beginning of the activity the practitioner will place the toy money out in random order and the children must put in order which they think has the most value to least value. This will show the children that although notes and coins can look the same, they all have different values. Then the children will get asked if they know how to add up the value of £1, £5 and £10 from change set in front of them, for example, two 50p, a £2 coin and three £1 coins or six 50p. Then with both notes and coins the child will be asked how they can make £10. As the activity progresses the practitioner can ask questions like 'What would happen if you wanted two more bananas' these types of open-ended questions will allow the child to think quickly, keeping them engaged.

Iechyd a diogelwch:

Health and safety: It is important that the children participating in the activity are always supervised and are not left alone at any time. It is also important to ensure that they do not put the toy money near their mouths to avoid a choking hazard. It

is also important to note that a choking hazard may arise if the children wish to eat the fruits or drink the liquids provided.

Rôl yr oedolyn/oedolion:

Role of adult/adults: The first responsibility the practitioner has will be to plan the activity accordingly and tailor it to each group of children that will participate. After the activity has been set up the role of the adult in the activity is to encourage the children to develop their mathematical skills. Allowing the child to engage in the role play will advance their numerical skills of adding and subtracting. It is also important that the practitioner encourages free play as much as possible to ensure the children feel like they are participating in play not a lesson. The adult will also have to ask the children questions such as 'How much would two oranges and a banana cost?'. Questions like these make the children think quickly and keeps their attention. The adult also must be aware that some children may not want to take part in the activity and that must be respected. Observing the child carefully is also a key role for the adult as this is when you can notice where a child is struggling mathematically.

Y weithgaredd:

The activity: Before the activity takes place, each child will be shown how to make £1 with ten 10 pence coins. They will then do some simple addition and subtraction examples with the practitioner to demonstrate how giving and receiving the correct change is executed. As the activity is executed it will be important that the practitioner keeps reminding the children of their number bonds from 10-100, for example, 10 and 90 or 60 and 40. This will remind them that there are 10 lots of 10 pence pieces in a £1 coin.

The activity in which the children will partake in will be a role play of 'shop'. Each child will have the chance of being both cashier and shopper. Before the activity

begins there will be a variety of fruits, milk and water placed out on a table with laminated cards in front of them saying the prices of each item. Each child who is playing the shopper will have different amounts of toy money which they will then use to 'purchase' the items.

The children playing the shopper will be able to count the money they have been given and be able to see which items in the 'shop' they could 'purchase', for example, if one child has £4.50, they will have to calculate how many items they can buy with that amount. If the total comes to £3.20 the child who is playing cashier will then have to calculate the amount of change needed by doing some simple subtraction from £4.50 to £3.20. If the child struggles counting backwards in 10's the practitioner is there to help and encourage the child.

After evaluating the activity plan it has been found that there are many strengths, weaknesses, opportunities and threats. Some strengths to the activity plan include that the activity can be revisited in the future as a free play activity, this activity also has links to the Foundation phase framework Curriculum for wales. This activity develops creative skills, mathematical skills, personal and social skills, knowledge and understanding of the world and it also develops the children's communication skills (Welsh Government, 2015). Developing a child's creative skills is essential to

widening their imagination. In this activity the children will use their imagination to get into the roles of 'shop keeper' and 'customer' which is a fun and creative way of using their imagination to understand areas of maths. When focusing on a child's mathematical development children should be given the opportunity to develop their skills in a range of scenarios. In this activity children will be asked to give correct forms of money, receive change and count correct change. Children will also be asked to communicate with one another using mathematical language. For example, children will communicate by telling each other how much money they have, the person who is 'shop keeper' will then say the total and will give change if needed, with the help of an adult if asked. This activity focuses on the child's personal and social development. Each child will have to communicate with one another in order to assist them in the activity. Being in smaller groups for the activity will allow the child to learn about themselves and how well they work with each other. This allows children to gain an insight to other children's views, beliefs and understand that every child is culturally different. Groupwork encourages children to become confident in their surroundings and gain independence. This activity allows children to experience the world using toy money and the activity role play of shop. The use of money lets children experience how the real world works. Using smaller groups for this activity will allow the children to communicate with one another, thus improving their communication and literacy skills. While this activity plan has strengths, there are also weaknesses which can be seen. The use of toy money stops the children from having the 'real world' experience which is discussed in the Welsh Government curriculum for Wales (2015). Another weakness is that some children are not as mathematically developed as others. During the foundation phase children should be able to count reliably to 10 and 20, interpret and compose numbers up to at least 10 and understand that the number 0 means 'nothing' (Welsh Government, 2015). Another weakness to the activity plan is that some children could struggle with the numbers. Children of this age should be able to demonstrate their understanding of bonding of 10 such as 7 and 3 nothing' (Welsh Government, 2015), however, it is important to note that each child has different abilities. There is an opportunity to allow children to use real money during this activity when repeated in future in order to link real world. Another opportunity for this activity would be to take a group of children outdoors and allow them to choose things from outside, such as rocks,

pebbles and leaves, bring them inside and use that in the activity instead of fruits. The Foundation Phase Framework, Welsh Government (2015) states that it is important for children to familiarize themselves with everyday materials, develop awareness of natural and man-made objects and children will gain an understanding that materials can change in certain circumstances, such as being snapped, bent or stretched. As previously stated, there is opportunity to leave this activity in place for free play in the future. Montessori's theory is heavily influenced on free play, Montessori believed that a teacher is only there to assist a child during the beginning of an activity which leaves them free to execute the play in whatever way they would like (Larson, H, 2013). Some threats that may arise during this activity might be that children can get confused when dealing with decimal numbers, for example £4.50. To overcome this the practitioner can adjust the prices and keep to whole numbers, enforcing the number bonds 1-100. Another threat to this activity is that there might not be enough resources for each child. This can be resolved by taking the child outside and allowing them to pick an item from outdoors to participate in the activity, Children might disagree during this activity over who plays shop keeper and who plays customer. This can be resolved by enforcing to the children that each child gets a turn at playing both. Slight disagreements during these types of activities develop a child's emotional development, allowing the child to experience feelings such as frustration (Shafer, L, 2018).

There are many strengths which can be identified from the resources in this activity. The fruits having different textures and tastes will be important for the children and their development. Taste is important for children for them differentiate between their likes and dislikes (ScienceDaily, 2005). Using different varieties of fruits in this activity promotes healthy eating habits, for a growing child it is important to obtain a balanced and healthy diet, having healthy eating habits are important when partaking in activities as these foods provide children with the sufficient energy levels that they need for inside the classroom (British Nutrition Foundation, 2018). Another strength to the resources is that the use of fake money allows children to understand that different coins and notes have different values. It is important that children are taught to count their change. This simple practice is a useful skill not only to teach children

basic mathematical number bonding but also to teach them skills for understanding the real world (Family Education, 2019), thus linking back to the Welsh Government Foundation Phase Framework (2015). A weakness to using real fruits is that some children may want to play around, creating a mess from squishing or squeezing fruits. Another weakness that can be seen from the resources is the use of toy money. The use of toy money limits the link to the real world which is emphasized in the Welsh Government Foundation Phase Framework (2015), limiting the children's real-world experience (Welsh Government, 2015). An opportunity to improve on the resources would be allowing children to use real money. Real money allows children to explore and experiment with gaining an understanding of the world. It also allows children to see everyday objects and how they are used (Welsh Government, 2015). There is also an opportunity for children to bring their own fruits when returning to this as free play. Children bringing in something they like will allow them to feel more engaged in the activity and this will motivate children to cooperate for longer periods of time (Lowry, L, 2016). At the age group selected for this activity, children should be able to identify what a word means with assistance of a visual representation (Welsh Government, 2015). A threat to the use of laminated cards could be that children with learning difficulties for example, dyslexia, might not be able to understand what is written on the cards. Another threat that might arise from the resources is that children may have allergies to certain fruits. As the practitioner it is important to communicate prior to the activity with the children's parents or guardians via letters or email, explaining what the activity will contain and to state whether their child has allergies and if so, what they are. Another threat that might arise when obtaining the resources might be that if the school is in a low poverty area gathering sufficient resources may be a challenge. It has been noticed in studies that there are less resources in poor areas whereas the number of resources sufficiently increased in more affluent areas (Ellaway. A, et al, 2008). Living in a poorer area could also mean that the children's attendance rates are lower, therefore less participation in the activities.

The role of the adult will be simple during this activity. After the activity has been set up the practitioner will observe the children and encourage that the children partake in free play. Allowing the child to engage in the role play will advance their numerical

skills of simple addition and subtraction. Montessori stated that 'Play is children's work' meaning as the adult it is important to fit in accordingly to the role and step back allowing the children to have free reign, while being close enough to intervene if a problem arises. Observing the child carefully is also a key role for the adult as this is when you can notice where a child is struggling mathematically, if this occurs the role of the adult here is to encourage the child and support them. Some strengths to the role of the adult are that they are there to support and prompt a child if they struggle with certain questions. The adult is also there to encourage children to play freely and choose an inspiring play environment. It is the adult's responsibility to ensure that the children feel included. Another strength of the adult is that although it is important to make their presence known by the children, it is useful that the practitioner takes a step back and allows the children to partake freely (Sensory Surroundings, 2020). A weakness to the role of the adult is that the practitioner could make the activity too difficult for the children to understand. It is important to note that at this age children should be able to count 1-100 and know their number bonds (Welsh Government, 2015). Another weakness is that the adult may not differentiate enough or ask enough open-ended questions to allow the children to think critically about their answers. It is important that the practitioner tries to avoid this and asks the children as many questions as possible. There are many opportunities to ask children open-ended questions, some questions could include 'Have you got enough money to get three apples?' or 'What would happen if you wanted two more bananas? Do you have enough?' The adult will also have to ask the children questions such as 'How much would two oranges and a banana cost?'. Using leading questions like these make the children think quickly and keeps their attention on the practitioner. There is opportunity for the adult to leave children to their devices and play freely however be there to prompt a child if they appear to be struggling. Threats that may arise to the adult during the activity could be that the adult could overpower the activity and take charge of it, leaving the activity to feel more like a maths lesson not like play. The adult also must be aware that some children may not want to take part in the activity and that must be respected. Another threat that could arise is that children have better bonds with certain teachers to others, this could affect the activity and how much they are willing to participate. Ensuring that the children and practitioner have a good relationship allows the student to develop more

socially and academically during these types of activities. A positive relationship also increases the level of engagement a child shows during this practitioners' sessions (Rimm-Kaufman, S., Sandilos, L., 2010).

Reference List

British Nutrition Foundation. (2018) *Food Provisions*. Available at: <https://www.nutrition.org.uk/foodinschools/foodprovision/food-provision>. (Accessed 8 February 2021)

Ellaway, A, Macdonald, L, Macintyre, S. (2008) 'Do poorer people have poorer access to local resources and facilities?' *Social Science and Medicine*. 67(6), pp 900-914. DOI: <https://dx.doi.org/10.1016%2Fj.socscimed.2008.05.029>

Family Education. (2019) *Teaching Basic Money Concepts to Children*. Available at: <https://www.familyeducation.com/life/money-kids/teaching-basic-money-concepts-children> (Accessed 9 February 2021)

Larson, H. (2013) *The Five Characteristics of Play- And of Montessori Work* [Blog] 26 September. Available at: <https://www.mariamontessori.com/2013/09/26/the-five-characteristics-of-play-and-of-montessori-work/> (Accessed 5 February 2021)

Lowry, L. (2016) *What Makes your Child "Tick"?* Available at: <http://www.hanen.org/helpful-info/articles/what-makes-your-child-tick-.aspx> (Accessed 9 February 2021)

Rimm-Kaufman, S, Sandilos, L, (2010) *Improving Students Relationships with Teachers to Provide Essential Supports for Learning*. Available at: <https://www.apa.org/education/k12/relationships> (Accessed 14 February 2021)

Rymanowicz, K. (2015) *The Power of Play*. [Blog] 8 December. Available at: https://www.canr.msu.edu/news/the_power_of_play_part_5_adult_roles_in_childs_play (Accessed 15 February 2021)

ScienceDaily. (2005) *Children's Taste Sensitivity and Food Choices Influenced by Taste Gene*. Available at:

Carys Evans
2004241
Word count: 2793

<https://www.sciencedaily.com/releases/2005/02/050211084620.htm> (Accessed 8 February 2021)

Sensory Surroundings (2020) *What is Free Play and Why is it so Important for Children?* [Blog]. 21 February. Available at:
<https://sensorysurroundings.co.uk/blogs/news/what-is-free-play-and-why-is-it-so-important-for-children> (Accessed 14 February 2021)

Shafer, L. (2018) *Summertime, Playtime* [Blog] 12 June. Available at:
<https://www.gse.harvard.edu/news/uk/18/06/summertime-playtime> (Accessed 5 February 2021)

Welsh Government (2015) *Curriculum for Wales- Foundation phase Framework*. (pp. 10-65) Available at:
https://moodle.uwtsd.ac.uk/pluginfile.php/137745/mod_resource/content/1/150803-fp-framework-en.pdf (Accessed 5 February 2021)