

Mathematical learning in the early years



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Introduction

This is a well known fact that the early years of a child's life are very important in terms of their emotional and social development, their general well being and their intellectual, emotional and physical growth. Almost all the children develop at different paces and what they learn takes place in the first three to five years of life. The environment of home is very important in the development of a child in the early childhood. Most of the people think that this is a time when children are most ready and open to learning experiences and a high quality care. The government has developed a policy for the early years that especially focuses on providing a comprehensive range of services for children, specially the very young ones. The policy involves the integration of early years with childcare provision. This policy enables children to build on throughout their entire life and it provides a positive foundation for children's early development. The high quality care provision in the early years also provides parents with peace of mind and allows them to balance work and family life. This paper will outline the most important elements in the education, training and development of a child the early years of his life. Beginning with a general overview of the early years sector role modeling, pedagogy's of play and inclusive practice will be examined as elements that are vital to the education, training and development of those wishing to work in early years education. The Labour Government which was formed in 1996 used as its pre election catch-phrase the words ' education, education, education. Since that time things have improved in some areas. In 1996 the labour government policy has been promoting a series of educational reforms. As a result in 1998 the National Childcare Strategy was launched. Four year old children, whose parents

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require it, the course is very vital in the early years of education. There has also been a growth in the proportion of two year old children in part-time early years education. These places are available in centers of primary schools in a number of settings through pre-school to authority nurseries settings like the one offered by the Pre-School Learning Alliance. In 1998 Early Years Development set up in each local authority to promote the expansion of early years education.

Numeracy

Literacy is to language as numeracy is to mathematics. They both represent a different means of communication which is very important to our civilized life. Both literacy and numeracy are on the decline in the United States of America. There are a lot of differences in form and structure; both in natural language and mathematical language are very powerful tools for representation, description and communication. The use of numeracy is very important for a nation expecting to compete in a global economy. On the other hand the natural language is ambiguous, redundant and concrete and the mathematical language is abstract, precise and concise, precise, and abstract. Full expression of vision and thoughts and visions requires the richness of both mathematical language and the natural. Yin and yang, literacy and numeracy are the example of human communication.

Mathematics very basic and core subject in child education. All over the world the I Q tests include an assessment based on the system of numeracy and therefore it is very important component of our lives.

Mathematical Learning in the Early Years

Learning about numbers in early years of our life is very important in developing positive attitudes about mathematics at an early age. Special methods will assist children to develop early numeracy skills. These methods will need to include the use of engaging and motivating materials that children can manipulate. Young children need to experience a lot of doing before written numerals will make sense.

As early as 1 year of age, many children will start saying the words ‘ one’, ‘ two’ and ‘ three’, etc. But they do not understand that the number refers a set of items or just an item. At this stage, children do not have number correspondence.

Concepts That Help Young Children

Children should be engaged in a variety of measurement concepts which is a great beginning. Children enjoy telling us that they are older than their brother or sister or taller than the cupboard. Young children will also develop thinking that they have more in their cup because the fact that their cup is taller. We all should support this language because it needs to be promoted and children need parental guidance to help with the misconceptions of these concepts through experimentation. You can start from a bathtub which is a great starting point, using different types of plastic cups and containers. At this age, perception will guide the child and they do not have any other strategies to guide them in determining which is heavier or lighter or has more or less etc. through playing techniques a day care provider or a parent can provide great learning experiences to assist young children’s misconceptions.

The Impact of Mathematics on our daily lives

If someone don't know about how to change and understand completely then it means he or she is not fit to learn anything. Whatever profession you choose in our lives we have to learn mathematics because we all need it to excel in our daily lives. You must have it to get a high paying job. For example cooking, you have to measure different ingredients and pour them in correctly. It requires you to measure lengths and draw them. Pressing the numbers on the cute and tiny toy that our mother had bought for us through good experience, if you are going on shopping or just doing math problems you have to use mathematics everywhere you go, to make sure that you are using the right measuring unit. When we look around ourselves we see that Math is everywhere in our daily lives. If you don't then you might mess up your project that you are cooking. Like dessert, using Math does a body good. Math is all around us and that we do need it in our daily lives.

Social and Cultural Factors Affecting Child's Learning

All the children born and live not only in a society but also in a specific part of it, and are therefore, influenced by particular subcultures of race, religion, and class, as well as by specific groups such as friends and family. Almost all the children during their lifetime, they continually encounter changing or new things and conditions, both social and personal , and must learn to handle all the changes. The most important socialization occurs during infancy and childhood, when the foundations of later personality are laid. Whether a child shy or ongoing, average or intellectually advanced, or depends on many unique influences effects are difficult to predict at the child's birth. There are many different factors that influence child development. It includes every aspect of cognitive, physical, emotional and <https://assignbuster.com/mathematical-learning-in-the-early-years/>

personality development. Peer groups or family members, the community and the school environment, influence deeply on how the child will socialize, think and become self aware. In many parts of the world the impact of socio-cultural factors on the personality development of adolescents.

After studying major socio-cultural factors that affect the children personality we came to know the factors which are identified as important determinants of child personality are parents education, their economic conditions , family structure and family size, peer group, children’s socialization level, school environment, parent’s involvement level in extra curricular activities and children’s day to day activities and government policies. There are many recommendations that are proposed which focus on parents reasonability towards child education, governments role in providing equal quality education to all classes of children compared emphasizing on improving parent, teacher and children relationships. This study also highlighted and suggested areas of further research. Subject having potential to be studied individually. Moreover, the role of media and other new emerging sources of mass communication should also be investigated. More studies on children’s psychology gives understanding to better personality development of children. Nurturing children in the best way is the key to attain broader objective of building an educated, well behaved society and nation and this objective can be achieved through conducting research on children psychology.

The Use of Calculators in Schools

In our country, students use calculators for their schoolwork. But many people oppose this idea because they believe that the child’s basic arithmetic

skills would suffer badly. This remains their major disagreement about the importance of the ability to perform calculations. Some curricula restricting calculator use until a certain level of proficiency has been obtained, on the other hand some experts concentrate more on teaching problem-solving and estimation techniques. According to this research suggests that inadequate guidance in the use of calculating tools can restrict the kind of mathematical thinking that students are engaged in. One theory says that calculator use can even cause core mathematical skills to atrophy, or that such use can prevent understanding of advanced algebraic concepts.

There are some other concerns also, for instance, a pupil can use the calculator in the wrong manner but he thinks that the answer is correct because that was the result given by a calculator. Teachers try to counter this by encouraging all the students to learn to make an estimate of the result manually and ensuring it roughly, after that they can agree with the calculator's result.

Rote Learning

Rote learning is the way of learning in a very short time; for example, when learning the Arabic alphabet or lists of words. In the same manner when learning the conjugation of irregular verbs, the morphology is often too subtle to be learned explicitly in a short time. However, as in the alphabet example, learning where the alphabet came from may help one to grasp the concept of it and therefore memorize it.

Rote Learning and Mathematics

Teaching mathematics by rote learning method is an ineffective and outdated way of teaching. Rote learning completely relies on learners

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remembering and reciting lists of information. The thing which is not taught in rote learning is the full rounded understanding of the subject. That is the reason why you should never use rote for learning mathematics. If you are unfamiliar with the term rote learning it is embodied in the chanting' of facts that used to occur in classrooms: $13= 3$, $25= 5$, $37= 7$ and so on. Some times we see that the children these facts smoothly and perfectly. But the fact is that if you took the numbers out of order or changed them around it became clear that the understanding of what these numbers actually mean has not been learned. For instance, if a child had just learnt their three times table they would know that $94= 28$ but if asked what $39=$ they would often say they had not done their 9 times table yet. This shows that the words had been learned but understanding had not been achieved.

That is the main reason that children should never go for rote learning. If your children's teacher or school is teaching in this way you should question it. It is not good for children's leaning and will not inspire them to want to learn more. The ideal teaching session should leave learners wanting to know more, inspired and interested. Rote learning is more likely to lead to boredom frustration and inadequate knowledge of the subject.

Contextual and Categorical Thinking in Young Children

The circular thinking in children facilitates educational choices and supports collaboration. But it makes the disability categories difficult to understand especially when taken out of context. Today we know that the disability categories are mainly the products of social process. Some times being identified as belonging to a category and thus receiving additional resources which can also mean discrimination.