Math and children

Education

Teaching Elementary Mathematics A particular pattern used by a teacher to teach mathematical concepts primarily depends on the intended impact in a particular grade level. Students' response to the particular system determines teacher's adoption of the strategy. This paper describes how to use patterning in teaching elementary mathematics and a specific activity that can be used for a particular grade level.

Use of symbols plays a great deal in learning elementary mathematics. It is undeniable that symbols help children to learn to identify patterns in general. This prepares children to a more advanced level mathematic skills such as numeration and numbering. Symbols such as circles, squares, triangles are good for patterning. This learning activity is best suited for grade four levels. This symbol patterning intends to expose children to sequences. This concept will use an analogy of a picnic table as an introduction to the sequence. Students get insight as they use T-charts to the idea of pattern rules. Once the student is able to solve the problem, they continually develop cognitive ability to understand mathematical concepts that are more abstract. In this activity student will understand relationship between numbers, figures, tables, and diagrams as mathematics models. This will work only if the student has experience in extending simple number pattern at a lower grade (Ministry of Education, 2008).

For instance, patterning can be used to expose children in elementary level to Pascal triangle. Student investigates the pattern of rectangular number and sums of the triangle. This activity may involve delivery of small toys to a prizewinner at a fun fair in several days. In day one chipmunk will be delivered, day two the same with two blue jays. In day, three repeat of previous with additional three puppies. This may continue for ten days and

the Pascal concept will be easily understood (Ministry of Education, 2008). In conclusion, patterning plays a great role in student perception towards numbers. It depends on the skills of the particular pattern introduced at a lower grade. Therefore, it is an interdependent process. Use of pattern in elementary mathematics is a progressive process. A pattern in a higher grade depends on what pattern was introduced at a lower grade level.

Reference

Ministry of Education. (2008). Patterning and Algebra, Grades 4 to 6. Retrieved from http://www. edugains. ca/resourcesLNS/GuidestoEffectiveInstruction/GEI_Math_K-6_PaterningAlgebra_Gr4-6/Guide_Patterning_and_Algebra_456. pdf

Grade 4 Learning Activity: Picnic Partners