5.5 Levels of Thinking

Introduction

Analysing the level of thinking required for a certain activity is a crucial component of a differentiated lesson. Bloom's taxonomy (Bloom, 1984) provides us with a framework for categorising learning activities by their level of challenge.

Bloom's taxonomy contains six levels:

1. Basic recall (*knowledge*)
2. Demonstrating understanding (*comprehension*)
3. Using knowledge (*application*)
4. Examining information (*analysis*)
5. Assessing value based on criteria (*evaluation*)
6. Creating something new (*synthesis*)

Some students may spend longer acquiring basic facts while others quickly move onto higher-level thinking. It is important to note that Bloom's higher levels of thinking simply reinforce basic facts. Therefore, all students can engage in learning content at an appropriate level within a differentiated lesson. Some students who have difficulties with basic recall have no problems engaging creatively in higher-order thinking. All students can benefit from being exposed to all levels of challenge.

Bloom's taxonomy applied to worksheet questions:

1. Label the parts of a plant cell and an animal cell.
2. Identify the functions of each part of a plant cell and an animal cell.
3. Create a poster showing both a plant cell and an animal cell and indicate which parts are only found in the plant cell.
4. Examine the differences and similarities between plant cells and animal cells.
5. Determine why animal cells do not need or have a cell wall.
6. Design a new type of cell using at least three parts of a plant cell. Describe each part and give a reason for selecting it.

Reference

Taxonomy of Educational Objectives: Book 1 Cognitive Domain. Benjamin S. Bloom (ed.) New York: Longman, 1984.