

DIFFERENTIATED INSTRUCTION: STRATEGIC INSIGHTS FOR INCLUSION

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Abstract

Differentiated instruction is a teaching philosophy based on the premise that teachers should adapt instruction to student differences. Rather than marching students through the curriculum in watertight compartments, teachers should modify their instruction to meet students' varying readiness levels, learning preferences, and interests. It is true that there are children with differential abilities in general classroom ranging in varying conditions of mental, physical and educational aspects. The progress towards inclusiveness is difficult to access, since it is a multi-dimensional concept. Inclusive education aims at integrated development of children with special need and normal children through main stream education. Inclusive education is the process of addressing and responding to the diverse needs of all learning and reducing exclusion within and from education. It ensures quality education to all catering to their individual needs. In the classroom, different instructional techniques can be used depending on the target group for fostering teaching- learning. Effective inclusion of students with special needs in the mainstream curriculum is said to depend on adequate differentiation of the teaching approach to match individual learning characteristics of the students. Differentiation means tailoring instruction to meet individual needs. Whether teachers differentiate content, process, products, or the learning environment, the use of ongoing assessment and flexible grouping makes this a successful approach to instruction.

This paper focuses on the concept of differentiated instruction for inclusion.

Keywords: Inclusion, Differentiated Instruction, Learner

Introduction

Inclusive education (IE) is an approach towards educating the children with disability and learning difficulties with that of normal ones within the same umbrella. It addresses the learning needs of all children with a specific focus on those who are vulnerable to marginalization and exclusion. It implies all learners with or without disabilities being able to learn together through access in educational setting with an appropriate network of support services. This is possible only in flexible education system that assimilates the needs of diverse range of learners and adapts itself to meet these needs. Inclusion has high practical value in education.

The importance of sound evidence – based techniques has been affirmed numerous times by professionals in the field of education. Much attention has to be given to curricular and instructional aspects of students' educational programmes based on differentiation. The concept of differentiating instruction has gained wide popularity for a long time.

Differentiated Instruction

It is a process to approach teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is, and assisting the learning process (Hall, 2002).

The comments.....

1. This process implies that teaching and learning should be considered from a comprehensive basis involving a number of dimensions that all relate to maximizing student outcomes.

2. The differential community includes :

- a) Students already identified - having a disability.
- b) Students who are struggling in some way with the demands of educational institution, but who have not been and never be identified as disabled.
- c) Students who are gifted and whose needs are as great as those with significant learning problem – however their needs require a different type of attention.

3) In order to address the needs of students, it is necessary to have a firm assessment of what their specific needs are.

Differentiated instruction – Terminology

The three terms involved are:

1) **Adaptation:** It refers to specific changes made to the way content is presented and the way students respond to instruction – includes all adjustments to instructional methodology and environment that enable students to engage the general education curriculum.

2) **Modification:** It refers to actual changes made to the content itself in terms of content covered or content that is assessed.

3) **Accommodation:** It refers to changes that are made to support students within various educational setting.

4) **Levels of differentiation:** Differentiating instruction should be considered as consisting of two levels. The first is a global, or macro level that applies to the education classroom on a general level. It incorporates the concept of universal design for learning (**UDL**). The practical interpretation of this level is that various features of instructional design that are essential to some student, beneficial to others, and not detrimental to anyone are implemented on a universal classroom level.

The second level of differentiation is a specific and individualized and can be considered on a micro level. Some students (eg. Students who are blind or deaf) will need very specific adjustments; other students will not need to benefit from instruction.

Differentiating Instruction – Operating Procedures

Choosing the most effective and efficient process is differentiating instruction is very important. This follows a five step process.

1. Determine the need for differentiation

It is important to determine which student will need differentiation in their programs. The operative lip is that many students will benefit from some form of differentiation. The challenge for classroom teachers is to know which student need assistance, know what exactly need to be done, and know how to differentiate instruction. Skill development and ability are the key factors for this.

2. Identify specific areas of need:

The role of teacher is very crucial in understanding the specific area of need. This is essential for problem solving, what adjustment need to be made within the class room setting to address the problem.

3. Implement various differentiation practices:

Educators need to incorporate many features to address the need of a range of students with the on-going operations of the classroom (ie, UDL). When differentiating instruction is on an individual basis, one should start with the learnt one, yet effective, practice first. This method serves the following purposes. First, teachers simply do not have enough time to make massive, complex adjustment to their program and instruction. Second, minor adjustment can be just as powerful and effective as more involved one. For example, changing the seating arrangement can be relatively done to minimize distractions.

4. Monitor student progress:

Much attention is to be placed on the importance of monitoring the progress of student in academic, behavioural and social areas. It is essential that data be collected in regard to the adjustments that are made for students. Without data collection, it is impossible, for teachers to know how well the accommodations are working.

5. Evaluate and modify differentiation practice:

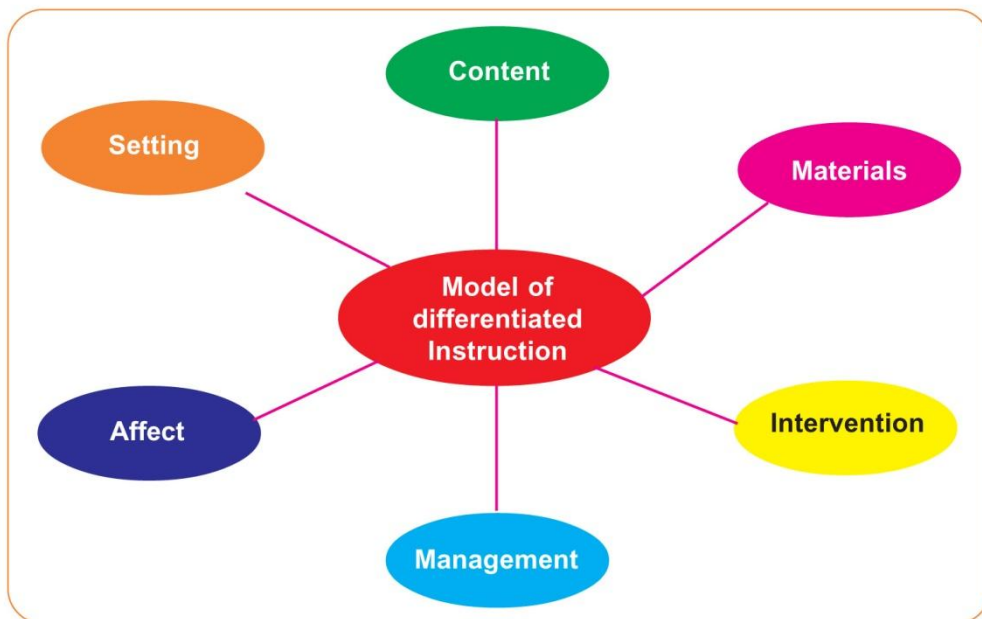
All differentiation practices must be evaluated for their effectiveness and their decision are to be made as to whether to continue them, terminate them, or modify them in some way.

Comprehensive model of differentiating instruction:

To address classroom dynamics, teachers need to be aware and competent to utilize ways to differentiate their instruction to maximize the potential opportunities for learning. Addressing the needs of a broad range of students is based on numerous considerations. To maximize the success of students in their classroom, teachers must pay attention to the six key elements of differentiated instruction: Setting, content, materials, Intervention, instruction, management / behavior, etc).

Eight important principles guide the development and implementation of a comprehensive model of differentiated instruction. They are as under:

- All students must be valued
- Meaningful relationships between teachers and students need to be developed and cultivated
- Successful learning outcomes derive from a positive classroom climate.
- Teachers have control over a number of critical factors that have a major impact on student learning and behavior.
- Affording students choices contributes to effective classroom dynamics and enhances self – determination.
- Teachers and students in effective classrooms are considerate of individual differences including cultural and familial differences.
- Proactive planning for differentiation (Prevention) is preferable to reactive appropriate (Crisis intervention).
- Teachers should not feel that they are alone – resources such as other teachers, administrators, and parents can contribute to successful instruction.



Model for Differentiated Instruction

When developing and implementing a comprehensive system of differentiating instruction, teachers must be mindful of the diverse range of students in their classrooms.

Differentiated Instructional Strategies – Hearing Impaired

Those teachers working with students who are deaf or hard of hearing need to carefully consider each student's unique needs and learning style, as well as the demands of the task. Strategies are offered to provide a starting point for thinking about possible adaptations.

Possible effects of hearing loss on skill development in mathematics

Children who are deaf or hard of hearing can learn mathematical concepts in the same sequence and manner as their hearing peers (Meadow, 1980). However, various factors may prevent children who are deaf or hard of hearing from successfully constructing mathematical knowledge, including the following:

They may lack general vocabulary and the basic mathematical vocabulary needed to be able to understand maths concepts/processes. Hearing children are exposed to language from birth and have an understanding of everyday language. This serves as a base for developing an understanding and use of mathematical language. It is more difficult for children who are deaf or hard of hearing to acquire language and learning from their environment incidentally (from overhearing conversations of others in their environment, on TV, on the radio). Without this incidental learning, a child who is deaf may not develop even beginning math concepts such as “in front of/behind” or “heavy/light” without being formally taught them.

Communication with others may be difficult. If the child and others in the environment cannot communicate with each other effectively, they will not be able to engage in mathematical processes such as problem solving, developing logic and reasoning, and communicating mathematical ideas. Problem solving is especially difficult for children who are deaf, as a sound language base is necessary for putting observations into words or making predictions. Without communication skills, the child can be isolated in the learning environment and unable to participate in group activities and discovery (Ray, 2001).

Cognitive development may be delayed. Research shows that children who are deaf or hard of hearing have normal intellectual potential (Meadow, 1980). However, for normal cognitive development to occur, particularly in a mathematical sense, a child must be introduced to a diversity of mathematical experiences along with a rich language base (Ray, 2001). This does not always occur in the home and in the educational setting.

The following strategies are designed to promote access to mathematics content based on the Standards of Learning for students who are deaf or hard of hearing.

Instructional and Environmental Strategies

Provide an enriched learning environment that promotes a wide range of meaningful mathematical experiences with opportunities for exploration and problem solving.

Be sure that there is someone for students to interact with in the learning environment who can effectively provide not only the vocabulary to label objects but also a language model for expressing concepts and ideas, using the child's mode of communication.

Partner with parents. Maintain ongoing communication between the home and teachers so that maths vocabulary and concepts are reflected and reinforced in as many different situations as possible. Make families aware of the limitless opportunities in the home for exploring and discussing math concepts during daily routines, and make sure that the parents are able to communicate effectively in the child's chosen mode.

Use multimedia approaches for visual representation of course content. Overhead projectors or PowerPoint presentations are preferable to blackboards, as the teacher does not need to turn his or her back to the students. This is especially important for students who are relying on speech reading, signing, and/or use of residual hearing for receptive communication.

Use more than one mode of presentation for concepts such as fractions. These may include verbal, pictorial, and symbolic modes. Encourage students to translate between sign language, English, and particularly the language of mathematics, and to make connections between all modes presented.

When using visuals, allow time for students to view the board, overhead, or objects, then to watch explanation/instruction given by the teacher or interpreter, and only then, allow students to offer responses. A hearing person can view visuals and listen at the same time. Children who are deaf or hard of hearing and rely on visual communication through sign language, cued speech, or speech reading must process information sequentially rather than simultaneously.

Note that word problems may be especially difficult for some students who are deaf or hard of hearing because of the literacy level needed to comprehend the problem and what is being asked of the student. Having the interpreter sign the problem may be an appropriate accommodation for some students.

Encourage students to process information at a deeper level through questioning.

Conclusion

Differentiated instruction is a highly valued instructional strategy in classroom. Proper orientation and positive outlook can produce excellent results in students.

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