

UGC 49956-929

UNIVERSAL DESIGN FOR LEARNING (UDL): ITS USEFULNESS AND IMPLEMENTATION AT ELEMENTARY LEVEL

*Naved Hassan Khan

*Assistant Professor, School of Education, Central University of Haryana

Abstract: In 1994, through the Salamanca statement, a new trend i.e. inclusive education emerged in the field of special education. Inclusive education, as the name itself suggests talks about inclusion of each and every child in regular schools. The basic philosophy behind inclusion is that schools should make necessary modifications to accommodate each and every learner. Universal design for learning helps us in our endeavor of making schools inclusive. The present paper deals with the three basic principles of UDL, it also focuses on how to make instruction/ content accessible to all learners at elementary level by applying the principle/ techniques suggested by UDL.

Key words : Universal Design for Learning, Inclusive Education, Multiple means of Representation, Multiple means of Engagement, Multiple means of Expression

Introduction

It is close to 65 years since the U.N. adopted the universal declaration of human rights in 1949. Filled with post war optimism, it proclaimed the right of every child to education. This noble sentiment was echoed down the years in numerous international and national documents. One of the best known, and probably the most influential, of these was the Salamanca statement (**UNESCO-1994**). Which identified inclusive education as the means by which this long sought vision of educating each child would be achieved.

As we all know that education is the key to the new global economy. It is central to the all around development of human being; therefore right to education should be universal and must extend to all children, youth and adults including persons with disabilities. After consistent efforts by several international bodies this right is enshrined in the **convention of the right of the children (1989)** by U.N. and addressed in several internationally approved declarations including

the **world declaration of education for all (1990)**. The standardized rules on the equalization of opportunities for persons with disabilities (1993), the **UNESCO'S Salamanca statement and framework for action (1994)** and **Dakar framework for action (2000)** are other efforts to equalizing the educational opportunities to disabled children.

UNESCO'S Salamanca statement (1994) emphasizes the need of providing quality educational opportunity to each and every child including the disabled in the regular schools. It talks about establishing regular schools with this inclusive orientation. Salamanca statement stresses on the fact that the regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all.

India, as a permanent member of U.N. automatically bounds by all the declarations and policies of U.N. India also a signatory of

UGC 49956-929

various international declarations on the education of persons with disabilities, such as **Salamanca statement (1994), and Dakar framework for action (2000)**. Apart from all these international legislation and statements, India also enacted a law called **right to education in 2009**, which make elementary education, a fundamental right of every citizen. With the passing of this act, it becomes the responsibility of govt. to provide to education to all.

With the growing movement toward serving all learners in the general classroom coupled with legislative mandates that pupils with disabilities be involved with and progress in the general education curriculum, it is not uncommon to find teachers searching for ways to :-

- Adapt curriculum.
- Modify instructional strategies.
- Assess students in ways that permit them to demonstrate their mastery of what they have been taught.

One solution to this quest is the emerging best practice of universal design for learning, commonly known by its acronym UDL.

Universal Design for Learning: Historical Background

The term universal design for learning originally comes to us from the field of architectural studies at the centre for universal design in **Raleigh, North Carolina (Centre for universal design, 1997)**. Ron Mace, an architect who happened to have a physical impairment, created this term to advocate the following inclusive philosophy: **“Universal design seeks to encourage products that are more usable by everyone. It is design built for the environment and consumer products for very broad definitions of user.”(Mace,1998)**

Universal design for learning has been presented as a framework for teaching-learning, assessment, and curriculum, which uses the principles/approaches of universal design to bring about flexibility in the teaching-learning process.

What is Universal Design for Learning?

Essentially, UDL is an educational model or approach to designing instructional methods, materials, activities and evaluation procedures in an effort to assist individuals with: **“differences in their abilities to see, hear, speak, move, read, write, understand, attend, organize, engage and remember”**. We offer the following concise description of UDL:-

“The central premise of UDL is that a curriculum should include alternatives to make it accessible and appropriate for individuals with different backgrounds, learning styles, abilities and disabilities in widely varied learning contexts. The “Universal” in universal design for learning does not imply one optimal solution for everyone. Rather, it reflects an awareness of the unique nature of each learner and the need to accommodate differences, create learning experiences that suit the learner, and maximize his or her ability to progress (Ross & Meyer, 2002)

Characteristics of Universal Design for Learning:-

- UDL is an educational approach or model that helps educators to design, curriculum, learning environments, and assessments that are “Smart from the Start.” (**Pisha& Coyne,2001**)
- Universal design for learning is accomplished by means of flexible curriculum materials and activities that offer alternatives to pupils with widely varying abilities and backgrounds. These adaptations are built into instructional design rather than added on later as an afterthought.

UGC 49956-929

- UDL provides equal access to learning, not simply equal access to information. It allows the students to determine the most appropriate method for accessing information while the teachers monitor the learning process.
- UDL assumes that there is no one method of presentation or expression that provides equal access for all learners. Learning activities and materials are purposefully designed to allow for flexibility and offer various ways to learn. (**Rose & Meyer**)
- The basic feature of UDL is that all the accommodations, modifications in the learning activities and materials are built “directly into the materials so that all students with differing abilities can use the same material, but in a way tailored to their strengths and instructional needs. (**Freund & Rich, 2005**)
- UDL does not remove academic challenges: it removes barriers to access.
- The great promise of UDL is that of flexible, equitable, and accessible ways to teach with this approach “**teachers can reach each individual student, disabled or non-disabled, providing a platform for each to interact with the curriculum in ways that best support unique learning styles.**”

Three essential qualities of Universal Design for Learning:-

Universal design for learning suggests schools offer an array of flexible options up front to diverse groups of learners so that each student has an equal opportunity to learn from the start. There are three essential qualities of UDL that must be considered when designing curriculum to meet the needs of all learners. They are:-

- i. Multiple means of Representation.
- ii. Multiple means of Engagement.
- iii. Multiple means of Expression.

Multiple means of representation:-

The “What” of learning and teaching. It offers flexibility in ways of:-

- ✓ Presenting, receiving and interpreting information/content.
- ✓ Adapting for different languages, learning styles, multiple intelligence, cognitive stages of development, sensory needs, perceptual differences, social needs.
- ✓ Adjusting the complexity of material presented.
- ✓ Adjusting environment so all can see, hear and reach.

Multiple means of engagement:-

The “Why” of teaching and learning. It offers flexibility in ways of:-

- ✓ Customizing the affective network systems in learning to increase participation.
- ✓ Adjusting for student interest and cultural backgrounds.
- ✓ Arranging the environment to allow for variety in grouping arrangements, individual work, and access technology and other materials.
- ✓ Using human resources in the classroom and schools.

Multiple means of Expression:-

The “How” of teaching and learning. It offers flexibility in ways of:-

- ✓ How students respond to information presented.
- ✓ Providing output formats that can be changed easily to accommodate preferred means of control.
- ✓ Using different cognitive strategic system.
- ✓ Tracking progress of students.
- ✓ Identifying areas of strengths and needs.
- ✓ Assessing knowledge and content.

Source: - Adapted from R. Orkwis, Universally designed instruction (Arlington, VA: Council for Exceptional children, 2003)

Universal Design for Learning: - Implementing it at elementary level
Multiple Means of Representation:-

UGC 49956-929

This element of UDL talks about presenting information/content to the learner by using different modes of presentation. In the inclusive setting, teachers find students of different abilities and learning preferences in the same classroom. UDL helps us in these situations, by applying the principles of UDL. We, the teachers present information to the learner by keeping in mind their unique abilities and preferences, and make necessary modifications in instructional techniques, so that all the learner could be accommodated. UDL emphasizes on changing the instructional techniques. It talks about making necessary modification in the instructional procedure, so that we may able to meet the exceptional need of all learners. Following points may prove to be helpful for the teachers and helps them in his endeavor of making instruction accessible to all learners:-

- Find out the exceptional need and learning preferences of each student.
- Present information to the learner by using different modes, such as: - visual-verbal, visual-nonverbal, auditory-verbal etc.
- Use technology and if not available use other available material like charts, models etc.
- If possible, give students information through real experiences.
- Provides information, through active “hands-on” activity and facilitate their learning.

Multiple means of Engagement:-

This principle of UDL talks about making every student active in the teaching-learning process. Even if our schools are physically accessible and equipped with accessible curricular materials, it does not mean that students will learn. A classroom might have lots of high-tech equipment, and tools, but it will only be as effective as the thought and planning that goes

into its use. In the classroom where books are available in different formats, there are still students who will read or hear the words, but do not know the meaning. Engagement can be increased first by knowing the students. By looking over previous assessments, using interest and learning preferences, talking with students, parents and other teachers who work or have worked with your learners, you can gather information that will help engage and motivate students. Following are some of the important ways to engage students:-

- **Auditory:** - Giving verbal prompts, talking through steps.
- **Visual:** - Highlighting key points, poster, pictures, and drawing.
- **Tactile:** - Using Braille, building a model, using game format, touching words on a word wall.
- **Affective:** - Working in areas of student interest, emphasize peer-tutoring, praising, giving feedback, cooperative learning.

Multiple means of Expressions:-

A third quality of UDL is multiple means of expressions this quality emphasizes on what different ways students may respond using the information they have received. Some students may find it difficult to respond orally/verbally in the class, others may find it difficult to give response in written form. Some finds it difficult to give presentation in groups because of his/her shy nature, other hesitates in responding to the questions of the teachers when asked verbally. Multiple means of expression gives student freedom in choosing his preferred ways of expressing his/her views in the classroom.

By offering alternatives approaches to responding to information received, learners can think about their thinking and organize it (**Pisha& Coyne, 2001**). Such an approach to response can also increase self-regulation,

UGC 49956-929

which should, in turn help students take ownership of their learning because they know how to get information. When students feel empowered by their learning they tend to feel better about school. Following points must be kept in mind while applying the principle of multiple means of expression:-

- Find out the multiple ways students preferred to give response.
- Encourage their preferred ways of responding.
- Make their responses understandable to the fellow learners.
- Provide support to them.
- Give them feedback about their responses.
- Make them self-regulated.
- Give complete freedom in choosing the preferred ways of responding.

Conclusion:-

Universal design for learning is a recent educational approach that brings a kind of revolution in the field of special education. Originally a concept of architecture, its principles now find application too in the field of education. It talks about making instruction/educational content available to all, by making necessary modifications in the instructional techniques. Although UDL is very innovative and useful concept and also have the capability to bring about revolution in the field of special education, but whether or not it becomes a practical concept, especially in India is a matter of debate and concern. UDL although brings about some apprehensions regarding its practicability, yet they may prove to be very useful for us in making our dream of making education accessible to all learners in the same classroom, a reality.

References:-

- Bremer, C., Clapper, A., Hitchcock, C., Hall, T., & Kachgal, M. (2002). *Universal design: a strategy to support students' access to general education curriculum*, retrieved from <http://www.ncset.org>. On 22 April. 2017.
- Bruner, J. (1960). *The process of education*. Cambridge: Harvard university press.
- Centre for applied special technology (1998). *what is universal design for learning?* Retrieved from <http://www.cast.org>. On 22 April. 2017.
- *Universal design for learning: reaching all, teaching all*. Retrieved from <http://www.doe.state.de.us>. On 23 May. 2017.
- Freund, L. & Rich, R. ((2005). *Teaching students with learning problems in inclusive classroom*. New Jersey: Pearson Education
- Gargiulo, R.M. & Metcalf, D. (2010). *Teaching in today's inclusive classrooms; a universal design for learning approach*. Belmont: Wadsworth Cengage Learning.
- Mace, R. (1998). *A perspective on universal design*. Retrieved from <http://www.adptenv.org>. On 23 June. 2017.
- Meyer, A. & Rose, D.H. (1998). *Universal design for individual differences*. *Educational leadership*, 58(3), 39-43.
- Orkwis, R. (2003). *Universally designed instruction*. Arlington, VA: Council for exceptional children.
- Pisha, B. & Coyne, P. (2001). *Smart from the start: the promise of universal design for learning*. *Remedial and special education*, 22(4), 197-203.
- Rose, D. & Meyer, A. (2002). *Teaching every student in the digital age: universal design for learning*. Alexandria: association for supervision and curriculum development.

UGC 49956-929

- UNESCO (1994). *Salamanca statement* Retrieved April 6, 2017, from <http://un.org>.
- UNESCO (1948). *Universal declaration of human rights* Retrieved April 6, 2017, from <http://un.org>.
- UNESCO (1989). *UN convention of the right of the children* Retrieved April 10, 2017, from <http://un.org>.
- UNESCO (1990). *World declaration of education for all* Retrieved April 10, 2017, from <http://un.org>.
- UNESC (2004). *Dakar Framework of Action* Retrieved April 10, 2017, from <http://un.org>.