



UNIVERSAL DESIGN FOR LEARNING

Social Science

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ABSTRACT

This paper highlights the importance of universal design for learning. The universal design of learning helps children with special needs to transact their cognitive domain of understanding the concepts in a concrete way. This article delineates the principles of universal design of learning and its transactional way to bring cognitive transition among diverse learners.

KEYWORDS

Universal Design for Learning, Children with special needs

INTRODUCTION

In recent years the Universal Design for Learning (UDL) is playing significant role in the field of education for special needs. UDL traces its origin to the Universal Design (UD) movement of the 1990's. The term "universal design" was coined by architect and designer Ron Mace at the Center for Universal Design at North Carolina State University (Burgstahler, 2008; Center for Applied Special Technology, 2011b). Mace and his colleagues defined UD as "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (Center for Applied Special Technology, 2011).

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The goal of Universal Design is the removal of barriers from the physical environment and the goal of Universal Design for Learning is the removal of barriers from the learning environment. The curriculum is disabled when it does not meet the needs of diverse learners (Council for Exceptional Children, 2011). The Universal Design for Learning evolves the curriculum to meet the needs of diverse learners. Elementary school teachers and university professors alike have adopted UD "as a conceptual and philosophical foundation on which to build a model of teaching and learning that is inclusive, equitable, and guides the creation of accessible course materials" (Schelly, Davies, & Spooner, 2011, p. 18). UDL provides options in learning because no single way of presenting information, no single way of receiving information and no single way of engaging students will work across diversity of students in a classroom. Universal Design for Learning provides options where it combines today's best approaches for engaging students and challenging them to think critically. It is a combination of instructional modalities, formats and technologies which meet the diverse needs of learners. Universal Design for Learning (UDL) is a research based framework that addresses learner diversity at the beginning of the design or planning effort. It helps us to plan how to teach, how to engage students in learning and how to measure what students learnt. It is embedded with flexibility in all aspects of teaching learning process. It helps the teacher to design the rigid curriculum to meet the learners' needs in different ways.

Principles of Universal Design for Learning

Universal Design for Learning (UDL) is a set of principles that guide the design of inclusive classroom instruction and accessible course materials. UDL's three principles are: 1) multiple methods of representation that give learners a variety of ways to acquire information and build knowledge; 2) multiple means of student action and expression that provide learners alternatives for demonstrating what they have learned; and 3) multiple modes of student engagement that tap into learners' interests, challenge them appropriately, and motivate them to learn (Center for Applied Special Technology, 2011). UDL provides a framework for the design of learning environments that scaffold and provide (a) multiple ways to access information and knowledge (the "what" of learning), (b) multiple ways to approach strategic tasks (the "how" of learning), and (c) multiple ways of becoming and staying engaged in learning (the "why" of learning; Meyer & Rose, 1998, 2005; Rose & Meyer, 2002).

Exploration on Universal Design for Learning

Drue E. Narkon & Jenny C. Wells (2013) has conducted a study on Improving Reading Comprehension for Elementary Students With Learning Disabilities: UDL Enhanced Story Mapping, Preventing School Failure: Alternative Education for Children and Youth. The study reveals that story mapping is an effective visual strategy to enhance comprehension of narrative text in students, with or without disabilities. It also demonstrates that how instruction can be designed using principles of universal design for learning with the evidence-based story-mapping strategy to improve reading comprehension for elementary students with a reading disability. Applying the principles of universal design for learning in the instructional design of a story-mapping lesson increases accessibility and removes barriers to engagement and interaction experienced by students with learning disabilities who have reading and writing challenges. An illustration of the planning and delivery of a universal design for learning enhanced story-mapping lesson that fits into the classroom schedule in inclusive general education or special education classrooms is included.

In the other study conducted by Peggy Coyne, Bart Pisha, Bridget Dalton, Lucille A. Zeph, and Nancy Cook Smith "Literacy by Design: A Universal Design for Learning Approach for Students With Significant Intellectual Disabilities wherein it reveals that these students benefit from high-quality instruction that includes comprehension and storybook reading. This study examined the effect of a technology-based universal design for learning (UDL) approach to literacy instruction, Literacy by Design (LBD).

UDL emerged from developments in architectural design, educational technology, and brain research. Architects designed buildings to meet needs of people with disabilities (Rabalate, 2011). Universal design for learning is described as a set of principles for curriculum development which give all the learners equal chances to learn (Udcenter, 2015). UDL framework posits that inflexible curricular materials and methods are barriers to diverse learners. If curriculum designers notice these diverse learners, they can develop a curriculum for all learners (Hitchcock, Meyer, Rose & Jackson, 2002).

CONCLUSION

There is no doubt that the quantum of research work conducted is commendable when we think of providing effective teaching strategies to children with special needs. Comparative research in Universal design learning strategies on children with special needs have been very few in numbers, moreover there is greater need of quality research work for this group of learners. Much of the studies conducted in abroad and in India are on examining the effectiveness of single teaching strategy among learners with special needs and other developmental disabilities. But this Universal Design for learning is a need of an hour and research in this area is a vital in the educational spheres of children with special needs.

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