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Universal Design for Learning: Facilitator to Inclusive Education for Children with Intellectual Disabilities

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Abstract

This article aims to explain the concept of Universal Design for Learning (UDL) and how it facilitates Inclusive Education for Children with Disabilities (CwDs). UDL is an approach towards achieving inclusive education by enabling the provision of flexible instructional strategies from the onset and this approach is increasingly gaining attention. UDL allows learners from diverse socio-economic, cultural, experiential background and varied abilities to get access of learning by adopting various means and methods of teaching that are in line to the principles of UDL. Universal design (UD) is commonly used in field of architecture, designing and hence its derived concept must be considered while developing physical environment of school as it also contributes in learning of children specifically for children with intellectual disabilities. Education is a fundamental Right and supporting acts like Right to Education Act, 2009 and The Rights of Persons with Disabilities Act, 2016 allows Children with Disabilities (CwDs) to get admitted in their nearby mainstream/general school and get admission in age appropriate classroom. Awareness regarding disability and its inclusion has increased the diversity in a classroom and hence general education teacher must be equipped with skills to deliver education to all and meet learning objectives with such diverse group of learners. The results have shown that UDL framework can contribute significantly in making inclusive education a success for children with disabilities. Teacher training and professional development programs need to be developed to enable teachers to learn and implement UDL in their lesson plans and execute same in classroom considering varied abilities of learners in a classroom.

Keywords: Universal design for learning, inclusive education, children with disabilities, right to education act, the rights of persons with disabilities act, disability awareness

1. Introduction

Universal Design for Learning is a concept coined by David Rose. This concept has been derived from concept of Universal Design, which follows the ideology of “One Size Fits All” and emphasize on developing architecture in such a way that all individuals with or without disability can be accommodated in same structure without requirement of any further adaptations. Universal Design talks about physical environment and its inclusive and accessible development, where Universal Design for Learning aims to incorporate students from all phases into a classroom and achieving learning objective with them. Singh (2017) explained UDL as “UDL is an instructional approach that opens opportunities for all learners by using flexible mode of instructions and digital media to help students meet their learning objectives.” Kapil (2024) stated UDL as “a framework that assists educators in minimizing barriers and enhancing learning opportunities for all students”. Whenever we talk about diversity of learners in a classroom, we talk about children belonging to different language, race, gender, socio-economic backgrounds, social status, residential status etc. In today’s era, Children with disabilities are also becoming part of diverse culture of the classroom and have contributed in increasing the diversity range of classroom. Inclusive Education too follows the same ideology of including all groups of learners having diversity and individual differences amongst them in same classroom and gain learning within same environment. Hasan (2023) considered Inclusive Education as “a human right issue pertaining to one’s right to avail quality education and ensure personal development of his potentials”. Hence, it can be easily understood that there might be some or the other relation

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between Universal Design for Learning and Inclusive Education. Where, Universal Design for Learning lays responsibility on the teacher's skills to use varied modes of presentation, ensure engagement of students through variety of materials, and provide opportunities to students to showcase their actions and expressions. Inclusive Education on the other hand, is not a skill based model, rather it is a right based model and involve all stakeholders involved in the education of children. Teacher is one of those stakeholders and hence his/her skill set will ease the process of inclusion for children specially children with disabilities. Traditional classrooms and modes of teaching could not help all students having different levels of learning, understanding, explaining, retaining etc., hence an approach need to be devised that meet learning needs of disabled and non-disabled students at the same time, keeping in line the learning objectives and timeline to achieve them. Students suffering from various disabilities have difficulty in different areas of learning, so their needs should be addressed and required adaptation in learning through UDL must be planned and executed. This will not only motivate students to learn but also acts as a support for teachers, as they can plan, execute, evaluate and re-plan their teaching using UDL Principles.

In this study the researchers felt the need to understand or develop a relationship between Inclusive Education and Universal Design for Learning, so that it can be understood how UDL can help student with disabilities accommodate within classroom with non-disabled peers.

2. Method

The investigators have used analytical method of screening and identifying latest relevant studies and considered their findings to draw the conclusion of their study. Reviews taken in the study are related to the area of UDL and its framework, Inclusive Education and role of these approaches in facilitating education for children with Disabilities.

3. Studies related to Universal Design for Learning and Inclusive Education for Children with Disabilities

Kapil, Jeyaprathaban and Halder (2024), propounded that "Universal Design for learning improves accessibility of general education curriculum which further improve learning outcomes and provide growth in various important skills like reading, writing, comprehension, decision-making, social skills and life skills etc. among children with mild intellectual disability".

Frolli et.al.(2023) investigated through their research "UDL could improve academic career of children with ADHD, as it works on improving basic learning skills (reading, writing and arithmetic skills) and children with ADHD who have undergone UDL based educational intervention demonstrated more significant improvement in core learning areas".

Khurana (2022) in their research found that "Universal Design approach in education focuses on making the curriculum, instructions, materials and assessments accessible for all the learners" and they further advocates that "Physical space of a school or Universal Design like classroom, corridors, playgrounds can be transformed into learning spaces that promote subconscious learning in all learners and such transformation would ensure learners with an equitable, inclusive and accessible environment that address learners individual differences and reduce barriers to learning".

Priyadarshini (2024) in her presentation at National Conference stated that "UDL offers flexibility in the ways students access materials, get engaged with it and showcase what is known to them." She also insisted that "Developing lesson plans using this approach will not only help normal children but also supports children with learning and attention issues".

Sulaiman and Tahar (2024) have discovered through their research that "UDL helps in reducing the hardships being faced by Special Education Needs students in learning by providing a variety of strategies, approaches and methods".

Molbæk and Sørense (2023) have written that "UDL is a mean to understand and develop more accessible and inclusive practices. This framework is an educational strategy for implementing inclusive education, which can help in understanding and working with inclusion and also, developing a teaching practice which will help overcome some of the dilemmas that teacher experience daily in their classrooms."

Zhang, Carter, Greene and Bernacki (2024), stated in their research that "UDL framework has been used by instructional designers and educators to guide their design of inclusive instruction for every student in class (with or without disabilities)." They also highlighted various challenges that stymie UDL research, including the absence of explicit alignment between UDL and intervention or instructional design.

Hasan, Khan and Malik (2023), conducted a study on Universal Design for Learning and how it promotes paradigm shift in Inclusive Education and in their study researchers supported the implementation of UDL in Inclusive setting through statement "UDL has the potential to meet out the diverse learner's needs of an inclusive classroom and it may be considered as paradigm shift in inclusive education." and they also added that UDL incorporates philosophical shifting of pedagogical aspects from text to audio-visual, traditional mode to blended, One Size fit curriculum for all to need based curricula. Hence UDL addresses one's right to get access to quality education.

Pagliara, Utge, Bonavolonta and Mura (2023) in their study emphasized on “significance of providing adequate training and necessary support to the teachers to facilitate inclusive education and improve learning outcomes”, as teachers generally use Information and Communication Technology in their classroom which is in line with Principle 1 of UDL guidelines which is Multiple Means of Representation.

Kovyazina and Lyudmila (2020) in their research highlighted that “problem of inclusive education relevant to quality management can be solved using principles of universal design for learning of children with special educational needs”.

Chavarría, Lopez-Bastias and Diaz-Vega (2023) emphasized that “though Universal Design and strategies were designed to eliminate difficulties and increase all student’s participation and achievements, they also mean to manage classrooms by focusing on the essential aspects of the teaching and learning process.”

Chen, Evans and Luu (2023) in their study on Australian Secondary school teachers found that “teachers have positive attitude towards UDL, though there were still some practical concerns regarding providing instructions and hence the need of developing professional teacher training program was emphasized so that inclusive education can be promoted as UDL framework is a lens for interpreting Inclusive Education”

Wilson (2017) through their research highlighted that “classrooms are typically constructed for non-disabled, neurotypical, white, male and it neither accommodates nor reflect the wide range of learners within it. Disability Studies in Education see the environment not students with disabilities as a problem and call for UDL approach to learning and such instructional designs and materials/activities that allow diverse learners to achieve learning goals, as UDL has the potential to radically transform the meaning of inclusive education and the very concept of disability.”

Dalton and Mckenzie (2020) stated that “UDL has several advantages and its introduction into policies, research and teaching practices can ease implementation of inclusive education”.

Dr. J. Sujathamalini et.al. (2022) investigated that “UDL has various importance in making learning accessible as (1) UDL makes the students to be socially productive with appropriate adaptations (2) UDL help all students to become expert learners, (3) It makes inclusive education possible by allowing adaptation in general curriculum and providing necessary support to students so they improve academically and develop social skills and relationship and (4) UDL advocates for barrier free physical environment that makes learning accessible for children with disabilities.”

Khushwaha (2023) emphasized through their study “need of professional development model that can effectively build teacher capacity for inclusive education and promote positive outcomes for students with diverse needs.”

4. Conclusion

The reviewed literature significantly showed the potential of UDL and its principles in making learning accessible for children with and without disabilities. It has also pinned significant importance on training of professional teachers on UDL and building teachers capacity for successful inclusion of all learners in inclusive education. The studies have shown affirmative role of UDL in inclusion and its role in facilitating inclusive education for children with disabilities.

Kapil (2024) have recognized the role of UDL in benefitting all students including those with mild intellectual disabilities. Frolli (2023) advocated the benefit of UDL in learning of students with ADHD and significant improvement among learner with ADHD after UDL interventions. Priyadarshini (2024) insisted on role of teachers to develop Lesson Plans in accordance to the Principles of UDL as it will provide accessibility to students with learning and attention issues. Pagliara (2023) emphasized on training and providing necessary support to teacher to facilitate inclusive education. Sujathamalini (2022) advocated that UDL makes inclusive education possible by allowing adaptation in general curriculum and providing necessary support to students so they improve academically and develop social skills and relationship

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