

Differentiated Instruction Through Online

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Abstract-Various factors like the global pandemics, working atmosphere, national recession and family situations in the recent past years forced the teaching community and the learners to use online platform for teaching and learning. So it is necessary to know the features and the strategies of differentiated instruction by online mode to bring out its benefits in teaching - learning process. This article tries to study, explore and highlight the importance of the ways and means the digital teachers use differentiation strategies to satisfy the requirements of their students in an online environment. Teachers should have complete knowledge about the online teaching tools and apps to give the best learning experience for students.

Keywords-Differentiated Instruction (DI), online teaching and learning strategies, online teaching tools, educational apps.

INTRODUCTION

Differentiated instruction is an orderly and scientific approach of preparing and planning the curricular instructions and methods according to the needs of various learners. It is assumed that students differ in their learning styles, aptitudes, needs, strengths, family backgrounds and their abilities. So it is necessary that all the classroom activities, instructions and learning experiences must be catered to meet all these needs. Ongoing assessment and flexible grouping are the two pillars that help this approach a successful one. By differentiation the learning needs of the slow and advanced learners are fulfilled. To give a successful differentiated instruction by online mode, teachers must be well familiarized with online teaching practices, and learners must be given freedom to learn at their own space.

REVIEW OF RELATED LITERATURE

Brian (2012) studied whether differentiated instruction had improved students' academic growth. He concluded that students with a

higher academic ability have improved by DI, while students with average ability did not benefit by this approach. Suzanna (2011) did experiment on Differentiating Instruction by using the concept of Multiple Intelligences in the Elementary School and they said that teaching students according to their strengths and needs by using MI (Multiple Intelligence) which had so many benefits such as meeting students' learning needs and engaging students, etc. which in turn led them to higher achievement. Emily Nelson (2021) explored Differentiation and online learning. She had concluded that though online learning was a necessity for many students in recent years due to the pandemic, in future it might be a good choice for students, because, in-person learning by technology had become a part of an element in learning. She also suggested that technology can be a valuable asset to teach students as educators try to give a personalized learning experience to students. Mohd Hasrul Kamarulzaman et al. (2021) studied the result of online differentiated instruction and its effects on motivation and academic performance during covid-19

and studied how teachers do online differentiated instruction. Online learning faces various difficulties by teachers and learning communities. Their study had 247 gifted students from a public school in Malaysia and they chose a mixed method research design and used the teacher cognition and explored the teachers' practice of online differentiated through observation, interviews and a survey to determine the impact of online differentiated instruction on students' motivation and academic performance. They said, that although online differentiated instruction was feasible, a combination of other differentiation constructs should be applied to achieve a higher level of motivation and academic performance. According to Stephanie J. Blackmon and Claire Major (2012), there are several factors that give better online experiences. They are Ability to balance between educational activities by online and family life, Ability and skill to manage time, acceptance of personal responsibilities of learning, the influence and impact that are given by the instructor, the availability of the instructor and the extent of chances that they get to connect with their friends.

DIFFERENTIATED INSTRUCTION BY ONLINE

Differentiated instruction by online means, not only tailoring the contents according to the individual learners but also the way in which the teaching process should be delivered and also the way in which the learning outcomes can be expressed or measured. There are many strategies that can be followed to get best result or learning outcomes by online differentiated instruction. They are explained as follows.

STUDYING AND UNDERSTANDING THE STUDENTS

Before teaching the concepts to students, it is necessary to know the prior knowledge, interests, learning styles and aptitudes and their learning needs. So the mentor should study the learners by giving questionnaire, by observations, by keeping small pre-tests and by interviewing. By studying the prior knowledge and strength of the students, the contents can be manipulated and made into an easily comprehensible packages and the same can be processed and delivered to students.

ONLINE FLEXIBLE GROUPING

Creating online groups make them learn from each other and share their learning experiences. Periodically, group members can be shuffled so that each learner can have the opportunity to mingle and learn from a variety of learners with varying learning strengths. Learners can compare, understand their progress and have a healthy competition.

GIVING ASSIGNMENTS WITH VARYING DIFFICULTY LEVELS

Learners can develop their skills and mastery in the subjects according to their level of learning. Students can demonstrate their skills and express their learning according to their own speed and abilities.

GIVE ALTERNATIVE WAY TO LEARN AND REPRODUCE

Students can use different social media platform, different apps and even use hard books for reading and work. They should be given opportunity to create and present their learning through a power point presentation, technology and online apps, videos, audios, multimedia, slide shares, etc.

GIVING SMALL BREAKS IN BETWEEN CLASSES

Sitting in front of online gadgets continuously make the students boredom and dull. So it's the mentors bound duty to give short breaks of 7 to 10 minutes between classes. This time can be utilized to bring some outdoor materials or information from neighbourhood for learning as well as for refreshing and relaxing.

ASSESSING THE STUDENTS CONTINUOUSLY

Regular assessments, doing case studies, testing their understanding and getting feedback about the learning of students helps teachers to cater and tailoring the teaching methods according to the learning style and capacity of the students. By assessing students' knowledge level, aptitudes and skills often, teachers can develop and refine and create their teaching methods, materials and instruction to meet the students' varying needs. Assessing students' interests'

strengths, weakness and learning profile helps teachers create and set learning tasks in such a way that they are easy, interesting, engaging, motivating and accessible. Giving short online tests or self-checkups after teaching each concept will help the teachers get feedback about their teaching.

GIVING MEANINGFULL OR RESPECTFUL TASKS

Teachers give different online worksheets or assignments of varying difficulty level to students according to their learning styles, pace, strength and weakness. This helps students to choose, work and learn at their own pace and space and be able to connect and apply the learned concepts in their day to day life. Students get the power to create their own eLearning experiences by choosing tasks which are interesting and complete them online. Thus they become active participants in the learning process and achieve more.

SUPPORTIVE AND CONGEANIAL LEARNING ENVIRONMENT BY

TEACHERS AND PEERS

It is necessary that students are valued, included, given importance and empowered within their learning community. By giving constructive comments, applause and suggestion for their performance, their affective domain get encouraged. Mentors should make themselves available to the students and involve all the students in the learning activity in such a way that all the children feel socially, physically and emotionally safe. Synchronous chats during online classes creates a supportive learning environment.

An effective online differentiated instruction is based on the following criteria:-

- Teacher's Knowledge and Skills in e-learning techniques, tools and apps such as Skype, Biju's learning app, Zoom, Google Meet, WhatsApp, Class room, etc.
- A full-fledged internet infrastructure facilities,
- Creating a conducive and homely learning environment by interacting with students,

- By building and maintaining online students' community,
- Bridging the students with their peers for collaboration,
- Sequentially arranging the learning materials and electronic resources from simple to complex order,
- Giving opportunities to students to express their ideas, point of views and opinions in between the teaching time,
- The learning outcomes of students must be measured in many ways i.e., by giving oral presentation, written assignments, making prototype, doing projects, etc., and
- Teaching should be completed within stipulated time.

Benefits of online differentiated instruction

- ❖ There are no barriers of space and time for learning,
- ❖ Enormous amount of information are available,
- ❖ Enhances collaboration in learning,
- ❖ Learning is easy and faster as all the senses are stimulated by colourful pictures and multimedia,
- ❖ Saves money and time as there is no need for travel,
- ❖ Links for related videos and extra reading materials can be posted,
- ❖ Synchronous chat with friends and clarification of doubts with mentors and peers are possible, and
- ❖ Already uploaded contents can be updated periodically. Audio and video conferences, documents such as word, pdf, power point, forum discussions and chat discussions are some of the salient features of online instructions.

Challenges of differentiated instruction in teaching by online mode

As in any other teaching strategies or methods, differentiating instruction by online also has many problems to be addressed. They are as follows:-

- Easy distractions from other interested apps, in between calls and frequent notifications which prevent them from focussing on the subjects,

- Lack of internet connections in remote areas,
- Not able to complete the learning tasks in stipulated time,
- Problems in availing the electronic devices or errors in the system,
- Students need self-motivation and have to self-organize their learning,
- Some students get a feeling of loneliness,
- The eye and posture problems they get while sitting with electronic gadgets for a longer time and the reduced physical activities and its consequences, and
- The complexity of educational apps, tools and their limitations.

CONCLUSION AND RECOMMENDATIONS

There are many skills and competencies which are needed by the mentor to design and create differentiated instructional classes. They should create contents and build assessment and analysis tools and instruments. Online differentiated instructor should have prior knowledge, competencies, readiness and qualification to teach in online learning environments. Online teaching is a golden opportunity and demanding during pandemics. Online differentiated instructors should have pedagogical and content knowledge. They should know to design and share the educational contents through online. They should have technological, management and institutional skills. They also should possess social and communication skills.

Though the current technologies are innovative and interesting, future developments and research in online differentiated instructions will take the online learning experience into a new and greater level of achievements. More research can be done in differentiated instruction by online mode, so that future generations can benefit from this.

References:

- [1] Faizah Idrus, Nur Afini Zainal Asri and Nurin Najihah Baharom (2021) Has Differentiated Instruction Gone 'Awry' in Online Teaching and Learning? *Journal of Language Teaching and*

- Research*, Vol. 12, No. 3, pp. 501-510, May 2021. DOI: <http://dx.doi.org/10.17507/jltr.1203.21> ISSN 1798-4769.
- [2] Emily Nelson (2021) Differentiation and Online Learning. Hamline University Digital Commons@Hamline School of Education and Leadership Student Capstone Projects School of Education and Leadership: https://digitalcommons.hamline.edu/hse_cp Part of the Education Commons.
- [3] Stephanie J. Blackmon and Claire Major (2012). Student Experiences in Online Courses: A Qualitative Research Synthesis. *The Quarterly Review of Distance Education*, Vol. 13(2), 2012, pp. 77-85 ISSN 1528-3518
- [4] Claudiu Coman, Laurentiu Gabriel Tîru, Luiza Mesepan-Schmitz, Carmen Stanciu and Maria Cristina Bularca (2020) Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability* 2020, 12, 10367; doi: 10.3390/su122410367 www.mdpi.com/journal/sustainability.
- [5] Naziya Hasan and Naved Hassan Khan (2020). Online teaching-learning during covid-19 pandemic: students' perspective. *The Online Journal of Distance Education and e-Learning*, October 2020 Vol. 8, Issue 4.
- [6] Mohd Hasrul Kamarulzaman, Melor Md Yunus, Hazita Azman and Azizah Mohd Zahidi (2021) The Practice of Online Differentiated Instruction and its Impact on Motivation and Academic Performance in the Wake of Covid-19. Doi: 10.20944/preprints202106.0028.v1
- [7] Catherine W. Cook and Christian Sonnenberg (2014) Technology and Online Education:
- [8] Models for Change. *Contemporary Issues in Education Research – Third Quarter 2014 Vol. 7, Number 3*.
- [9] Montebello, Matthew; Pinheiro, Petrilson; Cope, Bill; Kalantzis, Mary; Haniya, Samaa; Tzirides, Anastasia Olga; Amina, Tabassum and Sears Smith,

- Duane.(2018). Enriching Online Education through Differentiated Learning. 4th International Conference on Higher Education Advances (HEAd'18) Universitat Politecnica de Valencia, Valencia, 2018 ` DOI: <http://dx.doi.org/10.4995/HEAd18.2018.8019>.
- [10] Christy G. Keeler, Jonathon Richter, Lynne Anderson-Inman, Mark Horney, Mary Ditson (2007) Exceptional Learners: Differentiated Instruction Online
- [11] Christy G. Keeler, Jonathon Richter, Lynne Anderson-Inman, Mark Horney, Mary Ditson,
- [12] Professional Development for Online Teachers.Susan Lowes, Teachers College, Columbia University.