



A STUDY OF SECONDARY SCHOOL TEACHERS' READINESS TOWARDS PEERAGOGY AND OPEN PEDAGOGY

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Paper Received On: 25 JULY 2021

Peer Reviewed On: 31 JULY 2021

Published On: 1 AUGUST 2021

Content Originality & Unique: 80%

Abstract

Traditionally, teachers used to determine the learning of the students, they only decide about the knowledge and skills that need to be taught to the students but there has been a paradigm shift with the advent of new digital mediums. Now learning has evolved into a learning-centered, self-directed, social, peer-to-peer, inquiry-based and cooperative approach to education. ICT revolutionized learning for students and teachers. It has provided immense opportunities from connecting with people, accessing information, to availability of volumes of open educational resources. Education has transformed from pedagogy to new approaches like open pedagogy, self-education i.e., Peeragogy. No doubt these approaches will prove to be sustainable with the global health crises going on. Thus, this paper aims to recognize secondary school teachers' technological acceptability and to investigate their preparation for Peeragogy and Open pedagogy. Data was collected through a Google form from 96 secondary school teachers from 22 Indian schools, and descriptive statistics were used to examine the results. The findings revealed that the secondary school teachers are quite enthusiastic about integrating technology in education and employing peeragogy and open pedagogy in their classrooms. This study on secondary school teachers' attitudes towards technology, their readiness for Peeragogy and Open pedagogy, and the problems they experience is expected to offer educators with relevant information for future research.

Keywords: open pedagogy, peeragogy, ICT, education



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Introduction

In this 21st century, when the world is globally and digitally interconnected, all learners need 21st century skills and knowledge to succeed. Critical thinking, digital literacy, global awareness, communication skills are few of the many skills that can help learners to thrive in a world where change is constant and learning never stops. According to Jerald (2009), In order to flourish in a quickly expanding, technologically saturated environment, children should be

taught 21st century abilities. In today's world, a person's job regardless of field, necessitates continuous self-development and skill enhancement. The person who keeps himself updated and regularly studying throughout his professional is in great demand. That's why the pedagogical challenge is less concerned with imparting factual knowledge but turning learners to self-learners who continue learning their lifetime. "Education is not just school affairs. School provides the key to education. Non-formal education is a whole life! Every person should never give up learning!", rightly said by Anatoly Lunacharsky Zobova, Tarasova, Tsyganok, 2013. This pedagogical change from teacher centered to learner centered has also changed the role of the teachers too. In 21st century, Learner centered approaches such as Peeragogy and Open pedagogy have significant practical implications. Peeragogy is study of peer-to-peer and decentralized learning. Open pedagogy promotes open educational resources in teaching learning and cocreation of knowledge.

According to Ismail et al. (2013), technology has substantial impact on teaching learning processes and has a positive impact on their development. NEP 2020 too focuses on increased usage and integration of technology but that does not mean that all teachers are techno savvy or well versed in ICT. So, this research would throw light on the teachers' perception on using technology to aid teaching and learning. It would enable stakeholders to have a better understanding of teachers and consider how their ICT implementation decisions are understood by teachers.

Secondary school teachers will be more aware of the benefits of using peeragogy and open pedagogy in the classroom as a result of this research. It will also help learners in maximizing their learning experience by allowing them to learn autonomously, individually, collaboratively and sharing knowledge freely.

Literature Review

After 34 years, India gets a new education policy with the goal of instilling 21st century skills and competences in learners as well as improving the quality and efficacy of the learning process. Peeragogy and Open pedagogy are believed to be the approaches that paves way for self-determined and collaborative learning, skills and competencies of 21st century. The theoretical framework of this research is based on Vygotsky's theory of socio constructivist i.e., peer to peer learning. According to Leburn M (2010), social interactions and sharing of ideas and experiences are the basic of person's cognitive development and student's interactions reduces the task's difficulty. The "proximal zone of development" is related to the difficulty that the learner can overcome with the help of a peer.

Peer learning is an activity which mutually benefits all the people associated in the learning process. The activity is naturally reciprocated as students have little influence over one another due to their positions or responsibilities. They just help each other and accelerate their learning process (Boud, 2001). Dehghani, Amini, Kojuri and Nabeiei (2014) suggested that peer learning can help students gain confidence and study more effectively. They stressed the multiple benefits of peer-to-peer learning in the academic community. Gebeyehu & Regasa (2016) found that students are unaware of the importance of peer learning. The majority of students participated in peer learning outside of the classroom, but only for a few activities and not on a regular basis.

Peeragogy is a new approach which practices peer-to-peer and decentralized learning. In 21st-century learning, peer-based, collaborative, and self-directed learning are critical for task completion, issue resolution, and self-evaluation. The philosophy of peeragogy, according to Corneli and Danoff (2011), is based on peer-to-peer learning and teaching that emphasises self-directed learning. Peers create a helpful and supportive environment for self-directed learning in this setting. This approach was established through two online courses, "DIY Math" and "Collaborative Lesson Planning." Participants in a peeragogical venture work together to create emergent structures that respond to their changing environment. Peer learning is an extension of constructivist techniques, according to peeragogy.

According to Alexander et al. (2012), peeragogy is an activity in which peers learn together by helping and motivating each other in learning. In this learning group each & every person contributes in their own way. Rheingold (2014 Peeragogy handbook) is a book created by volunteers which is also a resource for bootstrapping peer learning. It encourages self-motivated learners to digitally connect with each other, to co-construct knowledge, to co-learn. It focuses on how to form a strong group, organise a learning environment, collaborate well, and conduct successful peer assessment.

Open pedagogy, open educational practices, and open teaching are all synonyms and are sometimes used interchangeably. OEP are those teaching and learning practices which are open means open educational resources (OER's) can be used and accessed easily, learner can be engaged by the practices of open education. The main focus of open pedagogy is to examine how openness affects teaching and learning, particularly how teachers engage their students (Hegarty, 2015; Hodgkinson-Williams & Gray, 2009; Wiley, 2017). The phrase OER-enabled pedagogy was coined by Wiley (2018) to describe the activities made feasible by using OER. Open pedagogy entails not just the use of open educational resources (OERs), such as open textbooks, but also a shift in the type of resource utilized in the classroom; nevertheless, this does not imply that pedagogy will change. According to Paskevicius and Irvine Smart Learning Environments 2019, open pedagogy is the polar opposite of closed pedagogical techniques because it supports learner autonomy in terms of resources, software, and technology platforms used to create and share their work.

Methodology

Research survey was conducted with the help of "Google forms", for this URL link was posted on WhatsApp of the secondary school teachers of India through contacts. Due to pandemic, the Google form was considered suitable for the study. A Purposive sampling technique was used as the detailed information about the research questions was needed for this research (Buchanan, 2012). Secondary school teachers were asked to answer the questions in an online learning situation as they have just shifted from conventional to online learning. Before the commencement of study teachers gave their consent for participation. The intent was to get maximum responses, but 96 teachers of 22 schools' responses were returned usable. Personal information, computer skills, Internet experience, readiness, attitude, efforts, and resources were all factors in the questions. These questions were designed to learn personal information in order to classify the sample into categories that would serve as a foundation for the study, to learn about secondary school teachers' computer knowledge and internet experience, and to

learn about the factors that influence technology acceptance, such as their readiness, efforts, attitude, and resources available.

Analysis and Interpretation of Data

Question 1: How comfortable are secondary school teachers with technology?

The first research question has four components. The percentages are used to represent all of the outcomes.

Items	Percentage	
Q) Have you ever conducted online classes before this lock down?	Yes	57.5
	No	16
	Sometimes	26.4
Q) How would you describe your Computer Knowledge?	Very Poor	0
	Poor	0
	Average	41.4
	Good	50
	Very Good	8.6
Q) How long have you been online?	Never used	0
	< 1 year	0
	1 to 3 years	0
	> 5 years	100
Q) How often do you go online in a day?	< 1 hour	0
	1 to 3 hours	24.5
	4 to 6 hours	43.75
	> 6 hours	31.75

Table 1. Distribution as per computer knowledge and Internet experience

57.5 % secondary school teachers have conducted online classes before lock down 16% have never conducted any online class and 26.4% have taken sometimes.

All of the secondary school teachers have basic knowledge towards computer. 41.4 percent believe they have an average level of computer knowledge, 50 percent believe they are good at it, and 8.6 percent believe they have excellent computer expertise. Because technology plays such a significant role in our daily lives, all secondary school teachers, regardless of age, race, or qualification, have been utilizing the Internet for more than five years. Though all teachers

have been using internet for quite long but it still depends on each individual how often do they go online in a day. 24.5 percent of teachers use the Internet for 1 to 3 hours per day, 43.75 percent for 4 to 6 hours, and 31.75 percent for more than 6 hours per day.

Question 2: How prepared are secondary school teachers for peeragogy?

Question 3: How prepared are secondary school teachers for open pedagogy?

There are 25 items which are divided into three aspects to know what factors influence the teachers' technology acceptance and their readiness towards Peeragogy and Open Pedagogy.

1) Readiness towards learning

Items	SD/D	N	SA/A
1. Technology would enhance teaching learning in class.	0	9.03	90.97
2. Technology would save time for both teachers and students.	0	0	100
3. The quality of the teaching and learning process would improve with the use of technology.	0	18.67	81.33
4. Open Pedagogy would enhance the students' learning process.	0	36.33	63.67
5. Open Pedagogy would save time for both teachers and students.	0	25	75
6. The quality of the teaching and learning process would improve with the use of Open Pedagogy	9.33	32.33	58.34
7. Peeragogy would enhance the students' learning process.	8.33	8.33	75
8. Peeragogy would save time for both teachers and students.	8.33	8.33	75
9. The quality of the teaching and learning process would improve with the use of Peeragogy.	0		17.67
82.33			

* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree

Table 2. shows Readiness in teachers

The majority of teachers (90.97 percent) strongly agree that integrating technology in the classroom would improve their teaching and save time for both teachers and students (100 percent). Open Pedagogy, according to 63.67 percent and 75 percent of teachers, would improve the learning process for students and save time for both students and teachers; 58.34 percent believe it would improve the teaching and learning process' quality. The findings suggest that teachers are more confident in the Peeragogy approach, with 75 percent believing it will improve the learners' learning process and save them time, and 82.33 percent believing it will improve the quality of teaching and learning.

2) Attitude towards technology

Items	SD/D	N	SA/A
1. It's easy to incorporate technology into teaching and learning.	0	8.33	91.67
2. It is easy to learn how to use technology.	0	10.4	89.6
3. It is easy to teach in class with the help of technology.	0	9.33	90.67
4. It is easy to apply Open Pedagogy in class.	0	50	50
5. It is easy to implement Open Pedagogy in teaching and learning.	4.33	25.67	70
6. It is easy for students to learn how to use Open Pedagogy approach.	0	34.55	65.45
7. It is easy to apply Peeragogy in class.	0	50	50
8. It is easy to implement Peeragogy in teaching and learning.	0	24.33	75.67
9. It is easy for students to learn how to use peeragogy approach.	0	24.33	75.67

* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree

Table 3. shows the attitude of teachers towards technology

Positive attitude towards learning always help us to excel. 91.67 percent teachers think that using technology in teaching and learning is easy and 89.6 percent think it is easy to learn how to use technology in their teaching. 90.67 percent agree that by using technology in teaching, they are able to teach easily in class. Only 50 percent of them agreed that applying Open pedagogy approach in class is easy but 70 percent do agree that implementing in teaching and learning is easy. 65.45 percent of the teachers believe that it is easy for learners to become skillful at using Open pedagogy. Only 50 percent of the teachers agree that it is easy to apply peeragogy approach in class but 75.67 percent believe that it is easy to implement in teaching learning. 75.67 percent believe that it is easy for learners to become skillful at using Peeragogy approach.

3) Availability of resources

Items	SD/D	N	SA/A
1. I have the means to incorporate technology into the classroom.	0	14.23	85.77
2. I am equipped to use technology into my teaching.	0	10.23	89.77
3. I have availability of assistance required if technical problem occurs.	16.33	8.33	75.34
4. I have the means to implement an open pedagogy approach in my classroom.	8.33	25	66.67
5. I am equipped to use open pedagogy approach in my teaching	8.33	25	66.67
6. I have the means to implement peeragogy approach in my classroom.	0	23	77
7. I am equipped to use peeragogy approach in my teaching.	0	23	77

* SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree

Table 3. shows the availability of resources

The availability of resources influences whether or not teachers use technology in their classrooms. 85.77 percent of the teachers agree that they have the resources to teach in class and 89.77 percent are equipped to use technology in their teaching. 75.43 percent of the teachers agree that there is an availability of assistance if any technical problem occurs. 66.67 percent of teachers agree that they have the tools and knowledge to use an open pedagogy approach in their classrooms. The data reveals that teachers are a little more confident in their use of peeragogy. They agree that they have the means and knowledge to incorporate a peeragogy method in classroom or in their teaching, with 77 percent saying they do.

Discussion & Conclusion

It is clear from this research that secondary school teachers have a very affirmative approach and optimistic attitude towards using technology in teaching learning, as well as adopting open pedagogy and peeragogy approaches in the education. They seem to realize the importance of

using technology in education as it helps to prepare students for 21st century and usage of the both learners centered approaches will make learners self-directed and lifelong learners. Teachers are eager to adapt and accept new ideas in order to keep up with the times. Their positive attitude shows that they wish to take efforts to adapt with the new technological changes. They wish to explore peeragogy and open pedagogy approaches in their teaching. Teachers alone can't bring technological changes, endeavors from Government & institutions are also needed. It will not only motivate teachers, but will also pique their curiosity and raise their awareness. To foster peeragogy and open pedagogy, institutions should provide adequate facilities, materials, and resources to teachers. Government is also taking initiatives to bring technological changes. In NEP 2020 online learning has been given huge importance and efforts are being taken for implementation but still there are no educational policies which clearly specifies E-Learning programs. Digital platforms like SWAYAM, e-PG Pathshala, Vidwan, Vidya mitra, One India One Digital Platform, Sakshat, GIAN, Virtual Lab & e-Acharya etc. are trying to fulfill objectives - equity, equality and access of educational policy but there is a long road ahead. OERs are also being developed and many educators are seriously taking efforts for them but to keep check on its standards is a must.

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