

## THE CORRELATIONAL STUDY OF DIGITAL PEDAGOGY OF SCHOOL TEACHERS WITH THEIR ADAPTABILITY QUOTIENT

\* Ms. Darshana Jadhav

\*\* Dr. Sally Enos

\* Assistant Professor & \*\* Principal, Pillai college of education and research, Panvel, Navi Mumbai, Maharashtra, India,

### Abstract:

This study attempted to assess the relationship between digital pedagogy (DP) and adaptability quotient (AQ). The discipline of pedagogy has recently undergone changes and introduced a new element known as "Digital pedagogy" as a result of the innovative and quick advancement of electronic and digital technology combined with Internet access. Every single educator has had to adjust to the rapid cultural change brought on by the digital age. One facet of the adaptability quotient is the capacity for new information absorption. The participants in the proposed study in the Navi Mumbai region were 4218 school teachers from the primary, secondary, and high school levels. in the general area of Navi Mumbai. The results of this study contributed to a better understanding of digital pedagogy and its relationship to the adaptability of teachers. The researcher developed a series of questionnaires for two variables: digital pedagogy and adaptability quotient. It aims to assist those who work in the field of education in producing sound intellectual and individual answers.

**Keywords:** Digital Pedagogy [DP], Adaptability Quotient [AQ]

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### Introduction:

Digital technology has become pervasive in everyday life, including educational settings, as students today are considered "digitally expectant." They are accustomed to using smartphones, digital media, gaming devices, and other digital tools for leisure activities. However, educators often find that students' technological literacy in formal learning situations lags behind their proficiency in informal contexts. This discrepancy has led to increased pressure from parents, organizations, and society to ensure that students develop digital literacy skills that enable them to effectively utilize and adapt to future technologies. The concept of "digital natives" coined by Marc

Prensky in 2001 gained attention and sparked discussions about how technology was transforming communication, education, and student needs. Some educators felt uncertain about how to meet the needs of these digital natives, while others welcomed the potential changes in education. However, with the constant evolution of web-based apps and emerging technologies, digital pedagogy cannot be approached as a one-time training or workshop. Instead, teachers need to develop a mindset and skill set that allows them to engage with emerging technologies and explore their applications in education.

Teachers' resistance to change is often rooted in fear or a sense of being digital outsiders. Overcoming this

resistance requires teachers to familiarize themselves with new educational technologies and adapt their methodologies, tools, and pedagogical approaches to the digital age. Adaptability, the ability to handle inconsistency, uncertainty, and stress, is crucial for educators. It enables them to cope with the changing nature of teaching and effectively respond to students' needs, learning abilities, and the dynamic conditions of the classroom.

To be effective in their roles, teachers must possess a high adaptability quotient. This adaptability extends beyond the classroom, as teachers also need to navigate changing conditions in the staff room and adapt to external factors like the ongoing pandemic. Being adaptable allows teachers to understand the overall environment and adjust their approaches to create meaningful learning experiences for students.

In summary, the prevalence of digital technology in students' lives and the pressure to produce technologically literate individuals necessitates that teachers embrace digital pedagogy. This requires them to overcome resistance to change, develop a mindset of continuous learning, and cultivate adaptability to effectively respond to the evolving educational landscape and the needs of their students

#### **Statement of Problem:**

Is there any relation between digital pedagogy of school teachers with their adaptability?

#### **AIM:**

To study the correlation between the Digital Pedagogy and Adaptability Quotient among School Teachers.

#### **Objectives:**

1. To study the relationship between the Digital Pedagogy of school teachers with their Adaptability Quotient
2. To compare the Digital Pedagogy of school teachers and their Adaptability Quotient with respect to

- a) Gender [ Male / Female/ Trans]
- b) Teaching Experience [1-3 Years / 4-8 years / 9-12 years / 13 and above]
- c) Affiliated Board [SSC / CBSE / ICSE / IB / IGCSE]

#### **Methodology of the Study:**

**Population:** In the current research area, Navi Mumbai, there are 265 total schools, with 206 participating schools.

**Sample:** The sample consisted 4218 school teachers from 206 schools of Primary, Secondary, and Higher secondary levels of SSC/ CBSE/ ICSE/IGCSE /IB boards of schools and junior colleges.

**Sampling technique:** In this study, the approach used for sampling was stratified random sampling.

#### **Tools:**

##### **Tool A: Digital Pedagogy**

The questionnaire used in this study was developed by the researchers and adapted from two existing scales: the Teacher Educators Aptitude and Familiarity towards ICT scale by Samuel, Gnana Murthy, and Krishnakumar R. (2010), and the Teacher Attitudes towards ICT Scale by Albirini (2006). The survey consisted of twenty questions aimed at assessing teachers' aptitude and attitudes towards using ICT in the classroom. The reliability of the survey was determined using the split-half approach, resulting in a reliability index of 0.97, indicating that the test was reliable.

##### **Tool B – Adaptability Quotient**

The instrument utilized in this study was developed by the researchers and was based on the Ployhart and Bliese I-ADAPT model, which incorporates a 55-item scale. This scale aligns with the eight dimensions identified by Pulakos et al. (2000).

### Findings of the Study:

The above-mentioned research hypotheses were tested and accordingly, analysis was done as below. The major findings of the study were as follows:

#### Correlation: Digital Pedagogy with Adaptability Quotient

Var.	N	'r' value	Level of Sig.	H <sub>0</sub>
			**0.01/*0.05	Accepted/Rejected
DP	4218	-0.16	**S	Rejected
AQ				

#### Correlation: Digital Pedagogy with Adaptability Quotient w.r.t. moderator variables

Mod. Var.	N	Var.	'r' value	Level of Sig.	H <sub>0</sub>
				**0.01/ *0.05	Accepted/ Rejected
Gender	Male	DP	-0.26	*S	Rejected
		AQ			
	Female	3458	DP	-0.14	**S
AQ					
AQ					
Teaching Experience	1-3 Y	DP	-0.12	**S	Rejected
		AQ			
	4-8 Y	DP	-0.21	**S	Rejected
		AQ			
	9-12 Y	DP	-0.23	**S	Rejected
		AQ			
13 & AB	DP	-0.06	NS	Accepted	
	AQ				
Board	SSC	DP	-0.27	**S	Rejected
		AQ			
	CBSE	DP	-0.26	**S	Rejected
		AQ			
	IGCSE	DP	-0.23	**S	Rejected
		AQ			

### Principal Findings and Conclusions of the Present Study:

In the context of school teachers, their digital pedagogy refers to their knowledge, skills, and practices related to integrating digital technologies into their teaching methods. This includes using devices like computers, tablets, interactive whiteboards, and educational software, as well as online resources and platforms for educational purposes. On the other hand, adaptability quotient (AQ) refers to an individual's ability to adapt

and thrive in rapidly changing environments.

There is a significant correlation between the digital pedagogy of school teachers and their adaptability quotient. Here's how:

- **Technological Competence:** Teachers with strong digital pedagogy skills are generally more technologically competent. They are comfortable using various digital tools, applications, and platforms, and can quickly adapt to new technologies. This technological competence

indicates a higher adaptability quotient, as they are better equipped to navigate and leverage new technological advancements and changes in the digital landscape.

- **Flexibility and Openness to Change:** Digital pedagogy necessitates a certain level of flexibility and openness to change. Teachers who embrace digital pedagogy are often more willing to experiment with new teaching methods, adapt their instructional strategies, and incorporate emerging technologies into their classrooms. This flexibility and openness to change are essential aspects of adaptability, as individuals with higher AQ are more likely to embrace and thrive in dynamic environments.
- **Problem-Solving and Resourcefulness:** Digital pedagogy requires teachers to be resourceful problem solvers. They need to troubleshoot technological issues, find innovative ways to engage students using digital tools, and adapt their teaching strategies to different learning needs. This resourcefulness and problem-solving mindset aligns with adaptability, as individuals with higher AQ are adept at finding solutions, adjusting their approaches, and leveraging available resources to overcome challenges.
- **Continuous Learning and Growth Mindset:** Digital pedagogy is constantly evolving, with new technologies and tools emerging regularly. Teachers with a strong digital pedagogy orientation are more likely to engage in continuous learning, stay updated with the latest trends and developments, and actively seek professional development opportunities. This commitment to lifelong learning indicates a growth mindset, a key characteristic of individuals with higher adaptability quotient.

### Conclusion:

Overall, the correlation between the digital pedagogy of school teachers and their adaptability quotient suggests that educators who embrace and excel in digital pedagogy are likely to exhibit higher levels of adaptability. These teachers are well-equipped to navigate the ever-changing digital landscape, adapt their teaching methods, and effectively leverage technology to enhance student learning experiences.

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