



## ONLINE TEACHING COMPETENCIES AMONG PRE-SERVICE TEACHERS

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### ABSTRACT

*The rapid integration of digital technologies in education, especially after the COVID-19 pandemic, has transformed traditional teaching into online and blended modes of instruction. This shift has emphasized the importance of developing online teaching competencies among pre-service teachers. The present paper explores the concept, dimensions, importance, and development of online teaching competencies among pre-service teachers. It also discusses challenges faced by teacher trainees and suggests strategies for enhancing their preparedness in digital teaching environments. Drawing upon recent research, this study identifies key competencies such as technological, pedagogical, social, managerial, and reflective competencies. The paper concludes that teacher education institutions must redesign their curriculum to integrate digital pedagogy and experiential learning opportunities to prepare future educators effectively.*

**Keywords:** Online Teaching, Pre-Service Teachers, Competencies, Digital Pedagogy, Teacher Education

### INTRODUCTION

Education systems worldwide have undergone a massive transformation due to technological advancements and global crises such as the COVID-19 pandemic. Traditional classroom-based teaching rapidly shifted to online platforms, making it essential for teachers to adapt to new teaching-learning environments. Pre-service teachers, who are in the process of acquiring professional teaching skills, must be equipped with competencies required for online teaching.

Online teaching competencies refer to a combination of knowledge, skills, attitudes, and abilities required to effectively deliver instruction in digital environments. These competencies go beyond basic technological knowledge and include pedagogical strategies, communication skills, classroom management, and the ability to engage learners virtually.

The need for such competencies has become more pronounced as education systems continue to adopt blended and hybrid learning models. Therefore, preparing pre-service teachers with appropriate online teaching competencies is a critical goal of modern teacher education.



## CONCEPT OF ONLINE TEACHING COMPETENCIES

Online teaching competencies can be defined as the integrated set of skills and abilities required by teachers to design, deliver, manage, and evaluate learning in virtual environments. These competencies include both technical and pedagogical aspects.

Research indicates that online teaching competency is multidimensional. A study identified four major components: pedagogy, facilitation, technology, and course administration . Similarly, another recent study highlighted that pre-service teachers require competencies such as planning, instruction, social interaction, and technological proficiency for effective online teaching .

Thus, online teaching competencies are not limited to using digital tools but involve the effective integration of pedagogy and technology to enhance learning outcomes.

## NEED FOR ONLINE TEACHING COMPETENCIES AMONG PRE-SERVICE TEACHERS

### Changing Educational Landscape

The shift towards online and blended learning environments has made it necessary for teachers to adapt to new instructional methods. Pre-service teachers must be prepared for this dynamic environment.

### Digital Natives and Learner Expectations

Today's students are digital natives who expect interactive and technology-integrated learning experiences. Teachers must be competent in using digital tools to meet these expectations.

### Continuity of Education

Online teaching ensures continuity of education during disruptions such as pandemics, natural disasters, or other emergencies.

### Professional Readiness

Teacher education programs must ensure that pre-service teachers are job-ready and capable of handling both offline and online classrooms.

## DIMENSIONS OF ONLINE TEACHING COMPETENCIES

Based on contemporary research, online teaching competencies among pre-service teachers can be categorized into the following dimensions:

### Technological Competency

This includes the ability to use digital tools, learning management systems (LMS), video conferencing platforms, and multimedia resources effectively.

Pre-service teachers must be proficient in:

- Using platforms like Zoom, Google Classroom, Moodle
- Creating digital content (videos, presentations)
- Managing online assessments



Technological competency is considered foundational, as it enables the implementation of other competencies.

### **Pedagogical Competency**

Pedagogical competency involves designing and delivering effective instruction in an online environment.

It includes:

- Lesson planning for online classes
- Using interactive teaching strategies
- Adapting content for digital delivery

Research shows that online teaching requires different pedagogical approaches compared to traditional classrooms, emphasizing student-centered learning .

### **Social and Communication Competency**

In online environments, maintaining interaction and engagement is challenging. Teachers must develop strong communication skills to build relationships with students.

This includes:

- Providing clear instructions
- Encouraging student participation
- Giving timely feedback
- Creating a supportive learning environment

Social competency helps in reducing the feeling of isolation among learners.

### **Classroom Management Competency**

Managing an online classroom requires different strategies compared to physical classrooms.

Key aspects include:

- Managing student behavior in virtual settings
- Ensuring discipline and participation
- Handling technical disruptions

Effective classroom management enhances the learning experience and ensures smooth delivery of content.

### **Assessment Competency**

Assessment in online teaching requires innovative approaches.

Pre-service teachers should be able to:

- Design online quizzes and assignments
- Use formative and summative assessment tools
- Provide constructive feedback

Online assessment also requires ensuring academic integrity and fairness.

### **Reflective and Professional Competency**

Reflection is a crucial component of teacher development.



Pre-service teachers must:

- Reflect on their teaching practices
- Adapt strategies based on feedback
- Engage in continuous professional development

This competency ensures lifelong learning and improvement.

### **Attitudinal Competency**

Positive attitudes toward technology and online teaching significantly influence effectiveness.

Studies highlight the importance of self-efficacy, motivation, and openness to innovation among pre-service teachers .

### **THEORETICAL FRAMEWORK**

Online teaching competencies are often explained through models such as:

#### **TPACK Model (Technological Pedagogical Content Knowledge)**

This model emphasizes the integration of technology, pedagogy, and content knowledge for effective teaching.

#### **Constructivist Learning Theory**

Online learning environments promote active learning, where students construct knowledge through interaction and collaboration.

#### **Connectivism**

This theory highlights learning through digital networks and online communities, which is highly relevant in online education.

### **DEVELOPMENT OF ONLINE TEACHING COMPETENCIES**

#### **Role of Teacher Education Institutions**

Teacher education programs must integrate ICT training into their curriculum. Studies suggest that structured training programs significantly improve competencies among pre-

#### **Practical Training and Internships**

Pre-service teachers should be given opportunities to:

- Conduct online classes
- Design digital lessons
- Participate in virtual teaching practice

#### **Workshops and Training Programs**

Programs like web-based training modules help in developing both pedagogical and psychological competencies .

#### **Peer Learning and Collaboration**

Collaborative learning environments enable pre-service teachers to share experiences and learn from each other.



## CHALLENGES FACED BY PRE-SERVICE TEACHERS

Despite the importance of online teaching competencies, pre-service teachers face several challenges:

### Lack of Technical Skills

Many pre-service teachers lack adequate training in using digital tools.

### Limited Infrastructure

Poor internet connectivity and lack of devices hinder effective online teaching.

### Lack of Practical Exposure

Teacher education programs often focus more on theoretical knowledge than practical skills.

### Student Engagement Issues

Maintaining student attention and participation in online classes is difficult.

### Assessment Difficulties

Ensuring fair and effective assessment in online environments is challenging.

## STRATEGIES TO ENHANCE ONLINE TEACHING COMPETENCIES

### Curriculum Integration

Teacher education curricula should include courses on digital pedagogy and online teaching.

### Hands-on Training

Providing practical training through simulations and virtual classrooms.

### Use of Emerging Technologies

Incorporating AI, virtual reality, and interactive tools to enhance teaching skills.

### Continuous Professional Development

Encouraging lifelong learning through online courses and certifications.

### Institutional Support

Providing access to digital resources, infrastructure, and mentorship.

## IMPLICATIONS FOR TEACHER EDUCATION

The findings of this study have significant implications:

- Teacher education institutions must redesign their programs.
- Policymakers should focus on digital readiness in education.
- Pre-service teachers must be trained as both learners and educators in online environments .

## CONCLUSION

Online teaching competencies have become an essential requirement for pre-service teachers in the modern educational landscape. The shift toward digital learning environments demands a comprehensive set of skills, including technological, pedagogical, social, and reflective competencies.



Teacher education programs must take proactive steps to integrate these competencies into their curriculum and provide practical training opportunities. Addressing challenges such as lack of infrastructure and technical skills is also crucial.

Ultimately, developing strong online teaching competencies among pre-service teachers will ensure effective teaching-learning processes and prepare them for the future of education.

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