

Creative Thinking and Global Skills in Teacher Education: A Conceptual Perspective on Prospective Teachers

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Abstract

Creative thinking is an important part of effective teaching and learning. It helps prospective teachers generate new ideas, consider different viewpoints and find new ways to deal with problems. Teachers also need a wider set of skills to work in changing educational and social environments. These skills include communication, collaboration, problem-solving, technological skills, leadership and global citizenship. However, the connection between creative thinking and broader global skills has received limited attention in teacher education. This conceptual paper examines @the possible role of creative thinking in the development of global skills among prospective teachers. It discusses creative thinking in relation to the eight domains of the Global Skill Taxonomy: cognitive, interpersonal, intrapersonal, global citizenship, innovation and creativity, self-paced learning, technological skills and leadership. The paper argues that creative thinking can support the development and application of these skills. It can encourage prospective teachers to explore different solutions, adapt to new situations and respond to diverse learners. The paper also highlights the importance of teacher education programmes in creating opportunities for creativity, collaboration, problem-solving and practical learning. A conceptual framework is proposed to show how creative thinking may contribute to broader global skill development. The paper concludes that creative thinking should be treated as an important part of preparing prospective teachers for the changing demands of the teaching profession.

Keywords: Creative thinking, global skill taxonomy, prospective teachers, teacher education, creativity, professional development, 21st-century skills

Introduction :

Education is changing with changes in society, technology and the workplace. Schools are no longer expected to focus only on academic knowledge. Learners also need skills that help them deal with new situations, solve problems and work with others. Teachers have an important role in this process. They need to create learning environments that encourage students to think, explore and participate. For this reason, teacher education needs to prepare prospective teachers with skills beyond subject knowledge.

Creative thinking is one such important skill. It refers to the ability to produce new ideas and look at a situation from different points of view. It also involves finding alternative ways of dealing with a problem. In the classroom, teachers often face situations that cannot be handled through a fixed method. Learners have different abilities, interests and backgrounds. A teaching strategy that works well for one group may not work in another situation. Creative thinking can help teachers respond to such differences. It can encourage them to try new approaches and adapt their teaching practices. The importance of creativity in education has been discussed by several scholars. Torrance (1974) linked creative thinking with abilities such as fluency, flexibility and originality. These abilities allow individuals to produce several ideas, consider different possibilities and develop responses that are not limited to familiar patterns. Craft (2005) also highlighted the importance of creativity in school education. Creative learning can give learners opportunities to explore ideas rather than simply reproduce information. Beghetto and Kaufman (2014) further noted that classroom conditions can influence the development and expression of creativity. At the same time, the demands placed on teachers have become broader. Teachers are expected to communicate effectively, work collaboratively, use technology and respond to diverse learners. They also need to develop leadership qualities and remain open to continuous learning. These requirements are closely related to the wider idea of global skills. Global skills refer to a range of abilities that help individuals participate effectively in educational, social and professional settings. They include skills related to thinking, communication, collaboration, technology, learning and responsible participation in society.

The idea of global skills is closely connected with discussions on twenty-first-century skills. Trilling and Fadel (2009) emphasised the importance of skills such as critical thinking, communication, collaboration and

creativity in modern education. The Partnership for 21st Century Skills (2009) also identified creativity, communication, collaboration and critical thinking as important areas of learning. Similarly, the OECD (2019) has given attention to the knowledge, skills and attitudes needed by learners to participate effectively in a changing world. These perspectives show that education needs to address both knowledge and the ability to use that knowledge in different situations. In teacher education, these skills have particular importance. Prospective teachers are preparing for a profession that involves continuous interaction with learners, colleagues, families and the wider community. They may have to deal with classroom problems, technological changes and different learning needs. They also need to continue learning throughout their professional lives. Therefore, teacher education should provide opportunities to develop a broad range of skills.

The Global Skill Taxonomy proposed by Baidya and Srivastava (2025) provides a useful framework for understanding these skills in the context of prospective teachers. The taxonomy includes eight domains: cognitive, interpersonal, intrapersonal, global citizenship, innovation and creativity, self-paced learning, technological skills and leadership. These domains cover different aspects of personal, academic, social and professional development. They also show that effective professional preparation cannot depend on one skill alone. Creative thinking may have an important connection with these wider skill areas. A person who can generate different ideas may also be better prepared to consider alternative solutions to a problem. Creative thinking can support innovation and may encourage individuals to explore new ways of using technology. It can also contribute to flexible learning and problem-solving. However, creative thinking should not be considered a replacement for other skills. Rather, it can work together with cognitive, interpersonal, technological and other abilities.

The relationship between creative thinking and global skills is therefore important to consider in teacher education. Prospective teachers need opportunities to develop both. Traditional approaches that mainly focus on memorisation may provide limited opportunities for such development. Teacher education programmes can instead include activities that encourage questioning, discussion, collaboration, problem-solving and experimentation. Project work, classroom simulations, open-ended tasks and problem-based learning can provide such opportunities. The present conceptual paper examines the possible relationship between creative thinking and global skills among prospective teachers. It draws on existing literature on creativity, twenty-first-century skills and teacher education. It also uses the Global Skill Taxonomy of Baidya and Srivastava (2025) as a framework for discussion. The paper explores how creative thinking may contribute to different areas of global skill development. It further considers how teacher education programmes can create suitable conditions for developing these skills. The paper aims to provide a conceptual basis for understanding creative thinking as one important component of broader professional and global skill development among prospective teachers.

2. Creative Thinking: Meaning and Educational Significance

Creative thinking is the ability to look at an idea, situation or problem in a different way. It helps a person move beyond familiar answers and consider new possibilities. In education, creative thinking is important because learning does not always involve finding one fixed answer. Students may understand the same topic in different ways. Teachers, therefore, need to think about different ways of explaining ideas and dealing with classroom situations. Creative thinking is often discussed through three basic abilities: fluency, flexibility and originality (Torrance, 1974). Fluency refers to the ability to produce several ideas. Flexibility means looking at a problem from different viewpoints or using different approaches. Originality involves developing ideas that are new or less common. These abilities can work together. A person may first generate several ideas, then consider which approach is suitable, and finally develop an original response.

Creativity does not always mean producing something completely new. It can also mean using an existing idea in a different and useful way. For example, a teacher may change a familiar classroom activity to meet the needs of a particular group of learners. The activity itself may not be new. However, the way it is used can make it creative. This shows that creativity can be part of everyday teaching. Creative thinking is also connected with problem-solving. Teachers face many practical problems in their daily work. Students may have different learning needs. Some may find a topic difficult, while others may need additional challenges. A teaching method that works well in one class may not work equally well in another. Creative thinking can help teachers consider different responses instead of depending on one routine method. The classroom environment also influences creative thinking. Learners need some freedom to ask questions, express their opinions and explore different answers. They should not always feel that making a mistake is a failure. A supportive classroom can encourage them to try new ideas. Beghetto and Kaufman (2014) noted the importance of classroom contexts in supporting creativity. This is particularly relevant to teacher education because prospective teachers learn not only through theory but also through their experiences as learners.

Teacher education programmes can provide many opportunities for developing creative thinking. Prospective teachers can be encouraged to prepare different lesson plans, design learning activities and develop teaching materials. They can also be given classroom-based problems and asked to suggest possible solutions. Group discussions and project work can expose them to different ideas. Open-ended tasks can further encourage them to think beyond a single answer. Creative thinking may also support other skills needed by teachers. It can contribute to innovation, problem-solving and decision-making. It may help teachers adjust their methods when educational situations change. It can also encourage them to explore new ways of using technology and learning resources. These connections make creative thinking relevant to the wider development of professional skills.

The importance of creative thinking has also been recognised in wider discussions on education and twenty-first-century skills. Trilling and Fadel (2009) identified creativity as an important skill for learning and working in changing environments. The Partnership for 21st Century Skills (2009) also placed creativity and innovation among the key learning skills. These perspectives suggest that creativity should not be treated as an additional activity. It can be part of the broader educational process. For prospective teachers, creative thinking has particular value. They are preparing to work with learners who differ in their abilities, interests and backgrounds. They will also work in educational environments influenced by social and technological change. Developing creative thinking during teacher education may help them approach these challenges with greater flexibility.

Thus, creative thinking is more than the ability to produce unusual ideas. It involves generating possibilities, considering alternatives and finding useful responses. In teacher education, it can provide a foundation for developing other skills needed for effective professional practice. It is therefore relevant to the broader development of prospective teachers and their readiness for changing educational demands.

3. Global Skills: Meaning and Key Dimensions

Global skills refer to a broad set of abilities that help people work, learn and participate effectively in different situations. These skills are useful in education, employment and social life. They go beyond subject knowledge. They include the ability to think, communicate, work with others, use technology and continue learning. The need for global skills has increased with changes in society and the workplace. Technology has changed the way people learn and work. People also interact with others from different social and cultural backgrounds. In such situations, knowledge alone may not be enough. Individuals need to know how to use their knowledge in practical situations. They also need to adapt when circumstances change.

The idea of global skills is closely related to the wider discussion of twenty-first-century skills. Trilling and Fadel (2009) highlighted skills such as creativity, critical thinking, communication and collaboration. The Partnership for 21st Century Skills (2009) also identified creativity, communication, collaboration and critical thinking as important areas for learners. The OECD (2019) has similarly emphasised the knowledge, skills and attitudes needed to participate effectively in a changing world. For teachers, these skills have particular importance. Teaching involves more than delivering subject content. Teachers need to understand learners, communicate with them and work with colleagues. They may also need to use digital tools and deal with new educational requirements. They need to reflect on their own practice and continue learning. These demands show why teacher education should address a wider range of skills.

The Global Skill Taxonomy developed by Baidya and Srivastava (2025) provides a framework for looking at these skills among prospective teachers. It includes eight key domains. Each domain represents an important area of personal, educational or professional development.

I) Cognitive skills

Cognitive skills help individuals understand information, analyse situations and make decisions. For prospective teachers, these skills can support lesson planning, problem-solving and classroom decision-making. Teachers need to understand a situation before deciding how to respond to it.

II) Interpersonal skills

Interpersonal skills are related to interaction with other people. They include communication, cooperation and the ability to maintain positive relationships. Teachers need these skills when working with learners, colleagues, parents and members of the community.

III) Intrapersonal skills

Intrapersonal skills concern an individual's understanding of their own thoughts, feelings and abilities. Self-awareness and self-management are important parts of this area. A teacher who understands their own strengths

and limitations may be better able to reflect on and improve their professional practice.

IV) Global citizenship

Global citizenship involves awareness of social responsibilities and respect for people from different backgrounds. Teachers have an important role in developing respect, inclusion and responsible participation among learners. This makes global citizenship relevant to teacher education.

V) Innovation and creativity

This domain focuses on the ability to develop ideas and explore new approaches. Teachers may need to find different ways to explain a topic or respond to a classroom problem. Creative thinking can therefore contribute directly to this domain.

VI) Self-paced learning

Education does not end with formal teacher training. Teachers need to continue learning throughout their careers. Self-paced learning involves taking responsibility for one's own learning and development. It can help teachers respond to new knowledge, technologies and professional requirements.

VII) Technological skills

Technology is now an important part of education. Teachers may use digital resources for teaching, communication, assessment and professional development. Technological skills help them use these resources effectively and responsibly.

VIII) Leadership

Teachers often take leadership roles in classrooms and schools. Leadership involves more than giving instructions. It can include guiding learners, taking responsibility, making decisions and working towards common goals. Developing leadership skills can therefore strengthen professional confidence among prospective teachers.

These eight domains are closely connected. They should not be viewed as completely separate areas. A teacher may use cognitive skills to understand a classroom problem, interpersonal skills to discuss it with learners and technological skills to find suitable resources. Creative thinking may then help the teacher develop an alternative solution.

Global skills should therefore be understood as a combination of abilities. They help individuals use knowledge in practical situations and respond to changing needs. For prospective teachers, these skills can connect teacher education with the realities of classroom practice. Developing them may help future teachers become more flexible, responsible and prepared for their professional roles. The Global Skill Taxonomy provides a useful way of viewing this broader preparation. It recognises that effective teachers need more than subject knowledge. They also need the ability to think, communicate, learn, adapt and lead. Within this broader framework, creative thinking can have an important role. It may support several of the other skill domains and help prospective teachers respond to new educational challenges.

4. Global Skill Taxonomy and Teacher Education

Teacher education has an important role in preparing future teachers for the realities of the classroom. Subject knowledge is necessary, but it is not enough. Teachers also need to communicate with learners, manage classroom situations, use technology and work with other people. They need to make decisions and respond to changing educational needs. These requirements show the need for a broader approach to teacher preparation. The idea of a Global Skill Taxonomy provides one way of looking at this broader preparation. Baidya and Srivastava (2025) developed the Global Skill Taxonomy Inventory to assess a range of skills among prospective teachers. The taxonomy includes eight domains. These are cognitive, interpersonal, intrapersonal, global citizenship, innovation and creativity, self-paced learning, technological skills and leadership. Together, these domains provide a broad view of the abilities that may support personal and professional development.

The cognitive domain is important because teachers regularly need to understand information and make decisions. A teacher may need to identify why a learner is having difficulty with a topic. The teacher may then have to decide whether to change the teaching method, provide additional support or use another learning resource. Cognitive skills can help teachers examine such situations carefully.

The interpersonal domain is equally important. Teaching is based on interaction. Teachers communicate with learners every day. They also work with colleagues, parents and school authorities. Good interpersonal skills

can help teachers listen to others, express their ideas clearly and maintain positive relationships. These skills may also contribute to a supportive classroom environment.

The intrapersonal domain focuses on the individual's understanding of their own thoughts, feelings and abilities. Teachers need to reflect on their own work. They may need to recognise their strengths and identify areas where improvement is required. Self-awareness can support professional growth. It can also help teachers manage difficult classroom situations in a more thoughtful way.

The global citizenship domain has become increasingly relevant to education. Classrooms include learners with different experiences, backgrounds and perspectives. Teachers need to promote respect and inclusion. They can also help learners understand their responsibilities towards other people and society. Teacher education can provide opportunities to discuss social responsibility, diversity and responsible participation.

The innovation and creativity domain is closely related to the present conceptual paper. Teaching does not always follow a fixed pattern. A method that works well in one classroom may not produce the same result in another. Teachers may need to modify an activity or develop a different approach. Creative and innovative thinking can help prospective teachers respond to such situations.

The self-paced learning domain recognises that teacher learning continues after formal training. Educational knowledge and practices keep changing. New technologies and teaching approaches also emerge. Teachers therefore need to take responsibility for their own professional learning. They may learn through reading, training programmes, online resources, professional discussions or classroom experience.

The technological skills domain has become an important part of teacher preparation. Digital tools can support teaching, assessment, communication and access to learning resources. However, simply knowing how to operate a device is not enough. Teachers need to understand how technology can be used meaningfully in the learning process. Teacher education programmes can help prospective teachers develop this understanding through practical activities.

The leadership domain is also relevant to the teaching profession. Teachers may take responsibility for classroom activities, school programmes and collaborative work. They may also guide learners during group tasks or projects. Leadership does not always mean holding a formal position. It can involve taking responsibility, making decisions and helping others work towards a common goal.

The eight domains are closely related. Developing one area may support another. For example, a prospective teacher may use cognitive skills to understand a classroom problem. Interpersonal skills may help in discussing the problem with learners. Creative thinking may then help in finding a suitable solution. Technological skills may provide additional resources. Intrapersonal skills can help the teacher reflect on whether the solution was effective. This connection is important for teacher education. Skill development should not be treated as a collection of separate activities. Prospective teachers need opportunities to use different skills together. A project, for example, can involve planning, communication, teamwork, creativity and technology. A classroom simulation can involve decision-making, problem-solving and interpersonal interaction. Such activities can make skill development more connected to real teaching situations.

Teacher education programmes can also create a supportive environment for developing these skills. Lectures remain useful for building theoretical knowledge. However, practical experiences are also necessary. Group work, school-based activities, teaching practice, discussions and reflective tasks can provide opportunities to apply knowledge. Prospective teachers can learn from both successful experiences and mistakes. The Global Skill Taxonomy is useful in this context because it presents a broad view of teacher development. It does not place attention on one ability alone. Instead, it recognises different areas that may contribute to effective professional functioning. This approach is consistent with the changing expectations of the teaching profession. Creative thinking has a special place within this framework. It is directly represented in the innovation and creativity domain. At the same time, it may support other domains. A creative approach can help a teacher solve problems, develop learning activities, use technology in new ways and respond to different learners. This suggests that creative thinking may act as a connecting ability within broader skill development.

Therefore, teacher education should provide more opportunities for prospective teachers to practise and apply these skills. The aim should not be only to produce teachers who know their subjects. It should also be to prepare teachers who can think independently, communicate effectively, adapt to change and take responsibility for their professional growth. The Global Skill Taxonomy offers a useful conceptual basis for moving towards this broader approach to teacher preparation.

5. Conceptual Relationship between Creative Thinking and Global Skills

Creative thinking and global skills are different concepts, but they are closely connected. Creative thinking mainly concerns how a person generates ideas, considers possibilities and responds to problems. Global skills cover a wider range of abilities. They include thinking, communication, self-awareness, learning, technology, leadership and social responsibility. The connection between the two becomes important when considering the preparation of prospective teachers. Teaching involves many situations that cannot always be managed through a fixed set of rules. A teacher may prepare a lesson carefully, but the actual classroom situation may be different. Learners may respond in unexpected ways. Some students may not understand the lesson. Others may need additional support or a different explanation. In such situations, teachers need to consider alternatives. Creative thinking can help them do this.

One important connection is between creative thinking and cognitive skills. Cognitive skills involve understanding information, analysing situations and making decisions. Creative thinking adds another dimension to these processes. It encourages a person to consider more than one possible response. For example, if a group of learners is struggling with a particular topic, a teacher may first identify the problem. The teacher may then think of several possible approaches. These may include using examples, demonstrations, group activities or digital resources. The ability to generate and compare different options reflects the connection between cognitive and creative processes. Creative thinking is also related to problem-solving. Although problem-solving is not a separate domain in the Global Skill Taxonomy, it is relevant to several domains, especially cognitive skills and innovation and creativity. Teachers face practical problems regularly. They may have limited resources, different learning levels or time constraints. A creative approach does not guarantee a perfect solution. However, it can help teachers avoid depending only on familiar methods.

Another important connection is between creative thinking and interpersonal skills. Creativity is sometimes viewed as an individual activity. In education, however, creative ideas can develop through interaction with others. Discussions, group work and collaborative activities expose prospective teachers to different viewpoints. Listening to another person's idea may lead to a new idea. In the classroom, teachers also need to understand how learners respond to different activities. Good interpersonal skills can therefore support the use of creative approaches. Creative thinking may also contribute to intrapersonal development. A person who tries different approaches needs some level of self-awareness and confidence. Prospective teachers may sometimes hesitate to use unfamiliar methods because they are worried about making mistakes. A supportive learning environment can reduce this hesitation. Reflection can also help them understand what worked, what did not work and what could be changed. In this way, creative practice and self-awareness can develop together.

The relationship between creative thinking and global citizenship is also worth considering. Global citizenship involves respect for diversity, social responsibility and awareness of wider social issues. Creative thinking can help teachers look at social and educational issues from different perspectives. For example, a teacher may need to consider how a learning activity can include students with different backgrounds and abilities. Instead of using the same approach for everyone, the teacher may explore ways to make participation more inclusive. The strongest conceptual connection can be seen between creative thinking and the innovation and creativity domain. Innovation often begins with an idea. Creative thinking helps individuals generate and develop such ideas. In teacher education, this may involve creating new learning activities, adapting teaching materials or finding different ways to use available resources. Innovation does not always require expensive technology or completely new teaching methods. It can also involve a simple change that makes learning more meaningful.

Creative thinking also has a relationship with self-paced learning. Teachers cannot depend entirely on what they learn during their formal training. They need to continue learning throughout their careers. When teachers encounter a new educational issue, they may need to search for information and explore different approaches. Creative thinking can encourage curiosity and openness to new possibilities. It can therefore support a more active approach to professional learning. The connection with technological skills is particularly relevant in the present educational environment. Digital tools have changed the ways teachers prepare lessons, communicate with learners and provide learning resources. Technology itself does not automatically make teaching creative. The teacher needs to decide how it can be used meaningfully. Creative thinking may help prospective teachers explore different uses of digital resources. For example, a digital presentation can be combined with interactive questions, collaborative tasks or student-created content.

Creative thinking can also support leadership. Teachers often need to take initiative. They may organise activities, guide students and work with colleagues. Leadership also involves dealing with challenges and making decisions. A teacher who can consider different possibilities may be better prepared to respond when a planned activity does not work as expected. Creative thinking can therefore contribute to flexible and

responsible leadership. The relationship between creative thinking and global skills can also be understood through the idea of adaptability. Educational environments are not static. Curriculum requirements, technologies and learner needs may change. Teachers need to adjust to these changes. Creative thinking can help them look for alternative ways of working. It may reduce dependence on routine practices and encourage a willingness to try something different.

However, it is important not to assume that creative thinking alone develops all global skills. Global skills are influenced by many factors. Communication skills require practice and interaction. Technological skills require access to appropriate tools and training. Leadership develops through responsibility and experience. Similarly, global citizenship requires awareness and meaningful engagement with social issues. Creative thinking can support these areas, but it cannot replace them. The relationship can therefore be viewed as interactive rather than one-directional. Creative thinking may contribute to global skill development, while a rich learning environment may also encourage creative thinking. For example, collaborative learning can develop interpersonal skills and provide opportunities to exchange ideas. This interaction can lead to new ways of thinking. Similarly, practical use of technology can provide new opportunities for creative expression.

The role of teacher education is important in creating these conditions. Prospective teachers need opportunities to practise different skills together. A lecture may provide theoretical knowledge, but practical tasks can help them apply that knowledge. Projects, teaching simulations, group activities, case discussions and problem-based tasks can bring several skill areas together. Such experiences may help prospective teachers understand that teaching requires a combination of abilities. The conceptual relationship can be summarised through a simple process. Creative thinking can help prospective teachers generate ideas and consider alternatives. These abilities can support problem-solving, innovation and flexible decision-making. Through practice, these processes may contribute to wider skills such as communication, collaboration, technological application, learning and leadership. The development of these skills can then improve professional readiness.

This relationship is particularly relevant to prospective teachers because they are still developing their professional identity. Teacher education provides a period in which they can experiment with different approaches before entering the profession. If they are given opportunities to think creatively, reflect on their experiences and work with others, they may become more comfortable with uncertainty and change. The conceptual link between creative thinking and global skills also supports a broader view of teacher quality. A competent teacher is not simply a person who has strong subject knowledge. Effective teaching also requires the ability to understand learners, communicate ideas, solve problems and adapt to changing circumstances. Global skills provide a framework for these broader abilities, while creative thinking may help prospective teachers use them in flexible ways.

Overall, creative thinking can be viewed as an important supporting element within global skill development. It does not operate separately from other skills. Instead, it can interact with cognitive, interpersonal, intrapersonal, technological and leadership abilities. This relationship provides a useful basis for considering how teacher education programmes can prepare prospective teachers for the practical and changing demands of teaching.

6. Creative Thinking as a Foundation for Global Skill Development

Creative thinking can provide a useful foundation for developing wider skills among prospective teachers. It does not work alone. It can support other abilities when learners are given suitable opportunities to practise and apply their ideas. In teacher education, this is especially important because prospective teachers need to prepare for classrooms that are diverse and constantly changing. One of the main contributions of creative thinking is its role in **problem-solving**. Teachers face different kinds of problems in their daily work. A learner may not understand a lesson. A planned activity may not produce the expected response. Classroom resources may also be limited. Creative thinking can help prospective teachers consider several possible ways of dealing with such situations. They can examine the problem, generate alternatives and select an approach that appears suitable.

Creative thinking can also support **innovation and creativity**. Innovation does not always mean introducing something completely new. A small change in an existing teaching practice can also be useful. For example, a prospective teacher may modify a group activity to encourage greater participation. They may use a familiar learning resource in a different way. Such experiences can help them understand that innovation can be practical and simple. Another important area is **cognitive development**. Creative thinking encourages individuals to consider different possibilities. This can support analysis and decision-making. Prospective teachers may need to examine a classroom situation before deciding how to respond. They may also need to compare different teaching strategies. The ability to think beyond the first possible answer can help them make more informed choices. Creative thinking can also contribute to **interpersonal skills**. Many creative activities involve

interaction with other people. Group discussions and collaborative projects allow prospective teachers to hear different opinions. They may agree with some ideas and disagree with others. Such experiences can teach them to listen, communicate and work towards a common goal. These abilities are important for teachers because teaching is highly interactive. There is also a connection between creative thinking and **intrapersonal skills**. Prospective teachers need to understand their own strengths, limitations and learning needs. Creative work often involves trying, reviewing and changing an idea. This process can encourage reflection. A prospective teacher may ask whether an activity worked well and what could be improved. Such reflection can support self-awareness and professional growth. Creative thinking may also strengthen **self-paced learning**. Teachers need to continue learning after completing their formal training. New technologies, teaching methods and educational policies can change over time. A teacher who is willing to explore new ideas may be more prepared to learn independently. Creative thinking can encourage curiosity and a willingness to look for different sources of knowledge. The role of creative thinking in **technological skill development** is also worth considering. Technology provides many tools for teaching and learning. However, effective use of technology requires more than technical knowledge. Teachers need to think about how a tool can support a particular learning purpose. Creative thinking can help prospective teachers explore different ways of using digital resources. It can also encourage them to combine technology with discussion, collaboration and practical activities. Creative thinking may further support **leadership development**. Teachers often need to take initiative and make decisions. They may organise activities, guide learners or participate in school programmes. Leadership can become difficult when situations do not go according to plan. Creative thinking can help teachers consider alternative actions. It can also encourage them to remain flexible instead of becoming dependent on one approach. Another important area is **global citizenship**. Teachers work with learners from different social and cultural backgrounds. They need to encourage respect and understanding. Creative thinking can help prospective teachers consider issues from different viewpoints. It may encourage them to think about how classroom activities can be made more inclusive. This can support a learning environment where different experiences and opinions are respected. Creative thinking can also contribute to **adaptability**. Educational settings are influenced by social changes, technology and new expectations. Prospective teachers may enter classrooms that are different from the ones they experienced as students. They need to adjust their teaching according to the needs of their learners. Creative thinking can help them consider alternative methods when familiar approaches are not effective.

However, creative thinking should not be treated as a single solution for developing all global skills. Different skills require different forms of practice. Technological skills need access to technology and practical training. Interpersonal skills need interaction and collaboration. Leadership requires opportunities to take responsibility. Global citizenship requires awareness and engagement with social issues. Creative thinking can support these areas, but it needs to work together with other forms of learning. Teacher education programmes can therefore use creative thinking as part of a wider approach to skill development. Prospective teachers can be given real or simulated classroom problems. They can be asked to suggest several solutions and discuss the strengths and limitations of each one. They can also design learning activities, work in groups and reflect on their experiences. Such tasks can bring several global skill areas together. The main value of creative thinking lies in its flexibility. It encourages prospective teachers to ask, **“Is there another way?”** This simple question can lead to further exploration. It can help teachers move beyond routine practices and respond to learners more thoughtfully.

Thus, creative thinking can serve as a foundation for wider global skill development. It can support problem-solving, innovation, communication, learning, technology use and leadership. When combined with practical experience and reflection, it may help prospective teachers become more confident in dealing with changing educational situations. This makes creative thinking an important part of a broader approach to teacher preparation.

7. Implications for Prospective Teacher Education

The relationship between creative thinking and global skills has several implications for teacher education. Prospective teachers need more than subject knowledge. They also need skills that help them understand learners, solve problems and respond to changing classroom situations. Teacher education programmes can provide a suitable space for developing these abilities.

First, **creative activities should be included in regular teacher education**. Creativity should not be treated only as an additional activity. Prospective teachers can be given open-ended tasks, classroom problems and project work. Such activities can encourage them to generate different ideas and consider alternative solutions.

Second, **practical learning should receive greater attention**. Prospective teachers can learn many skills through actual teaching experiences. Teaching practice, classroom observation and simulations can help them understand how different approaches work. They can also reflect on their experiences and identify areas for

improvement.

Third, **collaborative learning can support skill development**. Group discussions and projects allow prospective teachers to interact with others. They can exchange ideas and learn to consider different viewpoints. Such experiences can strengthen communication and interpersonal skills.

Fourth, **technology should be used meaningfully**. Teacher education programmes can provide opportunities to use digital tools for lesson planning, teaching, assessment and communication. Prospective teachers should also be encouraged to explore different ways of using technology rather than simply learning how to operate digital tools.

Fifth, **reflection should be part of teacher preparation**. Prospective teachers can be encouraged to reflect on their teaching experiences. They can ask what worked, what did not work and what could be changed. Reflection can support intrapersonal skills and encourage continuous learning.

Teacher educators also have an important role. They can create classrooms where questions, discussion and new ideas are welcomed. Prospective teachers should feel comfortable expressing their views and learning from mistakes. Such an environment can encourage creative thinking. Overall, teacher education should move towards a broader approach to professional preparation. Creative thinking, communication, collaboration, technology, leadership and other global skills can be developed together. This approach may help prospective teachers become more flexible and confident. It can also prepare them for the changing needs of contemporary classrooms.

8. Proposed Conceptual Framework

The discussion in this paper suggests that creative thinking can play an important role in the development of global skills among prospective teachers. The proposed framework presents this relationship in a simple way. It does not suggest that creative thinking is the only factor responsible for global skill development. Instead, it is viewed as one important element within a wider process. At the centre of the framework is creative thinking. It includes the ability to generate ideas, consider different possibilities and develop alternative responses. These abilities can help prospective teachers deal with classroom problems and changing educational situations. Creative thinking may first influence cognitive processes. Prospective teachers can use different ideas to understand a problem and consider possible solutions. It may also support innovation and creativity, as teachers explore new approaches to teaching and learning. The framework also connects creative thinking with interpersonal and intrapersonal skills. Group activities can help prospective teachers exchange ideas and understand different viewpoints. Reflection can help them understand their own strengths and areas for improvement.

Creative thinking may further support self-paced learning and technological skills. Prospective teachers can explore new information and find different ways of using digital resources. It may also contribute to leadership, as teachers need to take initiative and make decisions in changing situations. The framework includes global citizenship as another important area. Creative thinking can help prospective teachers consider different social and cultural perspectives. This may encourage more inclusive and responsible approaches to teaching. The proposed relationship can therefore be represented as:

Creative Thinking → Exploration of Ideas and Alternatives → Application in Different Situations → Development of Global Skills → Professional Readiness

The framework assumes that these relationships are influenced by the learning environment. Supportive teacher education, practical experiences, collaboration and reflection can strengthen the process. Overall, the framework presents creative thinking as a connecting element. It can interact with different global skill domains and support the broader preparation of prospective teachers.

9. Challenges and Considerations

Although creative thinking can support global skill development, there are several challenges that need attention. Developing these skills cannot be achieved through one activity or one course. It requires regular practice and support throughout teacher education. One major challenge is the traditional approach to teaching and learning. Many teacher education settings still give greater attention to lectures, examinations and the reproduction of information. Such practices may provide useful knowledge, but they may offer fewer opportunities for creative thinking. Prospective teachers need opportunities to ask questions, discuss ideas and explore different solutions. Another challenge is limited time. Teacher education programmes have several

academic requirements. Prospective teachers need to complete theoretical courses, assignments and teaching practice. Adding more activities may seem difficult. Therefore, creative thinking and global skills should be integrated into existing courses rather than treated only as additional work.

Teacher preparedness is another important issue. Teacher educators also need to understand how creative thinking and global skills can be developed. They may require suitable training and resources to use open-ended tasks, collaborative learning and problem-based activities effectively. There can also be differences in access to technology and learning resources. Not all institutions have the same facilities. Some prospective teachers may have better access to digital tools than others. Teacher education programmes should therefore avoid depending entirely on technology. Low-cost and classroom-based activities can also support creativity and skill development. Assessment presents another challenge. Traditional examinations often focus on correct answers. Creative thinking may involve several possible responses. Global skills such as collaboration, leadership and communication are also difficult to assess through written examinations alone. Teacher education institutions may need to use projects, presentations, portfolios, observations and reflective tasks along with conventional assessments.

Individual differences should also be considered. Prospective teachers may have different levels of confidence, previous experiences and learning preferences. Some may readily share ideas, while others may need more encouragement. A supportive environment can help ensure that all learners get opportunities to participate. Finally, creative thinking should not be presented as a solution to every educational problem. Global skills develop through several influences. Family background, educational experiences, social interaction, institutional support and professional opportunities may also play a role.

Therefore, the development of creative thinking and global skills requires a balanced approach. Teacher education programmes need suitable activities, supportive educators and appropriate assessment methods. They also need to consider the resources and context of each institution. A gradual and practical approach may be more useful than introducing too many new requirements at once.

10. Conclusion

The changing nature of education has increased the need for teachers who can do more than deliver subject knowledge. Teachers work with learners who have different abilities, interests and backgrounds. They also face changes in technology, curriculum and classroom practices. These conditions require a wider range of skills. Creative thinking and global skills can both contribute to this broader preparation. This conceptual paper examined the possible relationship between creative thinking and global skills among prospective teachers. Creative thinking was discussed in terms of fluency, flexibility and originality. These abilities can help prospective teachers generate ideas, consider different possibilities and find alternative ways of dealing with classroom situations. Creative thinking can therefore be useful in teaching, problem-solving and professional decision-making.

The paper also discussed the Global Skill Taxonomy developed by Baidya and Srivastava (2025). The taxonomy includes eight domains: cognitive, interpersonal, intrapersonal, global citizenship, innovation and creativity, self-paced learning, technological skills and leadership. These domains provide a broad view of the skills that prospective teachers may need for their professional and personal development. The discussion suggests that creative thinking can support several of these domains. It can help prospective teachers approach problems from different perspectives. It may also support innovation, communication, learning, technology use and leadership. However, creative thinking should not be viewed as the only factor behind global skill development. These skills are influenced by many factors. Practical experience, social interaction, institutional support and opportunities for learning also have an important role.

Teacher education programmes can create better conditions for developing these skills. Prospective teachers can be given opportunities to participate in projects, group activities, classroom simulations and problem-based tasks. Open-ended activities can encourage them to explore different ideas. Reflection can help them understand their own learning and improve their practice. The proposed conceptual framework places creative thinking at the centre of a wider process of skill development. It suggests that creative thinking can help prospective teachers explore ideas and alternatives. These abilities can then be applied to different educational and professional situations. With appropriate support, this process may contribute to broader global skills and professional readiness. The paper also recognises several challenges. Limited time, traditional teaching practices, unequal access to resources and conventional assessment methods may restrict opportunities for skill development. These challenges need to be considered when designing teacher education programmes.

Overall, creative thinking should be treated as an important part of teacher preparation. It should work

alongside communication, collaboration, technological skills, leadership and other global skills. A balanced approach can help prospective teachers become more flexible and confident. It may also prepare them to respond more effectively to the changing needs of learners and the teaching profession.

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