

An Analysis of Documents: Insights into the Future Role of Teachers in Education

Khureltogoo Majigsuren^(⊡)

Mongolian National Institute for Educational Research, Ulaanbaatar, Mongolia khureltogoo@mier.mn

Abstract. Education is undergoing significant changes due to the widespread penetration of digitalization in all sectors of the country. To examine the evolving role of teachers in future education, this analysis focuses on policy documents and reports issued by UNESCO, as well as research materials from foreign countries in this field. This examination is particularly pertinent to the implementation of teaching practices in the field of education in Mongolia. In the process of analysing these documents, a content analysis was performed, with a specific focus on identifying indicators related to the role of teachers. The outcome of this analysis has enabled us to discern seven key areas in which the future teacher's functions will be crucial: 1) possessing extensive scientific and pedagogical knowledge; 2) proficiency in 21st-century skills, allowing teachers to serve as role models; 3) implementing personalized learning strategies tailored to each student's needs; 4) breaking down the traditional barriers between teacher and student, creating a free and open learning environment; 5) ensuring inclusive education, providing equal opportunities to all students; 6) cultivating qualities such as warmth, fairness, understanding of children, respect for student independence, and serving as moral exemplars; 7) emphasizing collaborative learning by building relationships with various social groups, extending learning beyond the classroom, participating in educational discussions, and advocating for societal change. In light of the findings from this research, we recommend that current educational practices, which often centre around teacher-led instruction, be adapted to incorporate the functions of future education teaching. This adaptation should occur at various levels of the education system, including education governing bodies such as the General Department of Education, the Education Evaluation Centre, and teacher training universities.

Keywords: Future of education · Teaching · Future citizen · Learning · Skills · Attitudes

1 Introduction

As the world hurtles into the digital age, the pervasive influence of artificial intelligence and digitization across all fields promises a wave of unprecedented discoveries, even in disciplines such as neuroscience. This surge will not only supplant low-skilled jobs but also engender entirely new industries, ushering in a transformed way of life. Consequently, citizens can no longer adhere to the paradigms of the previous industrial society; they must acquire fresh skills and competencies. Traditionally, education was exclusively tailored for school-age children and youth, typically in formal settings. However, society is transitioning towards a learner-centric paradigm, where the authority to learn shifts from the teacher to the students. Throughout their lives, individuals can now select the content and methods that align with their needs and interests. This transition prompts crucial questions: How should teaching be orchestrated in this new landscape to empower citizens for active and continuous learning, and how must the role of the teacher evolve? Rethinking the role of teachers is pivotal for realizing educational reforms. Teachers must recognize themselves as not only dispensers of knowledge but as dynamic agents shaping both education and society [1].

In the impending future, the conventional model of educators merely disseminating information, fostering memorization, and encouraging replication will become obsolete. Instead, artificial intelligence (AI) will be adept at tailoring instruction to each student's unique learning style. The teacher's role will pivot towards facilitating education and nurturing students' capacities for innovative thinking, a realm where artificial intelligence falters, as well as fostering crucial soft skills like empathy and collaborative ideation [2].

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This metamorphosis mandates a reevaluation of instructional methods, curriculum design, and teacher professional development training, necessitating teachers to assume roles as mentors, tutors, coaches, and guides, and to uphold the highest standards of professionalism [3]. Anticipating the age of artificial intelligence, teachers will require not just technical proficiency, but also a profound grasp of humanistic and artistic domains [4]. A report emphasizes the criticality of teachers' adaptability to societal shifts and their schools' responsiveness to change, asserting that the more attuned they are to these transformations, the more effectively they can meet the evolving demands on education and schools, including swiftly evolving technologies and diverse learner needs [5]. Future educators are expected to be not only adept instructors but also caring figures who lend an empathetic ear, instill self-assurance, and truly understand and believe in their students. These attributes align with the principles of effective teacher-student relationships [UB 2005].

With this in mind, this study delves into the evolving role of teachers in bolstering the quality of education and propelling social development. Recognizing the potential seismic impact of this shift, we investigated how changes in the role of teachers could catalyze the actualization of educational reforms.

2 Research Methodology

In conducting this research, an initial exploration was undertaken within the Google environment using the keyword "Teacher's role". Subsequently, pertinent sections pertaining to the role of teachers were curated from seven policies, research materials, and reports. Additionally, recent policy documents and research reports disseminated by UNESCO were surveyed, focusing on segments relevant to the role of teaching. Specifically, UNESCO's publications "Reimagining our futures together: a new social contract for education" (2021) and "Rethinking Education" (2017) were referenced for this purpose. From the accumulated materials, key content regarding the role of teachers was discerned and subjected to a content analysis approach akin to meta-analysis. This process led to the categorization of results related to the teaching function into seven distinct classifications, with each category representing the core significance of the content analyzed. This analysis is instrumental in elucidating the transformative evolution of the teaching role.

3 Findings and Discussion

In contemplating the shifts in the teacher's role, it is imperative to consider the implications for citizens inhabiting future societies. This reflection is grounded in the definitions and insights provided by policy and research reports issued by notable institutions such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Organization for Economic Co-operation and Development (OECD).

Outlined below is a selection of content derived from UNESCO's policy documents and reports, illuminating perspectives on how the role of the teacher is conceptualized.

Table 1. Content Pertaining to the Role of the Future Teacher	
Name of document	Content related to the role of the future teacher
UNESCO, (2021) Reimagining our future together A New Deal for the Education Society	"Teacher understanding himself/herself as a producer of knowledge, a subject who changes education and society", "cooperation and teamwork", "self-monitoring", "research is a part of the teacher's activity", "participation in public interviews and discussions about the future of education"
UNESCO, (2021) The Future of Education International Center for the Future of Education Progress Report	"transforming the lesson into a collective inquiry", "directing the teacher to learner-led learning rather than the content provided by the teacher", "developing problem-based and project-based activities", "teacher team cooperation as a model of educational unity", "educational organization", participate in cooperation activities with other organizations"
UNESCO, (2017) Rethinking Education	"To be a guide to help throughout life from an early age", "not to lower the professional level of teachers", "to have deep knowledge of the content and teaching methods", "to be an academic expert", "to make the classroom a peaceful and mutually respectful environment" ", "encouraging students' independence and self-respect", "using a variety of teaching methods", "communicating effectively with parents and the community", "cooperating for the benefit of the school", "working as a team with other teachers", "knowing about your students and their families", "conducting training activities in accordance with the situation of their families", "selecting content and materials relevant to the situation", "effectively using the selected content and materials to develop the student's skills and abilities", "using technology",
Only such teachers will exist in the society of the future	Helping students make plans", "team of teachers monitor and evaluate children's progress and actions", "coordinating the learning community", making students understand that learning is the student's responsibility and should be controlled by himself/herself, "parents, many organize and direct daytime and evening learning activities with the public (facilitators)

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"cooperating with children on implementation in (learning park)", "helping students monitor their own progress", "being a project manager who acts as a bridge between the school and the enterprise organization"

"Teachers with practical experience in the field of counseling psychology will play the role of coaches", "give advice to each child individually and guide them according to the learning route of each child", "supporting the teacher team in the field of learning psychology"

"Planning learning by experience events", "planning and organizing small schools within schools and learning circles", "minimizing risks and dangers", "developing an adventurous spirit to try new innovations"

"Helping all children, regardless of their background, realize their potential", "be confident that all children can learn successfully", "teachers should have a growth mindset", "reduce differences in academic achievement", " be a person who has high morals and practices with it" "Understands children" (what they do outside of school, how they live, how they study at home, what they are interested in, what difficulties their parents are facing, what is the problem with the child's learning, the knowledge needed to support the child with what he/she needs have the ability to communicate well with children, have a high social and sensory skills, to know how to regulate emotions, master technology, have a good communication skills, and be a person with high social, sensory, and communication skills. , "establish mutual understanding and cooperation and partnership with families and other social groups", "warm-hearted", "leads others in the implementation of right and justice", "sets an example for others", "creates positive change for all children", "makes a difference" to reduce inequality", "to strive every day, every moment, any day now to eliminate inequality", "to be able to respond to the diversity of each child", "to have social and emotional competence", "to controlling your thoughts", "non-violent communication", "continuous learning", "providing evidence-based guidance based on case studies"

To develop creative thinking: "creating an open atmosphere", "creating an environment that accepts ambiguous and unclear things", respecting the thoughts of the learner", "encouraging to ask questions", "not creating an attitude that negatively affects the answers to questions", "not to compare the value of the student's work with other students in the region", "to create a new system by breaking the previous system that you know", "to be flexible", "to adapt to a different environment", "not to be bound by principles", "to develop the mindset of the related field" have basic knowledge", "creative thinking occurs in the field of which you know best and have the most experience", "have basic knowledge about the field", "accumulate a lot of experience about the field", "praise, recognize and encourage the student's actions", " to realize that the more creative practice is done, the further it will be the key to creating a creative person.

Determining the role of the future social teacher, the Ministry of Education, Culture and Science of South Korea (1994)

To develop critical thinking: to improve the ability to scrutinize patterns by raising questions about things, to "debate the causes of problems", to "lay the foundations of a way of thinking about why";

In order to guide the research: "to understand the method used to discover new concepts and new systems of phenomena rather than memorizing the contents of the science ", "to be interested in systematically searching to establish new concepts by understanding the importance of the knowledge of the science", "to teach the method of discovering new knowledge" ",

To become an expert in the field of research: "to learn how to get information from where and how to get it into our hands", "to guide how science and technology is related to our lives", "to practically apply the development, changes and trends of science and technology in the educational environment"

In order to make the student have a dream and a vision: "Only a person with a dream becomes the main hero of the historical period", "to instill the attitude of striving to create new things", "education is to instill vision and dreams in students"

Based on the above content, the role of teachers in the 21st century can be categorized as follows, in accordance with the key ideas pertaining to their functions. In the creation of these categories, we refer to the duties outlined in the Law on Primary and Secondary Education. According to this legislation, a teacher is mandated to "respect ethical standards," "cultivate respect for and adherence to the law among students," "enhance their professional proficiency," engage in "collaborative activities with students," and "assist parents in resolving challenges encountered by students during their learning." Additionally, teachers are expected to "provide counsel to guardians," "collaborate with parents and guardians in safeguarding the welfare of children," and "ensure compliance with educational, labor, and safety standards." Some of these responsibilities align with the current duties of educators.

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Scope of the teacher's duties	Content related to the role of the future teacher
Have a high level of science and teaching knowledge	 In-depth knowledge of science and teaching, learning content and teaching methods, To improve the ability to scrutinize regularities by asking questions, Debate the cause of the problem, To lay the foundations of the way of thinking Transform the lesson into a collaborative quest Create your own system by breaking the previous system you know Training in the method of discovering new knowledge Cultivating an adventurous spirit to challenge new innovations Provide evidence-based guidance based on case studies Gain experience in the field of planning events based on learning (learning by experience).
Have teaching skills	 To establish a good relationship with the child, to communicate in a non-violent manner, Mutual understanding and productive cooperation with family and other social groups Be able to control and control your emotions, thoughts and feelings High level use of technology, Coordinating multiple learning communities/learning communities, becoming a bridge between schools and educational institutions
Implement learning that is customized to each child	 To provide guidance suitable for each child's learning route, To make students understand that learning is the student's responsibility and should be controlled by himself Focusing on student-led learning rather than content given by the teacher, collaborating with children on what projects to implement, Be able to respond to the diversity of each child To help students monitor their own progress, to screen the child's progress and actions, and to give advice and evaluation To know about students and their families, and conduct teaching activities in accordance with the circumstances of their families
Create an open learning environment Provide equal opportunities to all students	 Creating an open atmosphere, Creating an environment that accepts ambiguous and unclear things, To respect the students' thoughts and independence, to encourage them to ask questions, and to create a peaceful, non-intimidating and mutually respectful environment that does not have a negative influence on the answers to questions. Do not compare the value of the student's work with the student in the area Helping all children, regardless of their background, realize their hidden potential, Strive every day, every moment, any day now to eliminate inequality and reduce disparities in academic achievement
Have values and a positive attitude	 Warm-hearted, leading others in the implementation of right and justice, be an example to others, Create positive changes for all children, understand the child (what they do outside of school, how they are, how they study at home, what they are interested in, what difficulties their parents are facing, what is the child's learning difficulty, what the child needs have the necessary knowledge to support them with things) Praising, recognizing and encouraging the student's actions To demonstrate that the cooperation of a team of teachers is a model of educational unity
Be involved	 Participating in public interviews and discussions about education, communication and collaboration with educational institutions and other organizations Teachers with practical experience in the field of counseling psychology will act as coaches

According to the preceding content, a teacher is viewed as a creator of knowledge, not merely a transmitter, but rather a dynamic force shaping both society and education. Here are the key facets that characterize this evolving role:

- 1. **Possession of Profound Scientific and Teaching Expertise**: In the era of knowledge and information, students are inundated with data. However, without a foundation rooted in empirical evidence, it falls to the teacher to furnish a rational elucidation of the veracity of knowledge. This demands a high level of teaching proficiency, especially when nurturing children's capacity for knowledge creation. This involves prompting questions, guiding explorations, engaging in debates on causal factors, encouraging experimentation, and instructing them in the art of research collaboration with teachers. It necessitates a pedagogical approach grounded in empirical evidence.
- 2. Establishment and Administration of Collaborative Partnerships: While traditional learning activities largely transpired within the classroom, effective engagement with various societal entities, including parents,

communities, and business organizations, has emerged as a crucial aspect of teaching. This extends to the execution of projects and activities in conjunction with these groups, mobilizing available resources for hands-on learning experiences.

- 3. Demonstration of Superlative Teaching Proficiency and Competence: In interactions with students, fellow educators, parents, and broader social circles, teachers must demonstrate an understanding of, respect for, and adept management of emotions. Such mastery of emotional intelligence not only facilitates efficacious responses to societal shifts and evolving student needs, but also models the skills requisite of future citizens.
- 4. Cultivation of an Open Learning Environment for Students: Fostering an atmosphere wherein students feel free to question, discuss, and debate is crucial in supporting their knowledge creation, critical thinking, introspection, and innovative ideation.
- 5. Exemplification of Positive Values and Morality: A teacher serves as a paragon for students, shaping them into upstanding individuals who uphold the essence of humanity. By dismantling the barrier between teacher and student, and by acknowledging the teacher's fallibility, a culture of mutual respect and principled conduct is fostered. This underscores the teacher's pivotal role as an exemplar for students to emulate.
- 6. **Customized Learning Approaches for Each Child**: We stand at a juncture where generic pedagogical approaches are no longer tenable. Instead of dictating content, the teacher's role lies in providing tailored support for each student's educational journey. This entails a genuine respect for student autonomy, affording them opportunities to collaborate with teachers in crafting content aligned with their interests and needs.
- 7. Ensuring Equal Educational Opportunities for All Students: In contemporary education, the concept of inclusivity has gained prominence. It necessitates a shift from the conventional focus on special needs, socially marginalized groups, and national minorities, towards an ethos of affording equal access to education for all. In endeavoring to expand these opportunities, teachers must recognize the unique characteristics and differences of each student, and guide them in a manner conducive to their individual growth.

4 Conclusion

In light of the documents analyzed, it is imperative that the 21st-century teacher tailors his/her approach to meet the individual interests, needs, and aptitudes of each student. This entails not only providing the platform for knowledge creation but also adeptly guiding them in diverse learning methodologies. Moreover, fostering an environment that encourages open communication between students and educators, devoid of apprehension, is paramount. Expanding the boundaries of learning spaces is equally crucial.

Additionally, the multifaceted role of the contemporary teacher extends to robust collaboration with various groups, possessing extensive scientific knowledge in their field, and exhibiting profound understanding and respect for both students and their families. The commitment to perpetual learning and the embodiment of moral and ethical values stand as cornerstones of this evolving role.

Given the rapid surge of digitalization and the transformative shifts permeating all sectors of society and student life, the conventional model of teacher-centric, lecture-based instruction within the confines of the classroom is no longer tenable.

References

- 1. UNESCO, "Reimagining our futures together: A New social contract for education," Mongolian National Commission of UNESCO, 2022.
- 2. E. Faure, "Learning to be The world of education today and tomorrow," Report of the International Commission on the Development of Education, Paris, 1972. [Online]. Available: https://unesdoc.unesco.org/ark:/48223/pf0000223222.
- 3. "AI 가 돕는 미래교육...'교사는 창의성 높이는 역할'," [Video]. https://www.youtube.com/watch?v=QvpjSxQ9aeM.
- 4. Tuya. U., et al., "Some results of document analysis of future trends in education," 2022.
- 5. 류성창, "미래 교사에게 요구되는 전문설과 역할," 2023. [Online]. https://happyedu.moe.go.kr/.
- 6. 박수정 충남대학교 8 교육학 교수, "교육의 대전환과 교사 역할의 변화," Edtech Korea, 2023.
- 7. "Law on Education of Mongolia."
- 8. "Law on Primary and Secondary Education of Mongolia."
- T. Valtonen et al., "Insights into Finnish first-year pre-service teachers' twenty-first-century skills," Educ. Inf. Technol., vol. 22, pp. 2055–2069, 2017. [Online]. DOI: <u>https://doi.org/10.1007/s10639-016-9529-2</u>
- S. Klemenz, "Learning opportunities in teacher education and proficiency levels in general pedagogical knowledge: new insights into the accountability of teacher education programs," Educ. Assess., Eval. Account., vol. 31, pp. 221–249, 2019. [Online]. DOI: <u>https://doi.org/10.1007/s11092-019-09296-6</u>

- G. Finger and B. Houguet, "Insights into the intrinsic and extrinsic challenges for implementing technology education: case studies of Queensland teachers," Int. J. Technol. Des. Educ., vol. 19, pp. 309–334, 2009. [Online]. DOI: <u>https://doi.org/10.1007/s10798-007-9044-2</u>
- C. Dignath, "Teachers' Beliefs About Inclusive Education and Insights on What Contributes to Those Beliefs: a Metaanalytical Study," Educ. Psychol. Rev., vol. 34, pp. 2609–2660, 2022. [Online]. DOI: <u>https://doi.org/10.1007/s10648-022-09695-0</u>
- J. Si, "Higher education teachers' professional well-being in the rise of managerialism: insights from China," Higher Educ., 2023. [Online]. DOI: <u>https://doi.org/10.1007/s10734-023-01056-2</u>
- G. Finger et al., "Developing Graduate TPACK Capabilities in Initial Teacher Education Programs: Insights from the Teaching Teachers for the Future Project," Asia-Pacific Edu Res., vol. 24, pp. 505–513, 2015. [Online]. DOI: https://doi.org/10.1007/s40299-014-0226-x
- M. Mladenović, "Adapting to online education: insights from computer science teachers," Discover Education, 2023. [Online]. DOI: <u>https://doi.org/10.1007/s44217-023-00060-z</u>

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