

Evaluating Pedagogical University Preparation for Educators of Tomorrow

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Abstract

The qualitative study explored how master's students in educational leadership in Azerbaijan perceive the future educator's profile. Through a group project, 163 students developed this profile, highlighting essential skills and qualities for engaging the new generation. One-on-one interviews provided insights into the adequacy of pedagogical university preparation, while thematic analysis revealed areas needing development, including emotional intelligence training, technology integration, educational trend alignment, and enhanced practical training. A review of BA program syllabi at various Azerbaijani universities focused on course inclusion, practical experiences, and theory integration. This analysis aimed to determine if foundational education aligns with student needs, identifying strengths and gaps in educator preparation. The study incorporated Complexity Theory in Education to analyze systemic behaviors and adaptations, addressed teacher burnout by examining its contributing factors, and explored a novel metaphorical model of teacher states – solid, liquid, and gas – to depict levels of adaptability and resilience. Additionally, the introduction of a hierarchical pyramid model helped to stratify the necessary competencies for future educators, providing a structured framework for analysis. The qualitative nature of this research may limit the generalizability of its findings, and further investigation with a larger and more diverse sample could provide a more comprehensive understanding of the issues discussed.

Keywords: Teacher Education, Educational Leadership, Complexity Theory, Teacher Burnout, Pedagogical Adaptation, Emotional Intelligence, Teacher Competencies, Curriculum Development, Teacher Profile

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Introduction

The preparation of educators for the 21st century is a worthwhile endeavor, necessitating not only an understanding of core teaching practices but also a readiness to face the complexities of an ever-changing educational landscape. In Azerbaijan, as in many parts of the world, the profile of an effective teacher is evolving to meet the demands of new generations of students who are growing up in a digitally connected, culturally diverse, and rapidly transforming society. As society traverses an era marked by digital integration and cultural pluralism, the pedagogical demands placed upon educators necessitate not only a solid foundation in traditional teaching methodologies but also proficiency in navigating the novel challenges presented by a diverse and dynamic student population. This research seeks to evaluate the pedagogical university preparation for educators of tomorrow, focusing on how well current programs equip prospective teachers with the skills, knowledge, and competencies needed for this new educational era.

Embracing Complexity Theory as a guiding framework (Morrison, 2008), the study explored the subtle nature of teacher education, acknowledging the systemic interactions and emergent behaviors that define the pedagogical ecosystem (Davis, 2008). The alignment of pedagogical syllabi with the evolving educational requisites necessitates an adaptive curriculum that not only imparts knowledge but also fosters the continuous professional development and resilience essential for the teachers of tomorrow (Martin et al., 2019). To reach these goals, the research focused on two main areas: first, it wanted to break down and understand the conceptual framework within which master's students in educational leadership create the archetype of a future-ready teacher; and second, it attempted to look at how well university curricula match up with the competencies and skills outlined by the hierarchical pyramid model, which includes advanced teaching strategies, reflective practice, and a comprehensive understanding of modern educational challenges.

Using qualitative methods and theme coding with MAXQDA (VERBI Software, 2021), the following analysis aims to clarify the strengths and potential shortcomings of the existing pedagogical paradigms. The study aims to combine future projections of educational landscapes with an analysis of current teacher preparation practices. This research fills a crucial gap by contextualizing the attributes of 21st-century educators beyond traditional academic competencies, emphasizing the need for adaptability, continuous professional development, and resilience. The research's findings and suggested framework for teacher skills and competencies offer a significant viewpoint on the necessary paradigm shift in teacher education, with the goal of guiding and motivating reforms that equip educators to not only survive but also flourish in the ever-changing landscape of modern education.

Literature Review

Complexity Theory in Education

The ever-evolving nature of education necessitates an understanding of how teacher preparation programs adapt to and prepare for emerging challenges and changing student demographics. Complexity Theory offers a robust framework for examining such adaptations, providing insights into the interconnected and evolving nature of educational systems (Morrison, 2008).

Complexity Theory originated in the fields of mathematics and biology and has been adapted to explain phenomena across a variety of disciplines, including education (Mason, 2008). The theory perceives systems as composed of multiple interconnected components, whose interactions result in emergent behaviors that are not predictable through individual component analysis alone. This theory is particularly pertinent to understanding how educational environments function, as these environments are inherently dynamic, comprising multiple stakeholders and varying influences.

In the educational sphere, Complexity Theory has been instrumental in understanding how schools and universities adapt and evolve in response to internal and external pressures. Educational systems are complex adaptive systems that exhibit behaviors like self-organization, emergence, and interdependence (Hargreaves & O'Connor, 2018; Low, 2018). These properties suggest that educational change is often nonlinear and arises from the interactions within the system rather than from top-down initiatives alone (Davis, 2008).

The application of Complexity Theory to teacher education has provided substantial insights into how teacher preparation programs can better adapt to changes in educational demands and policy landscapes. Effective teacher education programs are those that foster adaptive skills and self-organization among pre-service teachers, enabling them to respond flexibly to diverse educational contexts (Martin et al., 2019). Furthermore, the interdependent nature of elements within teacher education programs suggests that changes in one area, such as curriculum design or assessment strategies, can significantly influence other areas, such as student engagement and teaching effectiveness (Trinter & Hughes, 2021).

Complexity Theory provides a valuable lens through which to view the evolving nature of educational systems. Its focus on interdependence, adaptation, and emergent behavior offers essential insights into how teacher education programs might evolve to better meet the needs of both educators and students in a rapidly changing world. This framework not only enhances our understanding of educational dynamics but also guides the development of more resilient and adaptive educational practices.

Integrating Theory and Practice in Teacher Education

Theoretical training lays the groundwork for educators' pedagogical proficiency, which serves as the cornerstone of teacher education. It equips future teachers with an essential comprehension of educational psychology, enabling them to grasp the cognitive and emotional processes underlying student learning and behavior (Woolfolk, 2020). Practical experience allows pre-service teachers to apply their theoretical knowledge in real-world classroom settings. According to Darling-Hammond (2006), opportunities for actual teaching practice, accompanied by constant feedback and guidance, are essential for the development of effective teaching skills. This hands-on experience helps future teachers integrate theory with practice, refine their teaching strategies, and adapt to diverse student needs.

The integration of theory and practice is vital for developing competent educators. Yin (2019) suggests that teacher education programs should provide seamless connections between coursework and fieldwork, enabling pre-service teachers to apply theoretical concepts learned in university courses directly to their teaching practice.

Different cultural, educational, and policy perspectives perceive the qualities of effective teachers differently. For instance, El Kalai et al. (2022) and Al Maharma and Abusa'aleek

(2022) identify teacher passion, clarity, and feedback as universally valued qualities that significantly impact student achievement. Different cultural contexts emphasize qualities such as respect for cultural diversity and adaptability to student needs. Abacioglu et al. (2019) highlights the importance of culturally responsive teaching, which requires teachers to be aware of and responsive to their students' cultural backgrounds and learning styles. From a policy perspective, educational reforms often define teacher qualities in terms of standards and competencies that align with national educational goals. Ratnam et al. (2022) critiques this approach, suggesting that it sometimes overlooks the contextual and relational aspects of teaching that are crucial for understanding what makes a teacher effective.

Teacher Preparation and Burnout Prevention

Burnout among teachers is characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment. This state not only affects teachers' well-being but also the quality of education they provide (Arvidsson et al., 2019). Significant contributors to teacher burnout include workload, classroom management challenges, a lack of administrative support, and inadequate professional development. Additionally, insufficient preparation for handling these stressors contributes significantly to early career burnout (Chan et al., 2023).

Many teacher education programs do not adequately prepare candidates for the realities of teaching, particularly managing stress and work-life balance (Franco et al., 2021). There is a need for more comprehensive training in areas such as classroom management, effective communication, conflict resolution, and self-care practices. These competencies are essential for reducing burnout risk (Ingersoll & Strong, 2011).

Integrating stress management strategies into teacher education curricula can empower pre-service teachers to manage stress effectively from the onset of their careers. Topics may include time management, mindfulness, and emotional resilience techniques (Will, 2023). Mentorship and an increased emphasis on practical experience can equip novice teachers with real-world insights and coping strategies. Research has demonstrated that effective mentorship can alleviate new teachers' feelings of isolation and stress (Smith & Ingersoll, 2004).

Advocating for continuous professional development that addresses both pedagogical skills and personal well-being can help sustain teacher motivation and reduce burnout rates (Dweck, 2006; Will, 2023). Research indicates that programs that blend theoretical knowledge with practical skills, particularly those that include components of emotional and psychological preparation, significantly lower burnout rates among teachers (Low, 2018). An analysis of successful programs that have integrated comprehensive stress management and resilience training into their curricula provides a blueprint for reforming teacher education programs globally.

The literature review reveals a critical examination of the evolving demands in teacher education, aligning with contemporary pedagogical shifts and the diverse challenges faced within the educational sector. The conceptualizations of future educators drawn from the educational leadership students in Azerbaijan and the current pedagogical university programs' capacity to embed these concepts into their curricula spotlight potential disparities and areas for enhancement. The reviewed literature thus provided a foundation for the following research questions:

1. How do master's degree students in educational leadership perceive the ideal profile of future educators, and what skills and practices do they identify as essential for effectively engaging with the new generation of students?
2. What elements of teacher preparation are perceived by educational leadership students as critical in addressing the issue of teacher burnout, and how are these elements represented in the existing pedagogical university programs?
3. To what degree do the syllabi and teaching methodologies of current pedagogical university programs incorporate these identified skills and practices?

Methodology

This study employs qualitative research methodology to explore how master's students in educational leadership perceive the ideal profile of future educators. We chose a qualitative approach due to its ability to provide deep insights into complex subjective experiences and human factors, crucial for a deep understanding of student perceptions and educational content (Creswell & Creswell, 2022). To improve the precision and depth of our analysis, we used MAXQDA (VERBI Software, 2021) for accurate interview transcription and systematic extraction of open and axial codes, ensuring a robust qualitative analysis grounded in the collected data. The advanced functionalities of this tool allowed for rigorous organization and interpretation of the qualitative data, which was instrumental in identifying and understanding the themes that emerged from the participants' narratives (Santos et al., 2021).

Qualitative methods, including one-on-one interviews and academic syllabus analysis, allowed for an in-depth exploration of opinions, motivations, and educational practices. This approach is particularly suitable for capturing the subtle, emergent properties of educational systems as influenced by Complexity Theory, enabling a comprehensive understanding of the cognitive and cultural dimensions shaping teacher preparation (Busetto et al., 2020; Obeyd, 2021). This methodology ensures a rich, contextual analysis of how future educators are envisioned by those within the educational system, aligning with the study's objective to assess and enhance teacher training programs.

Data Collection

The data collection for this study was conducted in three stages to comprehensively evaluate how master's students in educational leadership at two universities in Azerbaijan perceive and define the skills and qualities required for future educators. Initially, 163 students were engaged in a group project to collaboratively design a list of essential qualities and skills needed by future teachers. This exercise aimed to gather diverse student perspectives and create a holistic view of the desired teacher profile.

Following the group assignment, detailed one-on-one interviews were conducted with the students to probe deeper into their views and experiences. These interviews were carried out until data saturation was achieved with 21 participants. The interviews explored various aspects of the teaching profile including the relevance of current pedagogical curricula to these ideal profiles, the effectiveness of practical teaching experiences provided by the universities, and the integration of modern educational theories within the courses. Questions ranged from inquiring about the critical skills for tomorrow's teachers, effective engagement strategies for the new generation, to the adequacy of practical teaching experiences and the application of contemporary educational theories (Creswell & Creswell, 2022; Obeyd, 2021).

To ensure the relevance and effectiveness of the interview questions, they were reviewed and validated by two educational experts from the Ministry of Education. This validation process was crucial in enhancing the reliability of the interview framework and ensuring that the data collected was robust and aligned with the study's objectives (Creswell & Creswell, 2022).

The final stage of data collection involved an analysis of the BA program syllabi from six pedagogical universities in Azerbaijan, focusing on courses related to teaching methodologies and practices across different disciplines such as humanities, language teaching, sciences, and mathematics. This analysis was restricted to syllabi that were publicly available, aiming to determine how well these programs are preparing future educators in terms of theoretical knowledge and practical application (Obeyd, 2021).

Throughout the study, ethical considerations were carefully adhered to according to APA 7 guidelines. All participants were provided with detailed information about the study, assured of their anonymity and confidentiality, and informed of their right to withdraw at any time without consequence (American Psychological Association, 2017).

While the qualitative nature of this study provides deep insights into the perceptions and experiences of educational leadership students, it also presents limitations, such as potential biases inherent in subjective data and the limited generalizability of the findings (Dawadi, 2020). Furthermore, the use of publicly available syllabi may not fully capture the comprehensive scope of the curriculum.

By methodically collecting and analyzing data across these distinct yet complementary stages, this research aims to offer a nuanced understanding of the adequacy of current teacher education programs in Azerbaijan and suggest potential areas for enhancement to better prepare future educators for the complexities of modern educational environments.

Findings

In exploring the essential qualities of future educators, the first stage of this research involved master's students in educational leadership working collaboratively to delineate the skill set required for teaching in the forthcoming educational landscape. The students identified a broad spectrum of competencies, intricately weaving together personal and professional attributes necessary for effective modern educators. Personal skills like resilience and adaptability were recognized as very important for teachers to stay in their jobs and be successful (Franco et al., 2021; Will, 2023). This collaborative effort also showed how important strong professional skills are, similar to what Darling-Hammond (2006) said about pedagogical knowledge and instructional strategies being essential for good teaching practice.

Furthermore, the students acknowledged the significance of collaborative skills, aligning with the views of Hargreaves and O'Connor (2018) on the increasing necessity for teamwork and shared practice in educational reform. Global and ethical awareness emerged as pivotal components, reflecting the growing discourse on global citizenship education and emphasizing the role of educators in fostering global competencies (Ratnam et al., 2022). The maps of skills crafted by the students also highlighted reflective and critical thinking skills as paramount advocating for teachers to be learners capable of reflecting on their actions for continuous improvement (Al Maharma and Abusa'aleek, 2022; Woolfolk, 2020). The diagram, which we synthesized from the students' maps, serves as an integrative framework that encapsulates these attributes, forming a composite portrait of the teacher of tomorrow – a

portrait that is deeply rooted in the rich tapestry of educational research and contemporary discourse (Figure 1).

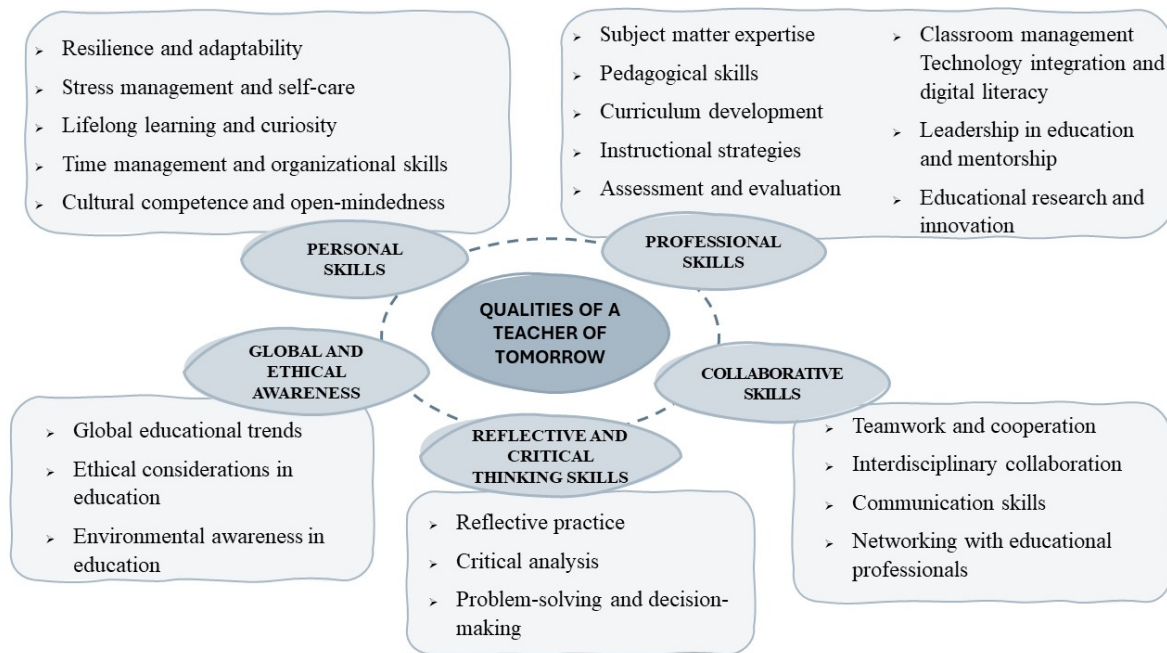


Figure 1: Teaching skills map.

The second and third stages of the research, comprising one-on-one interviews with the master’s students and the analysis of pedagogical university syllabi, provided further insights into the preparedness of future educators. The master’s students unanimously acknowledged the necessity of subject matter expertise and pedagogical competencies foundational for any teaching role. These are the cornerstones of the syllabi across universities that emphasize the development of in-depth content knowledge and teaching skills. The mater’s students also highlighted the significance of teachers’ ability to work in teams and foster collaboration among students. Hargreaves and O’Connor’s (2018) discussion of collaborative professionalism resonates with this observation, highlighting the shift towards collective efficacy in education.

However, the master’s students voiced concerns about the lack of explicit emphasis on emotional intelligence, time management, and reflective practices within the university syllabi. The analysis of the syllabi also demonstrated that the current curricula do not adequately address these elements, which are essential for adapting to the complexities of teaching as outlined in the Complexity Theory framework (Morrison, 2008). Although practical teaching courses were mentioned, the students reported a deficiency in constructive feedback, a critical component of professional growth, as detailed by Al Maharma & Abusa’aleek (2022) in their examination of feedback in learning.

Moreover, the necessity to balance the ever-increasing demands on teachers with strategies to mitigate stress emerged as a prominent theme. This finding echoes the importance of self-care and resilience strategies highlighted in the literature as essential for teacher longevity and efficacy (Franco et al., 2021, Will, 2023). The students’ call for courses on feedback and the need for ongoing, formative evaluation practices further suggested a gap between university preparation and the realities of the teaching profession, particularly in relation to fostering a reflective and adaptive mindset (Dweck, 2006).

Our analysis of the syllabi from pedagogical universities revealed a robust emphasis on providing deep theoretical knowledge, comprehensive assessments, and a profound coverage of pedagogical methods and techniques. However, there is a notable deficiency in areas critical to contemporary education, such as courses on emotional wellbeing and the integration of technology in education. Although there is a focus on teaching practice within these programs, further investigation is necessary to evaluate the effectiveness and depth of feedback provided to pre-service teachers on their teaching practices. This feedback is crucial for their development and readiness to face real classroom challenges.

Our comprehensive analysis yielded the following codebook, which captures key themes and concepts that emerged from the data. It organizes the findings into axial and open codes, offering a structured way to understand the complex interactions within the syllabi and the broader educational context (Table 1).

Open Codes	Axial Codes	Description
Subject Matter Expertise Pedagogical Competencies Instructional Strategies Curriculum Development and Adaptation	Educational Expertise	encompasses the depth of knowledge and skill in both subject content and pedagogy, essential for the effective teaching and facilitation of student learning.
Teamwork and Collaboration Interdisciplinary Approach Holistic Approaches to Education	Collaborative and Social Skills	refers to the ability to work effectively with others, fostering teamwork, and employing holistic educational strategies that go beyond the classroom to incorporate broader societal contexts.
Reflective Practice Professional Growth and Development Lifelong Learning and Curiosity Flexibility and Adaptability	Personal and Professional Development	encompasses the continuous growth and learning mindset of educators, highlighting the importance of reflective practice and the willingness to adapt and evolve professionally.
Emotional Intelligence Stress Management and Self-Care Time Management	Emotional and Psychological Well-Being	emphasizes the importance of educators' emotional health, including the management of stress and the development of emotional intelligence, crucial for sustaining a fulfilling teaching career.
Feedback Reception and Utilization Constructive Feedback Mechanisms	Feedback and Evaluation	captures the processes and importance of receiving and utilizing feedback to improve teaching practices, as well as providing constructive feedback for the development of others.
Global Awareness Ethical Awareness	Global and Ethical Orientation	underlines the awareness and integration of global perspectives and ethical considerations into teaching, preparing students to be global citizens and ethical thinkers.
Technological Integration	Adaptive and Integrative Technology	focuses on the integration of technology into teaching practices, ensuring educators are adept with digital tools to enhance learning experiences.
Critical Thinking Skills	Analytical and Decision-Making Abilities	pertains to the capacity for critical thinking and problem-solving, enabling educators to make informed decisions and engage in complex educational challenges.

Table 1: Codebook.

As this analysis of pedagogical university syllabi concludes, it is evident that while there is a robust foundation in theoretical and pedagogical knowledge, there remains a critical need to address gaps that could better prepare educators for the challenges of contemporary classrooms. The further exploration of the codes aimed to contextualize these findings within the broader scope of teacher preparation, evaluating their potential to shape the future landscape of education and the development of adept, responsive educators.

Discussion

Perceptions of the Ideal Profile of Future Educators

In addressing the first research question, the study revealed that the master's students in Azerbaijan perceive the ideal teacher of tomorrow as a multifaceted individual, endowed not only with profound subject matter expertise but also a wide array of soft skills. The students' responses echoed and expanded upon the existing literature by identifying core areas such as emotional intelligence and collaboration, which have been increasingly recognized as crucial for educators (Darling-Hammond, 2006). The findings underscored the shift from the traditional view of educators as merely conveyors of knowledge to facilitators of learning who are adaptable, reflective, and empathetic (Hargreaves & O'Connor, 2018).

The emphasis on adaptability and reflective practice suggests that future educators are expected to be lifelong learners themselves, consistently evolving in response to the dynamic educational environment (Morrison, 2008). This evolution encompasses a responsive pedagogical approach, sensitive to the cultural and social diversities that characterize modern classrooms (Abacioglu et al., 2019). Moreover, the insights gathered from the interviews illustrate a demand for teachers to be technologically adept, resonating with literature's call for digital fluency in education (Hargreaves & O'Connor, 2018).

The master's students indicated that to effectively engage with the new generation, educators need to integrate technology into their pedagogy, a skill not traditionally emphasized but now critical in a digitized world. The students' conceptualization of the teacher of tomorrow provides new prospects for educational stakeholders. For educators, it delineates a roadmap for personal and professional development; for school leaders, it offers a blueprint for fostering a supportive and collaborative school culture; and for policymakers, it underscores the importance of reforming teacher education programs to align with the needs of contemporary education. The enriched profile described by the master's students, therefore, does not only align with the literature but also extends it by situating the educator within the larger societal and technological shifts of the 21st century. The comprehensive profile suggests that we need to revamp teacher education programs to offer a more comprehensive and forward-thinking preparation that surpasses the traditional curriculum, emphasizing the soft skills and technological competencies that will shape tomorrow's educators.

Critical Elements in Addressing Teacher Burnout

The findings from the research illuminated teacher burnout as a pervasive concern amongst educators, leading directly to the second research question, which investigates the critical elements of teacher preparation that are deemed essential for addressing this issue and how these elements are represented in existing pedagogical university programs. The students highlighted the deficiency in university curricula regarding the preparation for psychological

demands and stressors inherent in teaching. Consistent with Arvidsson et al. 2019, who identified the components of burnout as emotional exhaustion, depersonalization, and a lack of personal achievement, the students' insights suggest that without proper grounding in self-care and emotional intelligence, novice teachers are particularly vulnerable. The educational leadership students underscored the need for a proactive curriculum that incorporates life-work balance, self-care practices, and the development of emotional intelligence – skills that are paramount for the well-being and sustainability of a teacher's career (Chan et al., 2023; Ingersoll & Strong, 2011). These critical components are absent from current pedagogical programs, which instead tend to prioritize content mastery and pedagogical skills over psychological preparedness and resilience (Low, 2018).

Hence, we introduce the metaphor of teachers in “solid”, “liquid”, and “gas” states, which serves as a compelling conceptual framework for understanding teacher resilience and adaptability. In their “solid” state, teachers, much like a substance locked in a fixed shape, are unyielding to change, potentially leading to the rigid and brittle practices that predispose them to burnout. This concept finds synergy with the fixed mindset described by Dweck (2006), according to whom educators may feel incapable of growth, leading to stagnation and frustration. In contrast, the “liquid” state embodies flexibility and adaptability, essential qualities that align with Darling-Hammond's (2006) notion of effective teacher education, which must foster an ability to navigate and adapt to the multifarious challenges of modern classrooms. These “liquid” teachers can fluidly analyze and adjust their practices to improve their teaching outcomes. Upon reaching a “gas” state, teachers, while still flexible, begin to “evaporate” under the heat of the demands placed upon them, risking burnout. However, with proper training and support, much like the condensation process, these educators can re-liquify, regaining their composure and resilience. This transformation highlights the importance of continuous professional development and the support systems noted by Smith and Ingersoll (2004) as vital for teacher retention and well-being. These findings, in alignment with the literature, underscore the necessity for pedagogical universities to integrate comprehensive strategies for well-being and stress management into their programs. By training educators to operate in a “liquid” state, where adaptability and emotional intelligence are at the forefront, educational institutions can create an environment that not only prevents burnout but also promotes a culture of continuous growth and well-being. This adjustment in teacher education programs can be a significant step in nurturing a generation of educators who are academically and pedagogically competent, and emotionally equipped to thrive in the demanding landscape of modern education.

Alignment of University Syllabi With Contemporary Educational Demands Research

The third and vital component of our research examined the alignment of university syllabi with the modern requisites of education, forming the basis for the third research question. The findings from the analyses of syllabi and methodologies revealed a significant gap between the students' envisioned profile of an ideal educator and the current teacher preparation curricula offered by Azerbaijani pedagogical universities. While the syllabi cover fundamental teaching practices and pedagogical theories, they appear to lack areas imperative to the holistic development of teachers, which are significant in meeting contemporary educational demands (Woolfolk, 2020; Yin, 2019).

Our proposed framework illustrates the hierarchy of teaching skills essential for the teacher of tomorrow (Figure 2). This model subverts the traditional hierarchy by placing continuous growth and lifelong learning at their broadest and most foundational level. It asserts that a

teacher’s ability to grow, adapt, and engage in innovative practices should underpin all other skills and competencies. This inversion mirrors the calls within the literature for a shift towards a more dynamic form of teacher education, one that champions adaptability and ongoing learning as fundamental, rather than supplementary, to a teacher’s role (Morrison, 2008; Davis, 2008). We reimagined the apex of the pyramid, traditionally representing the culmination of learning, to signify specialized instructional skills, leadership in education, and interdisciplinary collaboration.

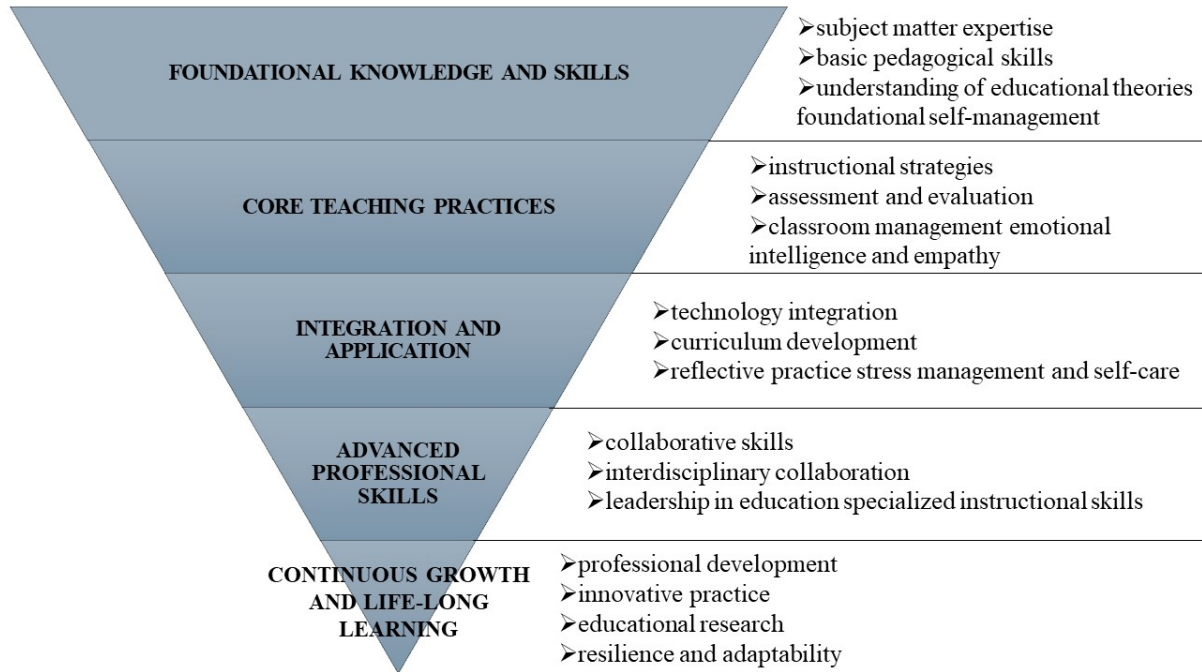


Figure 2: Hierarchical pyramid of teaching skills.

This conceptualization resonates with the literature’s depiction of the contemporary educator as a leader and collaborator (Hargreaves & O’Connor, 2018) and aligns with the view of teaching as an interdisciplinary endeavor (Darling-Hammond, 2006). The emphasis is on grounding all educational strategies and pedagogies in the ongoing professional development of educators (Martin et al., 2019; Mason, 2008; Trinter & Hughes, 2021), preparing them to navigate the complexities of modern education with resilience and adaptability (Will, 2023) by flipping the pyramid. The literature identifies a broader educational paradigm shift in the discussion surrounding the pyramid, where the static acquisition of knowledge gives way to the fluid development of skills and competencies necessary for lifelong learning and adaptability (Chan et al., 2023; Ingersoll & Strong, 2011; Low, 2018; Smith & Ingersoll, 2004). This paradigm shift also acknowledges the multi-dimensional nature of teacher burnout and the necessity for stress management and self-care to be integral to teacher education programs (Arvidsson et al., 2019; Ingersoll & Strong, 2011).

The hierarchical pyramid model advocates for pedagogical universities to broaden their curricula, shifting from mere knowledge transmission to fostering the development of adaptable, innovative, and emotionally intelligent educators. This model offers a holistic framework for educational stakeholders to design and implement reforms in teacher education, thereby equipping educators to effectively tackle the diverse challenges of 21st-century education.

Conclusion

The findings drawn from Azerbaijani master's students in educational leadership shed light on the expansive array of competencies – from pedagogical expertise to emotional intelligence – that are deemed essential for navigating the multifaceted educational terrain of the future. Reflective of the perspectives illuminated in the literature, the ideal educator transcends the traditional parameters of knowledge delivery to embody adaptability, empathy, and a lifelong commitment to learning (Darling-Hammond, 2006; Yin, 2019).

The introduction of Complexity Theory into the discourse on teacher education provides a powerful lens through which to view the nonlinear and interconnected nature of educational systems (Davis, 2008; Morrison, 2008). It further underscores the need for educational programs to evolve beyond static content delivery and towards fostering environments that cultivate adaptive and resilient educators (Martin et al., 2019).

However, a notable divergence emerges between the aspirational educator profile and the current realities of teacher preparation in Azerbaijan. The research indicates that pedagogical universities have yet to fully embrace curricula that address the comprehensive needs of educators, particularly in areas pertaining to well-being and the management of professional stressors, which are pivotal in mitigating the risk of teacher burnout (Arvidsson et al., 2019; Ingersoll & Strong, 2011). The metaphor of teachers as substances in varying states – solid, liquid, and gas – aptly encapsulates the fluidity and resilience required in the teaching profession, paralleling the liquid state with the ideal of an adaptable and responsive educator who is less susceptible to the pressures that precipitate burnout (Dweck, 2006; Smith & Ingersoll, 2004).

Simultaneously, the study proposes the hierarchical pyramid model to represent the hierarchy of teaching skills, where the broadest base supports continuous growth and lifelong learning, and the apex focuses on specialized, advanced skills. This model aligns with the literature advocating for a dynamic, continual learning process as the bedrock of effective teaching (El Kalai et al., 2022).

The study's findings, while rich in insights, are not without limitations. The reliance on qualitative data from interviews and public syllabi reviews, while offering depth, introduces the potential for subjective bias and limits the generalizability of the conclusions (Busetto et al., 2020; Creswell & Creswell, 2022). Furthermore, the focus on Azerbaijani universities may not capture the global variations in teacher education. Expanding the scope of the study to include multiple countries or varied educational contexts would provide a more comprehensive understanding of the nuances and complexities of teacher preparation (Dawadi, 2020). This approach would allow for a deeper exploration into how different educational systems address similar challenges, thereby enriching the comparative analysis and enhancing the applicability of the findings across different cultural and pedagogical landscapes.

This research contributes to the ongoing conversation regarding the need for pedagogical innovation and supports the push for educational stakeholders to re-envision teacher education. As the educational landscape continues to shift, the imperative to cultivate educators who are not only knowledgeable but also adaptable, empathetic, and technologically savvy becomes increasingly paramount (Low, 2018; Will, 2023).

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