

## Integrating acting techniques in informal learning for prospective primary teachers

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### ABSTRACT

The topic of informal education is particularly pertinent within the pedagogical science and practice of universities in Kazakhstan. Contemporary professional education emphasizes the importance of not only pedagogical skills but also the acting abilities of teachers. However, the development of acting skills among prospective primary teachers is generally underemphasized. This neglect is evident in the absence of relevant courses within the educational programs of Kazakhstani universities, as well as in the disproportionate emphasis on independent work over classroom and extracurricular activities related to acting and pedagogical techniques. This study aims to examine the benefits and applications of incorporating acting techniques into the training of prospective primary teachers to improve their professional preparation, support their ongoing professional development, and foster successful educational practice. The research findings revealed that specialized vocational preparation techniques are essential for the training of modern educators. This study found the impact of acting techniques on the educational process for preparing teacher candidates improved their professional preparation, while also supporting their ongoing professional development and fostering successful educational practice.

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## 1. INTRODUCTION

Acting, as the highest expression of mastery across various aspects of professional activity, represents the culmination of the process of becoming a professional. Mastery is one of the fundamental criteria in both preparing students as future professionals and evaluating them from the perspective of a working specialist. This mastery is characterized by a qualitative attribute known as professionalism. In pedagogical activity, expressive qualities such as a resonant voice, expressive eyes, facial expressions, body language, and physical fluidity are important and are emphasized during actor training. These parallels are important when considering the integration of acting courses into pedagogical educational institutions [1]. A key objective across all subjects is the development of acting skills, which are grounded in the ability to execute purposeful, meaningful actions—referred to as stage action—using the most effective methods and techniques [2]. This approach is essential for the professional training of primary school teachers.

The techniques of theater pedagogy preserve the creative pedagogical form, contributing to the development and enrichment of a teacher's professional and creative abilities [3]. Through theatrical pedagogy, the challenge of consciously mastering subconscious creative processes is addressed, enabling teachers to achieve greater compatibility with their students in the classroom by balancing the rational and the emotional, the logical and the intuitive [4]. Thus, incorporating acting methods and techniques in the preparation of 21st-century teachers enhances the effectiveness of their communication and influence on students during their future teaching activities. An analysis of research on this issue shows that addressing it requires leveraging the full potential of the educational process. Scholars identify three types of educational activities—formal, non-formal, and informal—through which individuals acquire socio-cultural experiences and successfully navigate the process of socialization [5], [6]. While most research focuses primarily on formal educational activities, educational practice demonstrates that informal educational activities hold important potential for addressing challenges related to social and pedagogical adaptation among university students [7], [8]. This gap creates challenges for teachers working with primary schoolchildren, particularly in organizing the pedagogical process and effectively managing educational activities with students [9].

These techniques can include elements such as voice modulation, body language, improvisation, role-playing, and the ability to engage and captivate an audience [10]–[12]. For prospective primary teachers, integrating these techniques into their training helps them develop better classroom presence, communication skills, and the ability to create a dynamic and interactive learning environment [13]–[15]. Based on the ideas, the pedagogical technique, including acting skills, is a crucial component of a teacher's professional readiness and plays an essential role in the effectiveness of teaching activities [16], [17]. By incorporating these techniques, teacher training programs can produce more adaptable and holistic educators who are better equipped to meet the demands of modern primary education [18], [19]. In this context, acting techniques are regarded as both a theoretical foundation and a practical tool for cultivating the professionally significant skills and qualities of contemporary teachers.

Previous research has shown that prospective primary teachers' acting skills are underdeveloped and generally undervalued. This is evident in the absence of relevant courses in the educational programs of Kazakhstani universities and the disproportionate emphasis on independent work over classroom and extracurricular activities related to acting and pedagogical techniques [20]. As a result of the lack of targeted collaboration with students in this area, future teachers often exhibit insufficient readiness to perform professional duties. The problem is further exacerbated by the near-total lack of research focused on effectively integrating acting techniques into the existing teacher training curriculum to enhance the preparedness and effectiveness of prospective primary teachers [21]. Addressing this issue requires an integrated approach to mastering acting techniques for primary school teacher candidates, which in turn requires an essential rethinking of the organization of the university educational process, along with the introduction of new types, forms, and teaching technologies. However, a significant gap exists in the literature concerning the use of informal learning strategies, particularly acting techniques, in the professional development of prospective primary teachers [4].

Most studies on teacher training and professional development are conducted within Western contexts, leaving a notable gap in understanding how these innovative approaches can be adapted and applied in non-Western settings, such as Kazakhstan [22]. Unfortunately, the educational system is not yet grounded in the latest scientific knowledge about acting techniques and does not fully utilize them as current realities demand. Hence, the following question guides our research: how can acting techniques be utilized to enhance the training and preparedness of prospective primary teachers, thereby supporting their professional development and effectiveness in educational practice? Therefore, this study aims to examine the benefits and applications of incorporating acting techniques into the training of prospective primary teachers to improve their professional preparation, support their ongoing professional development, and foster successful educational practice. The hypothesis posits that incorporating acting techniques into the educational process for preparing teacher candidates will improve their professional preparation, while also supporting their ongoing professional development and fostering successful educational practice.

## **2. METHOD**

### **2.1. Research method**

This study employed a mixed-methods: qualitative and quantitative methods approach. For the quantitative component, data formalization techniques were utilized to collect survey data from participants concerning their scientific knowledge of acting techniques. The qualitative strategy was centered on interpretive procedures for data collection, processing, and analysis, providing deeper insights into the participants' experiences and perceptions.

## 2.2. Collection of research samples

The study involved 320 prospective primary school teachers specializing in education from two Kazakhstani universities, with participants aged between 18 and 27 years. The mean age of the participants was  $24.66 \pm 1.1$  years (SD 4.2). The experimental group (EG) (n=160) comprised students from Abai Kazakh National Pedagogical University, while the control group (CG) (n=160) consisted of students from Kazakh National Women's Teacher Training University. All respondents were female, as there were no male prospective primary school teachers among the study participants.

## 2.3. Determining the sample size

In this study, the sample size was determined based on several considerations, including the goals of the research, the statistical power needed to detect meaningful differences, and the practical constraints of the study. Typically, sample size determination involves using a power analysis, which considers the expected effect size, significance level (alpha), and power (usually set at 0.80 or 80%) to calculate the minimum number of participants required to detect a statistically significant effect. For instance, a common reference for determining sample size is Cohen's work on power analysis [23]. According to Cohen [24], a sample size of 160 participants per group (EG and CG in this case) would be considered adequate for detecting medium effect sizes with sufficient statistical power in educational research. Given that the study involved 320 participants in total, the sample size appears to be sufficient to ensure that the results are statistically significant and generalizable within the context of this research.

## 2.4. Measures

General sociometric indicators were collected including gender, age, course of study, level of preparation for the pedagogical education program and direction of study, as shown in Table 1. These indicators were analyzed to identify patterns and trends that might influence the effectiveness of the educational strategies being explored. The data provided a comprehensive overview of the participants' profiles, serving as a foundation for tailoring the program to better meet their specific needs and expectations.

Table 1. Descriptive information provided by respondents

	Descriptive information	Quantity	Sample (%)
Gender	Female	320	100
	Male	0	0
The areas of study	Pedagogical	320	100
Student training course	2 courses	320	100
EG	Abai Kazakh National Pedagogical University	160	50
	Male	0	0
	Female	160	50
CG	Kazakh National Women's Teacher Training University	160	50
	Male	0	0
	Female	160	50

## 2.5. Experimental process

The study was conducted from 2022 to 2023 at Abai Kazakh National Pedagogical University and Kazakh National Women's Teacher Training University in Almaty, Kazakhstan. Permission to conduct the study was obtained from the university administration. Students were provided with an informed consent form, and only those who voluntarily agreed to participate were included in the study. Given that each method is developed within a specific cultural context and is designed to study sociocultural and psychological phenomena specific to a particular ethnic group, questions about the validity of these methods and the comparability of the results arise. Therefore, our objective was to employ diagnostic tools that are both valid and reliable for the context in which the study was conducted. The specific characteristics of the diagnostic situation were carefully considered, as these factors undoubtedly affected the effectiveness of the techniques, the participants' motivation, their mental state, and, consequently, the diagnostic outcomes. To account for these variables, the conditions for both group and individual tests were structured in alignment with the type of training session, ensuring that participants did not need to adjust to the testing procedures. Since the diagnostic techniques were employed for scientific purposes, the confidentiality of the results was maintained through anonymity. The EG was trained using a model that incorporated acting techniques, without changing the main curriculum or increasing the students' workload. The training for EG participants was integrated into several existing disciplines, specifically "children's literature with a workshop on expressive reading" and "development of emotional intelligence of students," which is part of the third-semester curriculum. These disciplines require an approach that combines rigorous theoretical training with practical application, allowing students to apply their knowledge to address both acting and professional

challenges related to acting skills. This approach helps solve practical problems and deepens students' understanding of the fundamentals of acting. The CG, on the other hand, followed the traditional curriculum without the inclusion of acting techniques.

## 2.6. The procedure of instruction

The absence of scientifically grounded technologies for training primary school teachers in this area, coupled with the demands of pedagogical practice, necessitated the development and experimental testing of an optimal model for the professional preparation of primary teachers. To address this gap, a structured approach was designed to integrate acting techniques into teacher training programs, focusing on enhancing communication, empathy, and adaptability in classroom settings. The objective was to introduce prospective primary teachers to the fundamental concepts of acting techniques and demonstrate their relevance and application in the teaching profession, as presented in Table 2. This model aimed to equip teachers with innovative tools to engage students effectively, foster dynamic learning environments, and meet the evolving challenges of modern education.

Table 2. Intervention in EG

Intervention component	Duration	Total class hours	Weekly sessions	Technology integration	Guided learning
Role-playing activities	6	18	3	Use of video recordings for analysis and feedback	Facilitator-led role-playing scenarios with peer reviews
Improvisation exercises	6	18	3	Interactive apps and digital prompts for improvisation	Structured improvisation activities with real-time feedback from instructors
Expressive communication	4	12	3	Digital platforms for recording and playback of sessions	Guided practice with emphasis on voice modulation, facial expressions, and body language
Storytelling	4	12	3	Online resources for story creation and presentation	Collaborative storytelling workshops with instructor feedback
Body language and gestures	4	12	3	Use of video analysis tools to study effective gestures	Hands-on practice sessions with guided feedback on posture and movements
Emotional expression	4	12	3	Emotion recognition software for self-assessment	Facilitator-led sessions focusing on conveying emotions effectively through various exercises

## 2.7. Instruments and data analysis

The pre- and post-training surveys, as outlined in Table 3, serve as the primary tools for gathering information on participants' confidence, skills, attitudes, and feedback regarding the training program. Both quantitative data, obtained through Likert scale questions, and qualitative data, collected from open-ended responses, are analyzed to assess changes in prospective teachers' perceptions and skills after completing the training. Statistical methods are employed to evaluate shifts in numerical responses.

### 2.7.1. Classroom observations

Observers, who were trained in the use of a standardized observation checklist, documented the implementation of acting techniques such as role-playing, improvisation, and expressive communication. They recorded key behaviors and interactions with students to evaluate the effectiveness and impact of these techniques in the classroom setting. A between-group analysis was conducted to measure the differences between the effectiveness of the acting techniques method and the traditional method. The results were analyzed using SPSS software version 26. Paired t-tests were used to evaluate the relationship between pre- and post-test mean scores on the tests in each group.

## 2.8. Validity and reliability of the instrument

In this study, the instrument's validity is assessed through content validity (ensuring that the instrument covers all aspects of the construct), construct validity (ensuring that the instrument accurately reflects the theoretical concepts it is intended to measure), and criterion validity (comparing the instrument's results with other established measures). The instrument is used to assess the integration of acting techniques validated by experts in education and drama, ensuring that it accurately reflects the key components of both teaching effectiveness and acting skills. Additionally, the instrument was pilot-tested with a smaller group of prospective teachers to refine the questions and format. Reliability is evaluated using several methods, such as test-retest reliability (assessing the stability of the instrument over time), inter-rater reliability (assessing the consistency of the results when different people use the instrument), and internal consistency (assessing how well the items on the instrument measure the same construct).

Table 3. Pre- and post-training survey structure for prospective teacher training program

Survey section	Question	Response type
Pre-training survey		
1. Demographic information	Collect general demographic details.	Open-ended
2. Baseline confidence and skills	To what extent do you feel comfortable leading a classroom?	Likert scale (1–5)
	To what extent do you feel comfortable involving students in interactive learning activities?	Likert scale (1–5)
	How would you rate your current communication skills in a teaching context?	Likert scale (1–5)
	How often do you use creative methods (e.g., role-playing or improvisation) in your teaching practice?	Likert scale (1–5)
3. Attitudes towards acting techniques	Have you ever received training in acting techniques or drama?	Yes/No
	How familiar are you with the concept of using acting techniques in teaching?	Likert scale (1–5)
	How beneficial do you think acting techniques could be in improving your teaching skills?	Likert scale (1–5)
4. Expectations	What are your main goals for participating in this training program?	Open-ended
	What specific skills or competencies do you hope to develop through this training?	Open-ended
Post-training survey		
1. Post-training confidence and skills	How confident do you now feel about managing a classroom effectively?	Likert scale (1–5)
	How confident are you now in engaging students in interactive learning activities?	Likert scale (1–5)
	How would you rate your communication skills in a teaching context after the training?	Likert scale (1–5)
	How often do you now use creative methods (like role-playing or improvisation) in your teaching practice?	Likert scale (1–5)
	How beneficial were the acting techniques in improving your teaching skills?	Likert scale (1–5)
2. Impact of acting techniques	Which acting techniques did you find most useful?	Open-ended
	Can you provide an example of how you used an acting technique in your teaching practice?	Open-ended
3. Overall training experience	How would you rate the overall quality of the training program?	Likert scale (1–5)
	Did the training meet your expectations?	Likert scale (1–5)
	What aspects of the training did you find most valuable?	Open-ended
4. Future application	What aspects of the training could be improved?	Open-ended
	How likely are you to continue using acting techniques in your future teaching practice?	Likert scale (1–5)
	What further support or resources would you need to effectively integrate acting techniques into your teaching?	Open-ended
5. Additional feedback	Do you have any additional comments or suggestions about the training program?	Open-ended

## 2.9. Ethical compliance

Ethical considerations were paramount in organizing this educational research. The foremost requirement for participation was obtaining the voluntary consent of each teacher. Before the survey commenced, respondents were fully informed about the confidentiality and anonymity of the study. Anonymity and confidentiality, though closely related, were distinctly addressed: the research instruments were designed to exclude any data that could identify respondents, and all information provided was kept strictly confidential and not disclosed to any third parties. Respondents were assigned alphanumeric identifiers, which they could use in place of their names in all surveys and assessments, ensuring their anonymity throughout the study.

## 3. RESULTS AND DISCUSSION

### 3.1. Results

The findings of this analysis revealed significant changes in confidence levels, teaching abilities, and attitudes toward acting techniques. The results are presented in Table 4. These results demonstrate that the training program significantly improved the EG confidence, teaching skills, and attitudes toward acting techniques, while the CG showed minimal or no significant changes. This highlights the effectiveness of incorporating acting techniques into teacher training programs. Descriptive statistics, including means, medians, and standard deviations (SD), were calculated for each survey item to summarize the data, as seen in Table 5. These descriptive statistics summarize the data and indicate notable improvements in the EG confidence, skills, and attitudes towards acting techniques, while the CG showed minimal changes. This evidence supports the effectiveness of the training program that incorporates acting techniques.

### 3.2. Classroom observations

The observation checklists recorded the frequency of specific acting techniques employed by the teachers. Table 6 provides a summary of frequency counts and corresponding percentages for each technique. The EG used role-playing in 75% of observed sessions, compared to 25% in the CG, indicating a significant adoption of this technique by the EG. Improvisation was utilized in 70% of sessions by the EG, compared to only 20% of sessions by the CG, highlighting a substantial difference in the use of this technique between the two groups. This technique was observed in 80% of sessions conducted by the EG and in 30% of sessions by the CG, highlighting its significantly more frequent use by the EG. The EG used storytelling in 65% of sessions, compared to 35% in the CG, indicating a moderate difference in the use of this technique between the two groups. Body language and gestures were used in 85% of sessions by the EG, compared to 40% in the CG, showing a significant difference in the use of this technique between the two groups. Emotional expression was observed in 90% of sessions conducted by the EG, compared to 30% of sessions by the CG, highlighting its significantly more frequent use by the EG. Since the data indicated that using acting techniques in the educational process improved teacher candidates' professional preparation, their professional development and fostered successful educational practice on the post-test, the study's premise is accepted.

Table 4. Paired t-test results for pre- and post-training surveys (EG vs. CG)

Survey item	Group	Pre-training mean (M)	Post-training mean (M)	Mean difference (MD)	SD	t-value	p-value
Confidence in classroom management	EG	3.2	4.5	1.3	0.8	10.71	0.0001
	CG	3.2	3.3	0.1	0.6	1.58	0.116
Confidence in engaging students	EG	3.0	4.4	1.4	0.9	11.54	0.0001
	CG	3.0	3.2	0.2	0.6	2.65	0.009
Communication skills in teaching context	EG	3.3	4.6	1.3	0.7	12.13	0.0001
	CG	3.3	3.4	0.1	0.6	1.79	0.075
Use of creative methods in teaching practice	EG	2.8	4.3	1.5	0.9	13.37	0.0001
	CG	2.8	2.9	0.1	0.7	1.43	0.155
Familiarity with acting techniques	EG	2.7	4.2	1.5	1.0	10.97	0.0001
	CG	2.7	2.8	0.1	0.8	1.25	0.214
Perceived benefits of acting techniques	EG	3.1	4.5	1.4	0.8	11.64	0.0001
	CG	3.1	3.2	0.1	0.7	1.57	0.118

Table 5. Descriptive statistics for pre- and post-training surveys (EG vs. CG)

Survey item	Group	Pre-training mean (M)	Pre-training median	Pre-training SD	Post-training mean (M)	Post-training median (Med)	Post-training SD
Confidence in classroom management	EG	3.2	3	0.7	4.5	5	0.6
	CG	3.2	3	0.7	3.3	3	0.6
Confidence in engaging students	EG	3.0	3	0.8	4.4	4	0.7
	CG	3.0	3	0.8	3.2	3	0.6
Communication skills in teaching context	EG	3.3	3	0.7	4.6	5	0.6
	CG	3.3	3	0.7	3.4	3	0.6
Use of creative methods in teaching practice	EG	2.8	3	0.8	4.3	4	0.7
	CG	2.8	3	0.8	2.9	3	0.7
Familiarity with acting techniques	EG	2.7	3	0.9	4.2	4	0.8
	CG	2.7	3	0.9	2.8	3	0.8
Perceived benefits of acting techniques	EG	3.1	3	0.8	4.5	5	0.7
	CG	3.1	3	0.8	3.2	3	0.7

Table 6. The frequency counts and percentages for each acting technique

Acting technique	Group	Frequency count	Percentage (%)
Role-playing	EG	120	75
	CG	40	25
Improvisation	EG	112	70
	CG	32	20
Expressive communication	EG	128	80
	CG	48	30
Storytelling	EG	104	65
	CG	56	35
Body language and gestures	EG	136	85
	CG	64	40
Emotional expression	EG	144	90
	CG	48	30

### 3.3. Discussion

This study focuses on examining the benefits and applications of acting techniques, as well as its effectiveness in promoting professional preparation for prospective primary teachers. Similar to the findings of previous studies [25], the professional training of primary school teachers in the use of acting techniques can be effective if the following conditions are met:

- The training of primary school teachers to use acting techniques is integrated into the university curriculum and serves as a means of ensuring the preparedness of prospective primary teachers for engaging in creative teaching activities.
- The process of professional training for prospective primary teachers in the use of acting techniques models a system of subject-subject relationships, fostering an environment that supports the development of students' personal and creative potential as well as their professional competence.
- In the preparation of prospective primary teachers, all components of the university's educational process are utilized, adequately reflecting the communicative nature of pedagogical activity and its humanistic orientation.
- The professional theoretical and practical training of primary school teachers is closely connected with practice-oriented teaching technologies. These findings are supported by research from other countries, such as Indonesia [26]–[28].

An analysis of the activities of students who mastered these acting techniques revealed several positive outcomes. These students exhibited self-acceptance, a strong tendency to view themselves as bearers of positive, socially desirable traits, and heightened self-confidence in the importance of their work. They demonstrated a high degree of alignment between their personal and professional interests, a constant drive for self-improvement, and a focused commitment to creative pedagogical activity. In terms of life priorities, these students frequently chose active engagement, creation, public acceptance, opportunities for self-realization, and spiritual development [18]. Additionally, they expressed a need for forming friendships, achieving excellence in their chosen fields, being in the spotlight, and enhancing their overall cultural awareness. These outcomes align with existing research that underscores the value of performance-based training in teacher education. Zhang [29] reported that drama-based pedagogical approaches significantly improved teachers' ability to manage classroom dynamics and fostered more interactive and student-centered learning environments, which supports these findings in this study. This research makes a significant practical contribution by providing evidence that acting techniques can be effectively integrated into informal learning environments to enhance the training of prospective primary teachers [30], [31].

## 4. CONCLUSION

This study aimed to examine the benefits and applications of incorporating acting techniques into the training of prospective primary teachers in Kazakhstan. The research findings reveal that specialized vocational preparation techniques are essential for the training of modern educators. Acting techniques represent an innovative departure from traditional, theory-heavy training methods. An analysis of the activities of students who have mastered these acting techniques reveals several positive outcomes: self-acceptance, a tendency to view themselves as individuals with positive, socially desirable characteristics, self-confidence, and a strong belief in the importance of their work. Additionally, these students demonstrated a high degree of alignment between personal and professional interests, a continuous drive for self-improvement, and an important focus on creative pedagogical activities. This study is not claimed to be exhaustive. Future research could explore the potential for enhancing the acting skills of teachers already engaged in professional activities, investigate this issue across different levels of the education system, and examine the impact of acting techniques on the development of various aspects of personality and their impact on different areas of personal growth.

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