

## Primary school teacher candidates' views on multilingual concepts: A perspective of learning technology

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### Abstract

With the expansion of primary school education in Kazakhstan, many ethnic groups were reached. This situation has started to signal the necessity of classroom teachers having knowledge, awareness and experience in subjects such as sensitivity, education and needs of children. This research is a qualitative study, and it was conducted to understand the awareness and knowledge levels of classroom teacher candidates on multilingual education. The research was conducted within the framework of the perspectives on learning technology. 38 teacher candidates who participated in the study were interviewed on the internet and their views on multilingual education were analysed with a descriptive qualitative analysis method. The data obtained as a result of the interviews were examined in detail and the opinions of the teacher candidates on multilingual education were interpreted. Based on the results of the research, suggestions have been made on subjects such as reshaping our teacher training programmes in the context of multilingualism and providing them with teacher support, both theoretically and practically, and to train teachers who can meet the needs of children from linguistic minority groups.

**Keywords:** Primary school, ethnic groups, technology, multilingual education.

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## 1. Introduction

In everyday life, we are exposed to many different stimuli. Our brains also rank priority among different sounds, smells and feelings, choosing certain senses, paying attention to them and filtering out the others. Multilingual individuals choose between one vocabulary and the other, one grammar and another while reading, listening, talking and writing. For example, someone who speaks English and Kazakh can only deduce that the word 'I run / ayran' means 'I am running' or 'yoghurt drink' by looking at the context of speech (SOL, 2010). Recent studies have shown that the ability to pay attention and ability to function, i.e., to integrate and choose information from different parts of the brain, are more advanced in multilingual individuals than in monolinguals (Lghzeel & Radzuan, 2020).

In today's world, the use of two or more languages in a community is quite common, and there is a growing interest among academics who focus on the education of multilingual children as well as social and linguistic competences in multilingual societies (Belinskaya, Martsinkovskaya, Orestova, Kiseleva & Kriger, 2020). Research has documented that using multiple languages in education leads to academic and personal benefits for linguistic minority students. Competence facilitates the acquisition of second languages other than the mother tongue (heritage language) (Burak, 2019; Yildiz & Kilic, 2019; Zhumabayeva et al., 2019), leads to higher academic success and provides greater cognitive flexibility, including the ability to deal with abstract concepts (Tukaiev et al., 2019). At this stage, it is necessary to clarify the reasons for the use of the term 'multilingual education' instead of 'mother tongue education' or 'bilingual education'. First of all, it is believed that a 'bilingual' individual should be using the languages in the same way as indigens. However, 'bilingualism' refers to the psychological and social situations that arise when individuals communicate using the rules of these languages. Although older languages of bilingualism are emphasised to be equally proficient in all the languages in question, people with different levels of proficiency in each language are considered bilingual according to the definition adopted today (Bhatia and Ritchie, 2004).

The bilingualism problem occurs in biological, psychological and sociological fields. In our opinion, the most important that should not be neglected is basically a bilingual problem, because attempting to make children learn a second language without learning their mother tongue sufficiently weakens their success in education and many of them do not benefit from higher education. Children can adapt to other languages in early childhood only when they manage to express themselves in their mother tongue and learn to put their feelings and thoughts into words (Bagila et al., 2019; Tenekeci & Uzunboylu, 2020). The mother tongue constitutes the basis of both learning and the command of the language in the development, preservation and use of the second language of intercultural identity (Dandashly, Barbar & Antoun, 2019).

It has been emphasised in many studies that multilingualism positively affects linguistic development, as well as mental development (Tenekeci & Uzunboylu, 2020). According to these studies, multilingual children are more sensitive to language meanings and are more susceptible to linguistic processes when compared to monolingual children (Deldoost, Mohammadzadeh, Akbari & Saeedi, 2019). Recent studies have revealed that the ability of multilingual children to understand the linguistic structure is more advanced than monolingual children. For example, in a study by Bialystok (2010), it was revealed that when children are taught how to arrange items according to accepted rules using cards with different pictures, monolingual and multilingual children learn at the same speed. However, when researchers changed the rules, multilinguals were able to adapt to the new rules, while the monotheists found it relatively difficult.

Multilingual education, defined as the use of more than one language as a teaching tool, targets communicative competence in different languages and requires complex educational planning to achieve this and to adapt to multiple linguistic goals, curriculum materials and teaching strategies (Rahimi, Soltani & Ghamarnia, 2020). In order to work effectively with children from different groups, it is important for teachers to first understand the linguistic and cultural backgrounds and environments; only then can teachers develop appropriate teaching and learning strategies (Amirova et al., 2018).

To establish the relationship between multilingualism and multilingual literacy and education, it is necessary to comprehend the relationship between language and power in a social context. In order to grasp this relationship, it is useful to first look at what the common beliefs and approaches in the society regarding multilingualism / multilingual literacy and different languages spoken in Kazakhstan are.

A common myth that can be mentioned is that learning a second language confuses the child and causes difficulty in learning other languages, especially the dominant language. This is nothing but an approach that assimilationist state policies make us believe. Worst of all, parents are also convinced of this through teachers, and as a result, they prefer their children to either receive education in their mother tongue or do not communicate with their children at home in their mother tongue (Aytac, Demirbas-Celik & Kiracioglu, 2019).

Hornberger's Bilingual Literacy Continuum model uses bilingual education policies method to fix the main problems associated with bilingualism (Alladi et al., 2017). This model can be used by language education linguists, researchers and language working teachers in institutions training teachers. Anyone who uses language, including working educators, language planners, students and families, between ideology and practice to fill the gaps as much as possible can be considered as part of the model. Haugen uses the metaphor of 'language ecology' that it put forward (Zhou, 2020). Haugen came up with this metaphor from Voegelin. Voegelin is not a specific language since language emphasises the importance of the geographical area; a selective rather than turning to a particular language, it turns to all languages in that geography, hence drawing attention to the necessity. Likewise, language planning cannot be restricted to one language since it must consider all languages spoken in the environment and its surroundings (Belinskaya et al., 2020).

It is important to consider how language can achieve the desired value and to address the question of what role the education system can play in this (Yesnazar et al., 2020). In countries that have gone through or are going through a similar process, various applications have been brought up to enable families to decide on which language their children will receive education in. To this end, administrative delegations were established in schools in South Africa. For the same purpose, a collective participation committee was established in the education reform provisions in Bolivia. However, all these initiatives have not benefited enough in the development of multilingual policies.

According to Gay (1994), multicultural education is based on an educational philosophy that provides ethnic and cultural differences, life and legitimacy, and aims to provide equal academic opportunities to lead students to success. It is an educational policy that includes educational programmes, teaching materials and organisational structure and has its own specific values and rules, based on the pluralism of all elements of education and training and educational policies. According to Hunter (1974) and Baptiste (1979), multicultural education is to realise democratic ideals, to meet the needs of different groups that make up the society and to provide social justice and is the structure of education based on pluralism in the context of equality, mutual respect, acceptance, understanding and moral commitment principles (cited in Gay, 1994).

The more space we can create that can positively change the language ideologies adopted in the classroom, in the region and in the community, the more we can strengthen bilingual literacy opportunities (Hornberger ve Skilton-Sylvester, 2000). In the next section, suggestions on how to do this through language and with the help of content are presented.

We are in the age of technology. As technology is used in every field, permanent learning has started to occur with the use of education. While multilingualism is such a problem, it can be minimised by providing technology-supported trainings. It has been effective in technology supported education in multilingual education (Vanichvatana, 2020). In this regard, it is especially important for teachers to have sufficient knowledge of the methods they use. In multicultural countries, limited tools and materials used for lessons are insufficient for foreign students. For this reason, in order to achieve the desired success, the use of visual and audio materials that motivate students and make learning more

permanent has become widespread today. Particular attention is paid to the development of computer and web-supported audiovisual materials in language teaching.

Although Kazakhstan is a multilingual and multicultural country, when it comes to teacher education programmes, it is seen that there are very few theoretical and applied courses covering multilingualism and multiculturalism. In this context, prospective teachers can only see their own values, beliefs, attitudes and behaviours correctly. The lack of basic knowledge on multilingualism and multilingual education may cause children who have languages other than the dominant language spoken in the community to be consciously or unconsciously drawn to their needs and approach children with prejudice. The purpose of this study, therefore, is to examine the pre-service teachers' opinions on multilingual education and to reveal their awareness and knowledge on this subject. In addition, in the research, it was planned that prospective teachers make the evaluation of the current preschool education undergraduate programme and express their opinions for the education of effective teachers who can respond to the language and cultural diversity in our country. As a result, the findings are shaped by shaping more sensitive educational environments and practices for different linguistic and cultural minority children, as well as prospective teachers from their mother tongue in Kazakh. It is important as it will develop suggestions on enrichment of teacher training programmes in order to provide sensitivity to meet the needs of different children.

## **2. Method**

The research is a descriptive study and was carried out by using the interview method, which is one of the qualitative research methods. Zhumabayeva, Kdyrbaeva, Nurzhanova, Stambekova and Uaidullakzy (2020), Hennink, Hutter and Bailey (2020) and Agranovich et al. (2019) stated that the focus of qualitative research is the use of a research model that helps us to understand the participants' own perspectives on a situation or a subject and their comments on the subject.

The participants of this research are 38 pre-service teachers for fourth-grade students in a university classroom teaching programme. Eighteen of the teacher candidates are male and 20 are female. Twelve pre-service teachers stated that they had a different mother tongue than Kazakh and stated that they learned Kazakh after starting primary school. Their mother tongues were Russian (8) and English (4). The pre-service teachers were first informed about the purpose and content of the research. It was explained that the interviews will be conducted by the researcher and that the talks will start if the teacher candidates want to participate in the research voluntarily. They were informed about the importance of technology availability in language education and they were also informed that the discussions will be held through Skype. For the Skype programme to be used in the interviews, information was made on the basis of volunteering. Negotiations were made face-to-face due to two teacher candidates not having a Skype account. The teacher candidates were told that if they do not feel comfortable, they could withdraw from the meeting at any time. In addition, they were informed that their personal information, which may lead to the recognition of prospective teachers, will never be included in the research reports and that their opinions on multilingual education will only be shared for educational purposes.

### **2.1. Data collection tool and data analysis**

The data obtained in the study were accessed through the 'Teacher Candidates' Interview Form for Multilingual Education', which was finalised by receiving five experts' opinions prepared by the researcher. In the first part, there are eight open-ended questions that aimed at determining the demographic information of the pre-service teachers, and in the second part, there were opinions about their knowledge and awareness about the concept of 'multilingual education'. The interviews took approximately 45–50 minutes.

In the interviews, the opinions of teacher candidates on multilingual education were analysed with the descriptive analysis method. Descriptive analysis is the form of analysis in which the obtained data are explained and interpreted according to the themes determined within the framework of previously determined research questions (Yildirim & Simsek, 2003). In the descriptive analysis, the titles under which the data will be analysed are determined based on the conceptual framework of the research. The process of data processing under these headings is followed by the identification of the research findings. The opinions and thoughts of the participants, where necessary, in defining the research findings are supported by direct quotes. In the final stage of the descriptive analysis, the interpretation of the identified findings and their association with the conceptual framework are mentioned (Yildirim & Simsek, 2003).

The purpose of the research questions is to reveal the opinions of the pre-service teachers about the importance of multilingual education, what they perceive and their difficulties. In the second part, the opinions, beliefs and awareness of prospective teachers about multilingual education are explained. In the last part, the opinions of teacher candidates on the impact of their professional or personal experience on their views on multilingualism and multilingual education and their readiness to teach a classroom of children whose mother tongue is different than Kazakh language are presented. Accordingly, the opinions of teacher candidates on the classroom teaching programme that will contribute to the training of teachers who can respond to the linguistic and cultural diversity in our country are also included.

### **3. Results**

#### ***3.1. Multilingual education: its importance, definition and challenges***

In the interviews, first of all, the following question was asked to the elementary teacher candidates: 'Do you believe that multilingual education is important? Why is that?'. All teacher candidates answered yes.

38 pre-service teachers pointed out different cultures and languages in the society and stated that multilingual education is important, and it is a form of education that provides equal opportunities in education. Some of the statements of prospective teachers who believe that multilingual education is important are as follows (P stands for participant and the participants were identified with numbers rather than names):

P22: 'In terms of geological location, multilingual education is important in our country where people from different countries and different languages live together. Because it will be quite easy to reach all students in multilingual education'.

P27: 'In a classroom, there may be students who do not speak or speak the mother tongue of that country. It is important to ensure equal opportunities in education and to enable these students to benefit from education'.

#### ***3.2. What do you perceive from multilingual education?***

After this question, the teacher candidates were asked: 'What about multilingual education?'

It is observed that the majority of pre-service teachers (21/38) define multilingual education with common expressions such as 'using more than one language in education and training' and 'receiving education without losing the mother tongue of the child'.

### **3.3. What pre-service teachers understand from multilingual education?**

'Is there a challenge in multilingual education? What are these difficulties in your opinion?' When asked these questions, all pre-service teachers stated that multilingual education has difficulties. However, when asked what these difficulties might be, only five pre-service teachers answered. Some of the pre-service teachers (12/38) on the question 'What do you think are these difficulties?' stated the following. In these statements, common sentences were found:

P12: 'We, the teachers, need to learn languages'.

P:18: 'It may be a problem if the programmes are insufficient and the materials are not suitable'.

P31: 'Teachers do not have sufficient equipment'.

From the statements of these teacher candidates, it can be understood that the perception that multilingual education can only be given by teachers who are dominantly multilinguists and therefore more labour and time will be needed for teachers who are multilinguists to be part of the multilingual education programme. It is thought that the majority of pre-service teachers do not comment on this question because of their lack of knowledge on multilingual education.

### **3.4. Multilingual education and applicability**

The questions to the teacher candidates are the answers they give to the problem in what language education should curriculum, communication and technology be.

All teacher candidates stated that there is no curriculum related to multilingualism. But there are differences in the opinions received, which are as follows:

'Should the official language be taught, or should the mother tongue be taught?' Five pre-service teachers who stated their opinion mentioned that there is a lack of multilingualism-related curriculum, but the language of the education to be given should be decided.

Twenty-one pre-service teachers stated that this problem would go away by developing applications using technology to the curriculum. The application programmes prepared for multilingualism will both increase the interest of the students and will not be left behind on the basis of lessons by other students.

As understood from these findings, pre-service teachers emphasised the importance of adding technology to the curriculum.

Eight teacher candidates mentioned the importance of communication. The more effective the communication between the students and the teacher, the more effective the communication between the student and the student develops. Therefore, trainings should be given accordingly. Pre-service teachers can take courses in universities under the name of communication skills in multilingualism.

## **4. Discussion and conclusion**

There are different languages spoken in Kazakhstan. This is also important for education. It is important to demonstrate how sufficient teachers are in the education of children with different languages. Russian, Kazakh and English languages are widely used in Kazakhstan. It is a country that receives a lot of immigration. Teachers' acceptance of the mother tongue of children from linguistic minority groups and their mother tongue knowing the value of these children in their lives have critical importance in terms of children's cognitive, social and emotional development and protection of their mother tongue (Garcia, 2009; Polat, 2009; Supriyatno, Susilawati & Ahdi, 2020).

The importance of spreading the structure of thought, in which linguistic diversity is perceived and accepted as a rich resource, not as an obstacle, to all segments of the society and to be discussed in all aspects of multilingual education, has become more evident (Elyildirim, 2019). During these interviews,

opinions on technology-supported trainings were also taken. The teacher candidates who stated that the use of technology is important in language teaching also stated that there is not enough technology supported applications.

Twenty-one pre-service teachers stated that this problem would go away by adding applications developed using technology to the curriculum. The application programmes prepared for multilingualism will both increase the interest of the students and will not be left behind on the basis of lessons from other students. As understood from these findings, pre-service teachers emphasised the importance of adding technology to the curriculum.

The results of the findings obtained from the research are supported by other studies. In foreign language teaching, the limited equipment used in the courses are insufficient. For this reason, in order to achieve the desired success, the use of visual and audio materials that motivate students and make learning more permanent has become widespread today. Particular attention is paid to the development of computer and web-supported audiovisual materials in language teaching (Aydan, 2014). The majority of prospective teachers stated that multilingual education is important; their ability to use advanced multilingualism is the basis for higher cognitive skills and that they will have positive effects especially on their academic skills in later years. However, when asked what the difficulties of multilingual education might be, only 12 pre-service teachers' gave their opinions. The results of the findings obtained from the research are supported by other studies (Atesal, 2017; Tarim, 2015; Yavas Celik & Yavuz, 2020).

In light of this theoretical framework formed by the research in this study, we recommend that future researchers determine the opinions of the prospective teachers about multilingual education and their awareness level about the best technologies that could be used in multilingual education. The learning technology competencies of teachers should be increased.

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