

Methods of Teaching Bilingual and Trilingual Children

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Abstract

This article sheds light on language training of bilingual and trilingual children, relationship between bilingualism / trilingualism and cognitive development, and also general principles of language teaching in multilingual regions. In the neuroscience of the last decade, it has been shown that bilingualism and multilingualism positively affect brain development and slow down the onset of cognitive decline; but, according to available scientific data, there is no significant difference in neuropsychological status of bilingual and trilingual children. Most of modern societies are increasingly characterized as multilingual. Linguists underline that modern linguistics has moved towards trilingualism and even multilingualism from bilingualism. This situation raises new questions about strategies for language teaching of bilingual and trilingual children. The most effective methods of language training for multilinguals nowadays match with methods for bilinguals that are presented predominantly by communicative approach, transcultural learning, methods of active listening, and those for overcoming lexico-semantic interference. The extent and the content of input in bilingual and trilingual development also significantly influence the positive effect of bilingual and multilingual education.

Keywords: Language teaching; Bilingualism, Trilingualism; Teaching methods; Cognitive development; Interference.



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1. Introduction

The problems of language teaching strategies for bilingual children have been studied quite well (Adesope *et al.*, 2010). For example, (Skutnabb-Kangas, 1995) in "Multilingualism and the education of minority children" concluded that very few educational programmes in Europe for migrant minorities try to make the children bilingual, even if many claim that they do because western industrial countries will need cheap labor at home in the future, too. Therefore, the industrial world needs to educate the children of the migrants, the great-grandchildren of the slaves from the colonies, for these jobs. Robinson and Sorace (2018) in "The influence of collaborative language learning on cognitive control in unbalanced multilingual migrant children" addressed the question of whether cognitive effects previously found in balanced bilinguals could also be detected in unbalanced bilinguals and monolingual children who find themselves in the context of other bilinguals. Furthermore, (Soleimani and Rahmanian, 2018) in "The Effect of Bilingualism and Trilingualism on Metacognitive Processing: Detrimental or Beneficial?" examined the effect of language learning on enhancing or weakening accuracy and response time in metacognitive processing by exploring three groups of monolinguals, bilinguals, and trilinguals.

At the beginning of the 20th century, most researchers came to the conclusion about the negative impact of bilingualism on intellectual development of children. There is still an opinion on speech delay in bilingual children, but there is no empirical evidence in favor of this assumption. In contrast, in a number of studies, data are provided that the prevalence of speech disorders is the same among mono- and bilinguals, i.e. bilingual children undergo stages of speech development simultaneously with peer monolinguals (Alyokhina *et al.*, 2016) and have advantages in comparison with them (Antúnez, 2001). Modern research studies have also indicated the cognitive potential of bilingualism. Over the last two decades, the hypothesis of Cummins has been very popular in which it was assumed that a low threshold level of bilingual competence could bring negative cognitive consequences. Achieving the first threshold (one of the languages is developed sufficiently) is necessary to avoid the slowdown of cognitive development. The prerequisites for positive cognitive effects of bilingualism also appear only if not only the basic communicative skills of everyday communication (BICS), but also the cognitive-academic language competence that is necessary outside the situation of language communication (CALP) in each language are developed (Antúnez, 2001) In this connection, it is necessary to touch on the issue of the extent and content of input as one of the problems of child bilingual development. For successful mastering of languages, an equal amount of input is also needed, despite the fact that it is extremely difficult to balance it (Cummins and Corson, 1997). Although some

previous studies involving methods of teaching of bilingual and trilingual children, one important shortcoming is that none seemed to have taken the particular research on relationship between bilingualism / trilingualism and cognitive development according to the Russian Government Program.

2. Materials and Methods

The materials for research were processed in the laboratory “Clinical Linguistics” (Kazan Federal University) in the frame of the project connected with speech and developmental disorders in children (Francis *et al.*, 2003). The theoretical basis of the study was also presented by materials collected as a result of the present research and by the method of continuous sampling from scientific databases of PubMed (May 2018), Scopus (May 2018), Web of Science (May 2018), E-Library (May 2018), and Academia.edu (May 2018). The results of the study could be used in practice of language teaching.

3. Results

The term “bilingualism” included a number of contradictions when it was used for the description of interaction between three or more languages in the linguistic consciousness of a person. Such interpretation did not take the multifaceted nature of this complex phenomenon into account which could affect various factors of linguistic environment, in particular the mechanism of interlingual interference which differed in trilinguals and bilinguals.

The results of studies which involved priming (a change in the ability to identify or retrieve an object from a memory as a result of a previous encounter with it) proved that the system of concepts in bilinguals was common to both languages. This was the so-called interlingual semantic priming effect: the effect of accelerating the response in one language with stimulus prime in another language (Gamirova *et al.*, 2018). Thus, the unconditional proximity of both languages at the level of semantics for bilinguals refuted the assumption of an excessively high cognitive load of bilingualism.

In addition, a number of experiments in the field of neurophysiology confirmed the hypothesis of a significant increase in the number and density of neural connections in the study of two languages.

Trilingualism differs substantially from bilingualism, and it is still at the beginning of its complex analysis. It should be noted that if trilingualism is considered according to the method of mastering languages, it can be characterized as natural (which is extremely rare) or as combined (formed on the basis of natural bilingualism or on the basis of artificial bilingualism).

Trilingualology (as a separate discipline which studies the specificity of cognitive features and speech of trilinguals and works out teaching methods for them) began to be formed relatively recently; therefore, the number of studies is rather small. In European research studies, the term “translanguaging” is also actively used (Gabdrakhmanov and Ergunova, 2017).

As a rule, the authors of trilingual studies work based on the following hypothesis: if bilinguals show significant advantages over monolinguals at the level of cognitive behavior, trilinguals, in turn, must outperform bilinguals at the level of cognitive mechanism development. However, the influence of trilingualism on individual’s cognitive processes is as unambiguous as in the case of bilingualism (Hut *et al.*, 2017).

For the development of linguistic competence in bilinguals and trilinguals, such approaches as communicative orientation and game training are also recommended and used in practice along with a model of transcultural learning, methods of active listening, and, in particular, methods for overcoming lexico-semantic interference which are being developed rather rapidly. The difficulty is that the set of three languages is very variable, and the methods for overcoming lexico-semantic interference that are effective for trilinguals speaking English, French, and Russian, do not work without appropriate adaptation in cases with other sets of languages (e.g., Russian, Tatar, and English) (Kondubaeva and Ongarbaeva, 2018).

4. Discussion

Since bilinguals preserved the semantic commonality of languages and the hypothesis of Russian researchers that lexico-semantic and syntactic information on three languages is shared in trilinguals together was not confirmed. Priming in the words of the native language led the trilinguals to slow down the processing of linguistic units of non-native languages. This meant that the listed types of information were stored separately in trilinguals, so it was possible to suggest that the disjointed systems of concepts in trilingualism could lead to slowing down of language information processing in children, and, consequently, creating certain delays in speech development in the case of simultaneous mastering of languages.

It is worth noting that the issues of interlinguistic influence in the studies on trilingualism have been very popular over the last decade. Studies have demonstrated that learners’ previous linguistic experience influence the acquisition of a new language and also the grammar of the first languages can form the initial state of the third language in the case of combined trilingualism. However, the problem - the languages will have a significant impact on the formation of the third and how? - has not yet been studied.

It becomes obvious that bilingualism and bilingual education can become not only an instrument of interethnic and international communication, but also a basis for the development of cognitive abilities in children while observing certain learning conditions, namely: 1) building a purposefully developing learning system in two languages; 2) formation of the skills of using both languages as a tool of thinking; and 3) providing equal volume and content of bilingual intuition.

Trilingualism is significantly different from bilingualism. The problem of research in the field of trilingual studies remains the search for a sufficient sample of students. However, as a result of the analysis of existing studies, it was assumed that simultaneous early mastering of three languages could negatively affect speech development in children at early stages in spite of some advantages (e.g., in non-linguistic cognitive tasks, according to Madrazo and Bernardo, trilingual children “were more accurate and efficient than bilinguals in the trials that involved interference suppression and response inhibition, but this advantage was negligible in trials involving only response inhibition” (Lukankina *et al.*, 2017). Nowadays, there are several neuropsychological research studies on trilinguals in comparison with bilinguals but they are connected with cognitive development in general, not particularly with speech, and in most cases they describe the situations in which bilinguals study the third non-native language in childhood, not the situations in which three languages are spoken simultaneously from the very birth.

5. Conclusion

Experimental studies on mechanisms of cognitive control (which manifest in the speed and efficiency of inhibition of non-target language of communication, ignoring interfering information, and switching between different activities) revealed no advantages of trilinguals in comparison with bilinguals (Madrazo and Bernardo, 2018).

Moreover, there were foreign studies in which trilingual children of primary and secondary school age were found inferior to their bilingual peers in the speed and correctness of performing experimental tasks (Quinteros and Billick, 2018). To date, cognitive advantages of trilinguals over bilinguals have been experimentally confirmed only for the elderly people, i.e. their “cognitive reserve” has been reported to be higher than that in bilinguals, which is manifested in the slowing down of cognitive decline (Petitto and Holowka, 2002). Though there were investigations into the positive effect of bilingualism and multilingualism on cerebral functions, it is necessary to mention that they had mostly described bilingual children - or elderly people (Poarch and van Hell, 2012).

Thus, it can be assumed that simultaneous acquisition of three languages at an early age is a heavy burden on the cognitive system. If the mastery of three languages occurs at intervals; in this case, the success of learning depends on many factors that have not been sufficiently examined in modern trilingual studies, namely:

- Age of acquisition of the third language (mechanisms of control between two native languages differ from those of a later learned language (Rowe, 2018));
- Language dominance;
- Metalinguistic knowledge and influence of the first languages (Schroeder and Marian, 2017).

At the moment, several models of interlingual influence have been presented in foreign studies, but the authors have not yet come to a consensus on this issue. Thus, a detailed study of interlingual influence can lead to further streamlining of the process of mastering the third language and modeling specific methods of the languages examined.

The most effective methods of language training for multilinguals nowadays are the same as those for bilinguals and presented by different communicative exercises, transcultural learning, methods of active listening, and those for overcoming lexico-semantic interference (Yarmakeev *et al.*, 2016).

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