

Exploring Pre-Service Teacher's Perspectives on Teaching Young Children Bilingually

Novi Rahayu Restuningrum* YARSI University Jakarta, Indonesia Novi.rahayu@yarsi.ac.id Lara Fridani

Jakarta State University

Jakarta, Indonesia

lfridani@unj.ac.id

Wina Hartaty

OPTIMA Language

Jakarta, Indonesia
saya.wina@gmail.com

Abstract—This naner discusses how pre-service kindergarten teachers view bilingual teaching. The research is a preliminary study that involved 240 pre-service teachers studying at a university in Jakarta. Data were collected through an online questionnaire and analyzed with descriptive statistics and factor analysis. The results depict that the majority of the participants agree on the importance of having bilingual capacity and believe that children will develop better learning ability when taught two languages since early age. However, a contradictory view is shown when more than half of the participants consider that teaching a foreign language should be done after the children acquire their mother tongue. The results showed that bilingual ability and sequence of acquisition were key variables that informed teachers' perspective on bilingualism. The discussion in this paper contributes to the conversation on the area of bilingualism and the importance of bilingual skill from the pre-service kindergarten teachers' point

Keywords— bilingual teaching, pre-service kindergarten teacher, young children

I. INTRODUCTION

English as a lingua franca becomes an essential factor for communication in the borderless world today, where people move a lot between countries. English language skills is considered important for proper communication and to compete in this era. Thus, to those whose first language is not English, there is a need of being bilinguals in their first language and English.

A. On Bilingualism

The definition of bilingualism varies over decades and from less demanding to the more demanding requirement of ability. Haugen defines bilingualism as having complete meaningful utterances of two languages, which is also cited in Liddicoat (1991) describing bilingual as people who "can produce complete meaningful utterances in the other language". Bloomfield (1933) defines bilinguals as people who can speak two languages and have native-like control of the languages. This definition, supported by Hamers in the following table, represents the high demanding requirement of ability that bilinguals need to possess. However, Kesler (1971) in Abudarham (1998) argues that equivalent competence in two languages or "balanced bilingualism" (Beardsmore, 1982, p. 9) does not exist. Restuningrum (2015) notes that it is not common to find bilinguals who are equally fluent in both languages about many areas or field. In addition, Liddicoat (1991) remarks that the bilingual's

language skills in the second language may not be very good, but the utterances on that language are still understandable. This is in line with the other concepts described in the table, where Macnamara (1966) and Grosjean (1982) note that bilingualism requires minimal knowledge of the four skills and that they do not need to be equally competent.

In summary, Restuningrum (2015) presents the following diagram.

Theorist, year Definition of bilingualism	
Bloomfield (1930-ies)	Native-like control of both languages
Haugen (1960-ies)	Complete meaningful utterances of two languages
Macnamara (1960-ies)	Minimal knowledge of the four skills
Weinreich (1970-ies)	Using 2 languages alternately
Thiery (1970-ies)	Skill to make use of second language
Titone (1970-ies)	Make use of a second language
Hamers (1980-ies)	Native-like command of two languages
Grosjean (1980-up to date)	No need to be equally competent

Table 1. Definition of bilingualism by theorists

Research on bilingual people's capacity and the benefits of being bilingual has discussed how the brain works. Bialystok's (2011) notion of executive function shows that the brain of a bilingual works with a control system to keep people focused on what is relevant and ignore distractions. This executive function includes inhibition, which is an ability that enables a person to ignore distractions and stay focused (Diamond, 2006). In addition, Diamond (2006) explains that executive function also includes working memory that enables a person to hold information in mind. Bilingual children develop the ability to solve problems earlier than monolingual children (Bialystok, 2009).



In the area of social life, people who speak more than one language are culturally benefitted from knowing the cultures of the languages they speak (Rosenberg, 1996). In relation to it, knowing the heritage culture to which the heritage language is connected means maintaining ties to the heritage culture (King & Fogle, 2006). Bilingual children having a heritage culture of their parents have the benefit of being accepted by the community owning the heritage language (see Restuningrum, 2015).

B. Bilingual Education

The awareness of the need for bilingual ability is implemented in the strategy of providing bilingual or dual-language education, which are commonly found in many places in Indonesia these days. Wright (2015) in Wei (2018) sees this phenomenon as becoming popular that "dual language models have grown in popularity with increases in federal support and the growing demand of English language learners' parents and parents of monolingual English speakers who want their children to be bilingual" (Wright, 2015, p. 102 in Wei, 2018, p. 1192).

Although there are contradicting thoughts in the society (May, 2017), bilingual education is believed to give good impact towards children when it is done earlier. Bialystok, Craik & Luk (2012) on their brain-based research reveal that bilingual children have better focus on task and ability to accomplish their goals and also develop skills on concentration than their monolingual cohort.

Bilingual education is a program where the media of instruction in the class uses two languages (Liddicoat, 1991) and involve the teaching using two languages as a part of the school curriculum (Anderson & Boyer, 1970 in May, 2017; Cohen, 1975 in Malarz, 2019; McGroarty, 2001 in Cabello, 2014). The purpose of such program is to promote the development of the children in mastering both languages (Liddicoat,1991). "For a program to be deemed to be bilingual, the key is that both languages must be used as media of instruction and thus to deliver curriculum content" (May, 2017, p. 3). n the context of this research, the languages used are Bahasa Indonesia and English.

The practice of bilingual teaching has been categorized into three types (Hamers & Blanc, 2004). The first type uses both languages at the same time as the media of instruction; while the second type implements the use of first language (L1) as the media of instruction in the beginning until the students are able to produce the language using the second language (L2). The third type mostly uses L2 as the media of instruction while the use of L1 is given at the later stage. Supporting this, Wei (2018) explains that the most commonly found in the field today is the early-exit type where students receive instruction in their mother tongue (L1) for two or three years before the English (L2)-only instruction, which Hamers and Blanc (2004) refer to as the second type. However, Wei (2018) argues that the dual language bilingual program is considered most effective. A dual language program is based on the principle of additive literacy, where learners attain biliteracy without turning off their native language when the target level of English is reached (Lachance, 2018).

In English-speaking countries, bilingual education programs aim at providing students with two language contexts (first language and English) to lead them smoothly to a mainstream program in the country using English as a media of instruction. This program, called a "transitional model of bilingual education" (May, 2017, p. 5), aims at shifting students away as soon as possible from the use of their mother tongue in order to be able to follow the general education in that country (May, 2017). In Indonesia as a non-English-speaking country, the purpose of bilingual education is enabling students to speak two languages as additive bilingualism (May, 2017), where the second language adds to the literacy of the children instead of to replace the first language or mother tongue, which is called subtractive bilingualism (May, 2017).

The effectiveness of bilingual teaching is examined by a variety of variables including students, communities, schools, teaching and learning procedures in class, types of programs applied, social context, political context, cultural contexts, and the results obtained (Baker, 1993). Similarly, Brisk (2000) in Madrid & Julius (2017) discusses that success of bilingual programs depends on several factors including the teacher training, curriculum, material used, instruction provided, methodology used in the evaluation of results), and on how many factors that are related are integrated and standardized (Baker, 1993). This research involves some of the variables above including schools, types of programs applied, teacher training, and social and political contexts that are reflected in the questionnaire items.

To prepare teachers of bilingual classes, proper training is needed. Most training pre-service teachers get during their study is not adequate to equip them for bilingual teaching (Cabello, 2014), indicated by a high percentage of participants (97%) considering that an appropriate training on foreign language for teachers is needed. Related to that, Tianshi (2010) argues that there are three requirements to be fulfilled by bilingual program teachers, namely being bilingual himself/herself, expert of his/her own field, and specialized in language education. All three must be fulfilled, although Tian-shi (2010) notes that it is still a great challenge nowadays.

Teacher education program is considered to form teacher belief in programs that are related to the bilingual education (King & Nash, 2011). Adequate training results in teachers to have a more positive attitude towards bilingual education (Morgan, 2015). On the contrary, teachers who do not have adequate training to teach English language learners tend to hold more negative attitudes towards bilingual education. In addition, Morgan (2015) explains that parents also agree to the implementation of bilingual education because it is considered beneficial for its educational value and support the idea of bilingualism because "students would benefit from learning two languages" (p. 64). Teachers and parents also believe in the benefits of bilingualism to improve the children's future socioeconomic status as a result from higher career advancement potential (Morgan, 2015).

Pre-service kindergarten teacher education in Indonesia prepares their prospective teachers to be involved in the practices of classroom teaching. Although not specifically prepared for a bilingual teaching practice upon graduation, the graduates of the Early Childhood Teacher Education study program will have the opportunity of teaching bilingual classes by choice.



To explore the pre-service teachers' perspectives on bilingual teaching, a preliminary research is conducted towards the students of Early Childhood Teacher Education at a university in Jakarta. Examining the views on teaching in two languages to young children, the research aims to explore the participants' perspectives on bilingual teaching in the three areas of exploration, namely concept of bilingual teaching, their perspectives on its advantages and their concerns about bilingual teaching.

II. METHODS

A. Research Design

The research design of this preliminary study becomes the blueprint that informs the selection of research tools and participants which determines the logical categories for analyzing the collected data (Arksey & O' Malley, 2005).

The researchers used a quantitative approach and developed a questionnaire as an instrument based on the literature in order to answer the research questions. Online questionnaire was chosen as it is a considerably effective means of gathering detailed information from participants with maximum ease and within a timely framework (Creswell, 2009). The instrument was divided into two main sections: a profile and the questionnaires statements. The first section, which is a demographic profile, consists of questions on gender, age, qualification and teaching The second section measures pre-service experience. kindergarten teachers' perspectives on bilingual teaching for young children which contain 30 questions. A Likert method rating scale is utilized in the questionnaire. Each statement requires an evaluation on a five-point Likert type scale, with scale values ranging from agree (5) to very disagree (1).

B. Research Participants

The target population for this research was pre-service kindergarten teachers in Jakarta. Due to the considerable size of the potential pre-service kindergarten teacher population across Jakarta, the study demographic has been reduced to Early Childhood Education Department, in a university in Jakarta, considering that they are prospective teachers for young children. A total of 240 pre-service teachers agreed to participate in the study. The return rate of the distributed questionnaire was 100%, indicating that all the participants completed and handed in their questionnaires.

C. Data Analysis

To find the reliability coefficient, the results were coded using a five-point Likert scale and calculated using SPSS to find the Cronbach's alpha of the total items in the questionnaire. The internal reliability coefficient alpha for the 30 items in the questionnaire was found acceptable. Finally, the overall reliability coefficient for the total scale was .740, making the instrument reliable for use. The data from the questionnaire was analyzed using descriptive statistics and quantitative analysis involved Exploratory Factor Analysis with Varimax Rotation in order to answer the research questions (Pallant, 2013). It was conducted with the help of computer software; Statistical Package for the Social Sciences (SPSS).

D. Research Questions

To guide the research methodology and the design of the study (Guba and Lincoln, 1994), the research questions are:

- (i) What concept of bilingual education and teaching is held by pre-service kindergarten teachers in Indonesia?
- (ii) What are the participants' perspective about the advantage(s) of learning other language for young children?
- (iii) What are the concerns of the participants regarding the practice of bilingual teaching in early childhood?

III. RESULTS

The questionnaire consists of participants' demography, the percentage of participants' responses to bilingual teaching, and the result of factor analysis. There were 39 male kindergarten teachers (16.3 per cent) and 201 female prospective and experienced kindergarten teachers (83.8 per cent) in the sample. The age distribution of participants who responded to the questionnaire indicated that more than three-quarters of the participants (79.1 per cent) were 17 - 21 years old. The majority of participants (94.2 per cent) had been teaching less than two years, followed by those with six and more years working experience (3.3 per cent) indicating that most of the participants were not experienced teachers. There are 80.8 percent had secondary school qualification.

A descriptive statistical procedure was used to analyze the data generated for all items. The participants' perspectives on bilingual teaching were also presented in percentages. Further, Factor Analysis technique with Varimax Rotation was computed to reduce the number of variables, detect structure in the relationships between variables, and classify variables. (Pallant, 2013).

Related to the percentage of participants' responses to bilingual teaching for young children, there are a very significant number of participants who agree on the importance of having bilingual capacity in the era of globalization (Items 1, 2). The participants also agree to introduce foreign language teaching for children at an early age (item 5). It can also be determined from the results that more than three-quarters of the participants agree that every school needs to facilitate young children to learn two languages (Item 17). Further, about half of the participants do not agree with the government policies to limit the teaching of foreign languages for elementary school children (item 25) which may relate to the bilingual teaching in younger age.

On the other hand, almost half of the participants agree that in general, the implementation of bilingual teaching in Indonesia is difficult (item 20). There are a great number of participants believe that the teachers need to be trained to have the ability to teach two languages (item 26). More than two thirds of the participants agree that schools usually have a higher prestige when they teach young children using two languages (item 23).

Surprisingly, almost one third of participants were not aware of the importance of bilingual teaching for early childhood (Item 7, 8, 9, 14). More than one third are not sure whether the skills to understand mother tongue and other foreign languages need to be taught at the same time since early age. They do not understand whether learning two languages would awaken their children's brain and



memories. This is interesting that many participants agree the practice of bilingual teaching for young children without having appropriate knowledge about the importance of having those skills.

Further, the responses of participants (N=240) to these items were factor analyzed to find out if prospective and experienced teachers 'perspectives were clustered in some particular way to have a deeper understanding about bilingual teaching for young children. To do this, the items were first assessed by using the Kaiser–Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity. The data was found to be suitable for factor analysis considering KMO value was .774, and the Bartlett's Test of Sphericity was significant (p=.000) as indicated in the table below.

Kaiser-Meyer-Olkin Measure of	.774
Sampling Adequacy	1956.267
Bartlett's Test of Sphericity- Approx.	435
Chi-Square	.000
df	
sig	

The number of components (factors) to be extracted was determined by focusing the component that has an eigenvalue of 1 or more and by inspecting the 'scree plot'. These factors were therefore retained for further analysis and submitted to Varimax Rotation. The highest loading item was used to determine which factor was relevant for each item with the correlation of factors showing that each factor is independent of the other.

Four items (5, 7, 8, 9) are loaded on factor 1 which is labelled as bilingual's ability. Four items (11, 13, 15, 16) that are grouped into factor two are labelled needs for foreign language acquisition and identity. Factor three contains three items (27, 28, 30) and is related reasons why people prefer bilingual education and is labelled reason for bilingual education. Factor four included three items (1, 17, 18) which is labelled bilingual ability and bilingual teaching. Items number 10, 14, 23 are included in factor five and are labelled prestige and language acquisition. Factor six is labelled learning context and contains three items (12, 21, 22). Factor seven included two items (4, 6) and labelled sequence of acquisition. Factor eight, which involves three items (24, 25, 29) is labelled policy and practice. Factor nine includes two items (19, 20). This factor is labelled obstacles in the practice of bilingual teaching.

IV. DISCUSSION

This preliminary study investigated the perspectives of pre-service kindergarten teachers on bilingual teaching for young children. The participants' views are critical to the understanding of bilingual teaching because they play a significant role in children's language development. Understanding participants' perspectives on bilingual teaching is important for both conceptual and practical reasons. The discussion focuses on participants' perspectives on teaching in bilingual education or bilingual teaching, including how aspects of the data connect with or challenge some of the relevant literature in the area of bilingual teaching.

The theoretical concepts of bilingual teaching for young children are used to explain the findings which portray 9 themes identified from the questionnaire subscales in the quantitative analysis. The themes are (1) bilingual's ability, (2) issues in foreign language acquisition and identity, (3) reason for bilingual education, (4) bilingual ability and bilingual teaching, (5) language acquisition and prestige, (6) learning context, (7) sequence of acquisition, (8) policy and practice and (9) obstacles in the practice of bilingual teaching.

The first research question "What concept of bilingual education and teaching is held by pre-service kindergarten teachers in Indonesia?" can be explained through themes (1), (4) and (6). The second research question, "What are the participants' perspectives about the advantage(s) of learning other language for young children?" is addressed by theme (1) and (5). Theme (2) and (9) address research question "What are the concerns of the participants regarding the practice of bilingual teaching in early childhood.

A. Pre-service kindergarten teachers' concept of bilingual education and teaching

Bilingual ability is a person's ability of using two languages (item 1). This concept is confirmed by the vast majority of participants (94.6%). The concept or definition of bilingualism indicates that any of the definitions might apply in understanding this item. However, assessing the context where the research is conducted, where native-like control of both languages (Bloomfield, 1933) or native-like command of two languages (Hamers, 1981) is most likely not people's expectation of bilingual ability. We would argue that how "a person's ability of using two languages" inquired in item 1 of the questionnaire means "using two languages alternately" (Weinreich, 1970) or "minimal knowledge of the fours skills" (Macnamara, 1966). In addition, it would support Grosjean's (1982) definition that bilingualism does not mean equal competence in both languages.

Based on the result, it indicates that the participants do not have a common understanding about the topic, either agree or disagree. This might reflect what happens in the society, where there is split opinion about whether bilingual education is giving beneficial impact towards the children. May (2017) address similar issues, where there is a strong public opposition to bilingual education.

B. The advantages of learning other language for young children

The advantage of learning other language cannot be separated from discussing about how the brain works, learning ability and memory. There are more than 50% of the participants believe that children's learning ability can be better developed and that the children usually have a better memory if they are taught two languages since early age. Participants consider that bilingual education is related to the ability to develop children's learning skills (item 5), brain work (item 8) and memory (item 9). Related to this, Bialystok (1986, 1999, 2009) in Restuningrum (2015) notes that bilingual children show better performance compared to monolinguals. The executive control that bilingual children's brains has enabled the children to exceed the performance of monolinguals when doing tasks (Barac & Bialystok, 2012). Bilingual children's working memory is also a significant ability as Diamond (2006) explains about the brain's ability to hold information in mind and then operate it.



The data shows that more than half of the participants consider children who start learning foreign language in adolescence have difficulty in obtaining the language ability that children who start learning it at an early age have (item 10). Specifically, in pronunciation, children who start learning a second language tend to pick up the language to the level of pronunciation that sounds like the language's native speaker (Scovel, 2000). This becomes an advantage of learning a second language at an early age. Patkowski (1980) and Slavoff and Johnson (1995) in Scovel (2000) describe that research has shown that second language learners can acquire the level of the competence of native speakers in syntax if the start learning the language before puberty, which does not happen to learners who learn a second language after the age of thirteen. Similar to this, Patkowski (1994) describes that children of the age of 12-15 years old experience the most difficulty in a second language acquisition.

Meanwhile, one of the aspects of the second research question seen in the fifth label (language acquisition and prestige) shows an interesting finding. Although there are 40% of participants who disagree to the questionnaire item, more than 30% of participants do not know whether focusing on the single use of Bahasa Indonesia in teaching young children may hinder the children from acquiring foreign language (item 14). The seemingly contradictory finding shows a fragmented understanding that the participants have about bilingual teaching and what it does to children. With the split opinions in the society about the benefits of bilingual education (May, 2017), what happens here is reasonable and needs to be understood as an impact of vagueness in the society which affects personal thoughts.

C. Participants' concerns regarding bilingual teaching

The findings show some issues in foreign language acquisition and identity. It is interesting to note that about three quarters of participants did not agree with the notion that teaching children foreign language at an early age may weaken their identity as an Indonesian (item 16). participants confirm that by teaching children a foreign language from an early age will not decrease their sense of nationalism (item 13). Thus it cannot be argued that teaching foreign language for young children will threaten the existence of Bahasa Indonesia (item 15). These findings imply participants' believe in the need of acquiring foreign language for children even though they live and grow up in one country (item 11). Rosenberg (1996) believe that individual who speak bilingual are culturally benefitted from knowing the cultures of the languages they speak. Besides, knowing the heritage culture would lead people to maintain the ties of the culture (King & Fogle, 2006).

The other issue is about nationalism which is significant in Indonesia (Restuningrum, 2015). Lauder (2009) describes that there is fear of an undesirable influence on Indonesian life and language that would be caused by too much influence from English. Identified as "language schizophrenia" (Kartono, 1976, p. 124 in Lauder, 2009, p. 14), this phenomenon is discussed by Byram (2008, p. 5) as "potential threat to national identity because it introduced learners to different beliefs and values". This issue is a substantial concern among the society with extensive use of foreign language.

Connected to the discussion addressing the third research question, more than half of participants believe that the implementation of bilingual learning in Indonesia is generally difficult (item 20). In this regard, the participants argue about the competency of Indonesian teachers in general who lack English language skills (item 19). This is quite worrying as it may result in bilingual teaching hindrance. These concerns suggest the competency of kindergarten teachers in their role to teach young children another language. The kindergarten teachers should have English language proficiency specifically and the strategy of providing bilingual teaching as well as creating language development activity for the children. Therefore, the purpose of bilingual teaching program to promote children mastering both languages can be achieved (Liddicoat, 1991). Furthermore, importantly to consider several factors that contribute to the success of bilingual programs such as teacher training, curriculum, material, methodology and the approach provided (Brisk, 2000).

The implications that can be gleaned from the findings to answer the research questions are as follows. Pre-service kindergarten teachers have the same understanding about what bilingual capacity is and see the benefits of bilingual education. Majority of the teachers believe that bilingual ability is related to an individual's ability of using two languages or using two languages alternately. Whereas they view the advantage of children who learn a second language at an early age is related to their ability to pick up the language that sounds like the language's native speaker. Furthermore, their concern about the lack of bilingual competence of teachers should be addressed by the responsible body such as government or their institution.

V. CONCLUSION

The need for bilingual ability is evident as a strategy in dual-language education, now commonly found in many Indonesian early-childhood schools. Although teachers share the same understanding about what bilingual capacity is and the benefits of bilingual education are, most of them believe that bilingual ability is related to an individual's ability of using two languages alternately. However, institutionalizing such ability remains debatable since most Indonesians are already multilingual with different vernaculars across different areas. Another issue would be the disparity of socioeconomic status of the students which relates closely to parental aspiration in future education outcomes.

REFERENCES

Abudarham, S. (1998). 'Bilinguality' in dual language school children and its implications. International Journal of Language & Communication Disorders, 33(S1), 494-499. doi: 10.3109/13682829809179474

Arksey, H. & O'Malley, L. (2005). Scoping studies: towards a methodological framework. International Journal of Social Research Methodology, 8, 19–32.

Baker, C. (1993). Foundations of Bilingual Education and Bilingualism. New York: Multilingual Matter Ltd.

Barac, R., & Bialystok, E. (2012). Bilingual effects on cognitive and linguistic development: role of language, cultural background, and education. Child Development, 83(2), 413-422.

Barac, R., Bialystok, E., Castro, D. C., & Sanchez, M. (2014). The cognitive development of young dual language learners: a critical review. Early Childhood Research Quarterly. doi: http://dx.doi.org/10.1016/j.ecresq.2014.02.003



Beardsmore, H. B. (1982). Bilingualism: basic principles. Clevedon, Avon, England: Tieto.

Bialystok, E. (1986). Factors in the growth of linguistic awareness. Child Development, 57, 498-510.

Bialystok, E. (1999). Cognintive complexity and attentional control in the bilingual mind. Child Development, 70, 636-644.

Bialystok, E. (2007). Language acquisition and bilingualism: consequences for a multilingual society. Applied Psycholinguistics, 28, 393-397. doi: 10.1017.S0142716407070208

Bialystok, E. (2009). Bilingualism: the good, the bad, and the indifferent. Bilingualism: Language and Cognition, 12(1), 3-11. doi: 10.1017/S1366728908003477

Bialystok, E. (2011). The bilingual advantage. [Interview] Retrieved from http://www.nytimes.com/2011/05/31/science/31conversation.html

Bialystok, E., Craik, F. I., & Luk, G. (2012). Bilingualism: consequences for mind and brain. Trends in cognitive sciences, 16(4), 240-250.

Bloomfield, L. (1933). Language history: from Language (1933 ed.). Holt, Rinehart and Winston.

Brace, N., Kemp, R., & Snelgar, R. (2006). SPSS for Psychologists: A Guide to Data Analysis using SPSS for Windows: Third Edition. Mahwah, NJ: Lawrence Erlbaum Associates, Inc., Publishers.

Byram, M. (2008). From foreign language education to education for intercultural citizenship: Essays and reflections (Vol. 17). Multilingual Matters

Cabello, N.P. (2014). Bilingualism: teacher perceptions on bilingual programme. Final Project. Faculty of Education, University of Granada.

Cadierno, T., & Eskildsen, S. W. (2018). The younger, the better?: A usage-based approach to learning and teaching of English in Danish primary schools. European Journal of Applied Linguistics, 6(1), 171-182.

Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 3rd Edition. Los Angeles: Sage Publications, Inc.

Creswell, J.W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches. (2nd ed.) Thousand Oaks: Sage.

Diamond, A. (2006). The early development of executive functions. In E. Bialystok & F. I. M. Craik (Eds.), Lifespan cognition: mechanism of change. New York: Oxford University Press.

Grosjean, F. (1982). Life with Two Languages. Cambridge, Massachusetts, and London, Harvard University Press.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), The handbook of qualitative research (pp. 105–117). Thousand Oaks, CA: Sage.

Hakuta, K., & Diaz, R. M. (2014). The relationship between degree of bilingualism and cognitive ability: A critical discussion and some new longitudinal data. Children's language, 18(3), 337-362

Hamers, J. F. (1981). Psychological approaches to the development of bilinguality: an overview. In H. B. Beardsmore (Ed.), Elements of bilingual theory. Brussel: Vrije Universiteit.

Hamers, J. F., Blanc, M., & Blanc, M. H. (2004). Bilinguality and bilingualism. 2nd Edition. Cambridge University Press.

Hongzhi, L. (2017). A study of problems and responses in the development of dual-language education models in Tibetan regions: taking Xiahe County in Gannan Tibetan autonomous prefecture as an example. Chinese Education & Society, 50: 33-41. doi: 10.1080/10611932.2016.1262185

Johnson, R. B., & Christensen, L. B. (2008). Educational research: Quantitative, qualitative, and mixed approaches (3rd ed.). Thousand Oaks, CA: Sage.

King, C.H. & Nash. C.P. (2011). Bilingual teacher belief and practice: do they line up? Gist Education and Learning Research Journal. (5), 66-83.

King, K., & Fogle, L. (2006). Bilingual Parenting as Good Parenting: Parents' Perspectives on Family Language Policy for Additive Bilingualism. International Journal of Bilingual Education and Bilingualism, 9(6), 695-712. doi: 10.2167/beb362.0

Lachance, J. (2018). A case study of dual language teaching in science class: implications for middle level teachers. Research in Middle Level Education Online, (41): 5, 1-15.

Lauder, A. (2008). The status and function of English in Indonesia: A review of key factors. Makara, Social Humaniora. 12 (1), 9-20.

Liddicoat, A. (1991). Bilingualism and Bilingual Education. National Languages Institute of Australia Occasional Paper No. 2. Retrieved from https://archive.org/details/ERIC_ED355759/page/n3.

Macnamara, J. (1966). Bilingualism and primary education: a study of Irish experience. Edinburgh: Edinburgh University Press.

Madrid, D. & Julius, S.M. (2017). Quality factors in bilingual education at the university level. Porta Linguarum, 28, 49-66.

$$\label{eq:main_main_state} \begin{split} & Malarz, L.~(2019).~Bilingual~education:~effective~programming~for~language-\\ & minority~students.~Retreieved~from:~http://www.ascd.org/publications/curriculum_handbook/413/chapters/Bilingual_Education@_Effective_Programming_for_Language-Minority_Students.aspx~\\ \end{split}$$

May, S. (2017). Bilingual education: what the research tells us. In Bilingual and Multilingual Education. Garcia et al. (eds). Switzerland: Springer International Publishing, doi: 10.1007/978-3-319-02258-1_4

McGroarty, M. E. (1992). The Societal Context of Bilingual Education. Educational Researcher, 21(2), 7-24. https://doi.org/10.3102/0013189X021002007

Morgan, E.N. (2015). Parent and teacher attitudes toward bilingual education. (thesis). State University of New York, USA.

Pallant, J. F. (2013). SPSS survival manual: a step by step guide to data analysis using SPSS for Windows. Crows Nest, N.S.W: Allen & Unwin.

Patkowski, M. (1994). The critical age hypothesis and interlanguage phonology. First and second language phonology, 205-221.

Restuningrum, N.R. (2015). Raising children bilingually in Australia: a case study. (thesis). Monash University, Australia.

Rosenberg, M. (1996). Raising Bilingual Children. The Internet ESL Journal, II(6), 3. Retrieved from http://iteslj.org/Articles/Rosenberg-Bilingual.html

Scovel, T. (2000). The younger, the better" myth and bilingual education. Language ideologies: Critical perspectives on the official English movement, 1, 114-136.

Tian-shi, G. (2010). Major obstacles limiting the development of bilingual education in Chinese college. US_China Education Review, (7):11, 83-87.

Wei, L. (2018). A quality Chinese-English bilingual education program: defining success. Journal of Language Teaching and Research, 9(6), 1191-

Weinreich, U. (1974). Languages in contact: findings and problems. Mouton: The Hague.

Yuqian, Y. (2018). An investigation on the students' opinions on bilingual teaching in universities of western China. Journal of Education and Training Studies, 6(12). doi: 10.11114/jets. v6i123594