

Rafał Młyński 

Jagiellonian University, the Faculty of Polish Studies, the Institute of Polish Studies Glottodidactics, the Department of Speech Therapy, 3 Romana Ingardena St., 30-060 Kraków; e-mail: rafal.mlynski@uj.edu.pl

## A proposal for an educational model in speech therapy implications of bilingualism: A scientific and didactic perspective

Propozycja modelu kształcenia w zakresie logopedycznych implikacji dwujęzyczności. Perspektywa naukowa i dydaktyczna

**Keywords:** bilingualism, speech therapy problem-based learning, student centred learning, MA studies

**Słowa kluczowe:** dwujęzyczność, logopedia, nauczanie problemowe, kształcenie zorientowane na studenta, studia magisterskie

### Abstract

The article is a proposal for educating students as part of the course titled “Bilingualism and speech-language diagnostics and therapy” implemented at the MA speech-language pathology studies at the Faculty of Polish Studies of the Jagiellonian University. The author presents in detail the learning goals and curriculum content, starting from the introduction of the theoretical implications of bilingualism and ending with case studies of bilingual children solved by students. The text also emphasises the use of problem-based learning (PBL) and student-centred learning (SCL) in the classroom.

### Streszczenie

Artykuł stanowi propozycję kształcenia studentów w zakresie kursu „Dwujęzyczność a diagnostyka i terapia logopedyczna”, realizowanego na logopedycznych studiach magisterskich na Wydziale Polonistyki Uniwersytetu Jagiellońskiego. Autor w szczegółowy sposób przedstawia cele i treści kształcenia, zaczynając od wprowadzenia teoretycznych implikacji dwujęzyczności, a kończąc na rozwiązywaniu przez studentów studiów przypadków dzieci bilin-gwalnych. W tekście zaakcentowano również użycie na zajęciach nauczania problemowego (PBL) oraz kształcenia zorientowanego na studenta (SCL).



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## Descriptions of educational models in speech therapy literature

There is a definite shortage of works in Polish literature on speech therapy that would present descriptions of training of future therapists in the subject. Such studies include Danuta Pluta-Wojciechowska's articles titled *O kształceniu logopedów w zakresie dyslalii. Nowe wyzwania* (*On educating speech therapists in the field of dyslalia. New challenges*) [Pluta-Wojciechowska, 2022] and *Przygotowanie logopedy do pracy z dzieckiem z rozszczepem wargi i/lub podniebienia. Projekt modelu kształcenia* (*Preparing a speech therapist to work with a child with cleft lip and/or palate. A draft model of training*) [Pluta-Wojciechowska, 2021]. In the first of her works, the author presents a new understanding of the model for equipping speech therapy students with the knowledge, skills and competencies regarding dyslalia, which is related to the latest research on phoneme realisation. In her second study, Pluta-Wojciechowska defines the subject matter of cleft lip and/or palate, the diagnosis and therapy of speech in people with the disorder(s) in question and the need to integrate speech, linguistic, medical and psychological knowledge in the therapist's workshop in the traditional educational framework (knowledge, skills and competencies).

Agnieszka Hamerlińska devoted part of her publication to the model of education of speech therapists. She described the need to introduce oncological issues into speech therapy curricula, also defining a new sub-discipline, namely oncologopedics. She suggested a range of topics which future speech therapists should become familiar with [Hamerlińska, 2018, p. 58].

This brief overview of the literature identifies a gap, i.e. the lack of descriptions of speech therapists' training in the area of bilingualism as well as its diagnostic and therapeutic implications. The need for such proposals is all the greater given that within other disciplines such studies are conducted. An example of this is the article written by Edyta Pałuszyńska in 2021 titled *Wprowadzenie do wielojęzyczności. Program zajęć na specjalizacji glottodydaktycznej* (*An introduction to multilingualism. Curriculum for the glottodidactic specialisation*). This text attempts to provide an answer to such a demand by placing this answer also in two paradigms of academic didactics.

## Bilingualism and speech therapy: the basics of the course described

The Faculty of Polish Studies at the Jagiellonian University offers a two-year speech therapy master's degree program. Its curriculum includes the subject "Bilingualism and speech therapy diagnosis and therapy" including mixed-mode instruction with 30 hours of lectures and seminars. The course is taught using the traditional expository

method of teaching with elements of problem-based learning (PBL) and student-centered learning (SCL). These two approaches are described later in the article.

Placing this subject in the curriculum<sup>1</sup> is a response to the increasing number of children representing bilingualism who may need specialised assistance of a speech therapist in the diagnosis and treatment of speech and language disorders. These children represent three social groups: a) foreign children who speak Polish as the second language, b) children of Polish repatriates for whom Polish is an inherited language and c) children of mixed marriages who use Polish interchangeably with another language, predominantly in family situations.

The likelihood that a speech therapist will deal with a foreign child is becoming increasingly higher. According to statistics, there were 50,000 foreign students in the Polish educational system in 2019, the largest group being from Ukraine. This number has changed dramatically. In 2022, after Russia's aggression against Ukraine, almost 190,000 Ukrainian children came to attend Polish educational institutions [Matłacz, 2023]. Following the Supreme Audit Office, there is no data on Polish community children and those from mixed marriages. It should be assumed that the number of students from the first group is considerable. The scale of the problem is also evidenced by the study conducted by Katarzyna Gaweł, Henriette Langdon, and Katarzyna Węsierska among Polish speech therapists. Nearly half of the therapists-respondents admitted that they had dealt with a bilingual patient [Gaweł, Langdon, Węsierska, 2015, p. 58]. In another study, they acknowledged their perceived substantive deficiencies in this area [Łuniewska et al., 2015, pp. 35–56; Jonak, 2018, pp. 62–89].

## Problem-based learning and student-centred learning in academic education

Problem-based learning was first used in 1960 in Canadian medical schools, but was soon transferred to other fields of knowledge, including speech therapy. Speech therapy degree programs based on problem-based learning have been applied in such countries as Ireland, Sweden, Australia, the US [Burda, Hageman, 2015, pp. 47] and Poland [Knappek, Młyński, Wójcik-Topór, 2019]. The use of PBL relies on two foundations: the acquisition of problem-solving skills necessary to provide effective patient care, and learning through solving problems, which is more effective than classical, memory-based acquisition of the knowledge presented

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1 Issues of bilingualism in the perspective of a speech therapist are addressed in speech therapy degree programs, for example, in the courses “Speech development of bilingual children” and “Disordered development of bilingual children” at the Pedagogical University of Krakow; “Development of bilingual children” at the University of Gdańsk; “Therapy of delayed speech development in bilingual children” at the University of Opole; “Methodology of work with a bilingual child”, “Bilingualism” at the University of Rzeszow.

[Barrows, Tamblyn, 1980, pp. 12–13]. The specific hallmarks of PBL include focus on the problem (learning based on a case study), the leading role of the learner (the way of acquiring knowledge is not imposed), responsibility (it is the learners who are responsible for solving the problem), reflexivity (students actively monitor their own learning strategies), the figure of the mentor/tutor (who supports and models the work of the group of learners rather than give direct answers) [Marra et al., 2014, pp. 223–224].

SCL was first described in the pedagogical literature in the 1960s [Attard et al., 2010, p. 5] and continues to be developed. The idea behind this style of teaching is based on the motivation and the educational needs of the student, who is at the centre of the didactic process. The role of the teacher is to act as a facilitator focused on students' skills and interests who assists in finding the best way to learn, clarifying incomprehensible issues and presenting new interpretations of the material. The role of the learner is also modified: he or she is to be independent, creative, capable of finding an independent point of view and being motivated to pursue and acquire knowledge. The main elements of SCL comprise full responsibility on the part of the student for the learning process, including proactivity and full engagement. The relationship between the teacher and the student is based on equality: they mutually support the growth and development of both parties; the instructor is the organiser and keeper of resources, the student's experience depends on his/her participation in the learning and the student perceives himself/herself differently as a result of the learning experience [Brandes, Ginnis, 1986]. Example methods of working during a lecture include short discussions in pairs, continuing discussions in a larger group (the snowball effect), random division of groups of students, quizzes, role play, individual presentations, poster presentations, drawing mind maps, summarising learning outcomes in class [Bugaj, 2010, p. 16].

## Objectives and topics of classes

The main course objectives are to familiarise students with the social, psychological and linguistic aspects of bilingualism, emphasise the importance of diagnosing communication disorders in bilinguals and programming speech therapy for them. To achieve this, the following topics were proposed for the lessons:

- 1) bilingualism: key concepts and definitions,
- 2) models of minority language retention/attrition,
- 3) language in contact,
- 4) benefits and risks of bilingualism,
- 5) intercultural communication in speech therapy practice,
- 6) cerebral organisation of language functions in bilingual children,
- 7) speech development in a bilingual environment,

- 8) contemporary research on impaired communicative competence in bilingual children,
- 9) cooperation between a speech therapist and an interpreter,
- 10) international standards for speech therapy procedures with a bilingual child,
- 11) case studies of bilingual children: speech therapy diagnosis and therapy.

The content has been organised from the general to the specific, from broader topics to progressively narrower ones, to be concluded with case studies.

An introduction to the subject involves a reflection on definitions of bilingualism. At this point, it should be borne in mind that the literature of the subject offers many different explications, which are, in turn, categorised in various ways. The most common division is into the definitions based on the criterion of language proficiency and those based on the criterion of use. The first group includes proposals by Leonard Bloomfield, who defines bilingualism as “native-like control of two languages” [Bloomfield, 1933, pp. 55–56], a definition by Maximilian Braun as “active, completely equal mastery of two or more languages [cited after Skutnabb-Kangas, 1981, p. 82] or that by Ewa Lipińska, who understands bilingualism as “mastering two languages to the same extent as their socially equivalent monolingual carriers, i.e. ambilingualism” [Lipińska, 2003, p. 115]. The second group includes definitions of bilingualism e.g. by William Mackey, who defines it as “the alternative use of two or more languages by the same individual” [Mackey, 1962, p. 555], one by Uriel Weinreich as “the practice of alternately using two languages will be called bilingualism, and the person involved, bilingual” [Weinreich, 1974, p. 1] or a definition Francois Grosjean, who argued that “bilingualism is the regular use of two languages” [Grosjean, 2008, p. 10]. A possible third category could be an explanation describing bilingual people. It is worth quoting here Jadwiga Cieszyńska, who argues that “a bilingual person is defined as someone who uses two languages equally” [Cieszyńska, 2006, p. 25], or Francois Grosjean and Bernard Py, who describe a bilingual as a person who communicates with the same communicative competence as a monolingual. He or she uses one language and the other once, or both at the same time as bilingual speech, depending on the situation, the topic being discussed, the interlocutor, the function of the interaction, etc. communicating just as effectively as a monolingual person [Grosjean, Py, 1991, p. 36, cited after Wróblewska-Pawlak, 2004, pp. 29–30 – translation R.M.] or Carol Myers-Scotton, who claims that speakers are bilingual when they have also acquired or learned to speak or understand – as a minimum – some phrases that show internal structural relations in a second language; being bilingual is associated with being able to speak two or more languages [Myers-Scotton, 2006, p. 3].

Adopting a specific definition for the purposes of speech therapy diagnosis and therapy also requires the introduction of terms denoting the status of languages of bilinguals. Given that Polish speech therapists may be approached by foreign children, children from Polish communities abroad and those from mixed families, it is important that these specialists know and can differentiate between such notions as *native*

*language, second language, heritage language and foreign language.* Native language is the language first learned and experienced by an individual, which he or she uses to communicate with other people, with which he or she identifies and in which he or she thinks [Lipińska, 2003, p. 15]. At this point, it is also worth sensitising future speech therapists to the fact that the term *native language* may be a result of choice and emotional attitude, therefore it may be more appropriate to use the term *first language* [Tambor, 2007, pp. 94–95]. In the educational context, Polish as a second language is the one taught to people with migration experience, usually including children of immigrants and political refugees, children belonging to national minorities who use a language other than Polish in their family environment in everyday communication, and children of repatriated Polish citizens returning to the country after extended stays overseas [Gębal, Miodunka, 2020, pp. 149–150]. A foreign language is the one taught in schools and courses under artificial conditions. In turn, an inherited language has no dominant/official status, being a family, minority or heritage language. It is mostly spoken, narrowed down to everyday and family topics, situating itself, from the glottodidactic perspective, between the mother tongue and a foreign language and carrying with it the richness of national legacy [Lipińska, 2003, p. 43; Seretny, Lipińska, 2019, p. 289]. The workshop of a speech therapist confronting the phenomenon of bilingualism should also include its typology, which can be presented in oppositions, such as individual vs. social, balanced vs. dominant, natural vs. artificial, coordinate vs. compound, early vs. late, adding vs. subtractive and ambilingualism vs. semilingualism [Błasiak, 2011, pp. 33–57]. To characterise a bilingual patient, it is also possible to use concepts such as the principle of complementarity (related to the identification of the interactional domains of such a person), (monolingual and bilingual) communication mode of a bilingual [Grosjean, 2008, pp. 10–23; Grosjean, Li, 2013, p. 14] as well as and phenomena typical of linguistic interaction, including positive and negative transfer, borrowings, calques, code-mixing and code-switching [Lipińska, 2003, pp. 80–99]. Taking into account that bilingualism is a dynamic phenomenon constantly changing under the influence of many factors, it is also reasonable to make them more specific. In this case, it will be useful to draw a dichotomy: models of minority language retention vs. its attrition. The first group may include communication in marriage and between parents and children, children and grandparents, within groups of friends, acquaintances and Polish community organisations, participating in religious rituals and cyberspace. Language attrition can be caused by cultural and linguistic distance, length of stay, social policies and attitudes, place of residence or gender [Dębski, 2009, pp. 67–78].

Acquiring the above information will familiarise students with one of the key concepts of the whole course, i.e. language biography. Its characteristics were defined by Władysław Miodunka and embedded in the methodology of contemporary research on individual bilingualism, which allows it to be used in the case of speech therapy diagnosis. The linguistic biography consists of two parts: 1) the narrative part

showing the basic facts about a person's life and the process of becoming and being bilingual, with a focus on childhood and the linguistic situation of the immediate family, the language of schooling and adolescence, and finally the languages used in adulthood (especially in marriage and in the workplace); 2) the analytical part, which looks at language contact in oral and written communication: linguistic interference (lexical, syntactic and grammatical) and the phenomena of code-switching or code-mixing [Miodunka, 2016, p. 81]. The notion of linguistic biography falls within the scope of global research on individual bilingualism: similar proposals were made by Ng Chin and Gillian Wigglesworth [2007, pp. 3–18], who characterised descriptors for identifying the degree of bilingualism, and by Charlotte Hoffmann [1991, p. 31], who wrote on the profile of bilingualism.

The above linguistic dimension of bilingualism is also complemented in the literature of the subject by considerations of its psychological and social impact. These can be defined as the benefits or risks resulting from bilingualism and its cultural context. According to research, speaking more than one language affects cognitive function. Both systems are characterised by coactivation, or full readiness for use by a bilingual [Kroll, Bobb, Wodniecka, 2006, pp. 119–135]. Thanks to their interaction, bilinguals gain an advantage over monolinguals in tasks that require ignoring a once-accepted principle of task performance and applying a new one. In children, the benefits of bilingualism manifest themselves in an easier adoption of another person's perspective or in an increased metalinguistic awareness [Wodniecka et al., 2018, pp. 98–99]. Researchers of bilingualism have also distinguished six benefits that make bilinguals better able to cope with social life: 1) mental agility understood as the ability to see things from different viewpoints, 2) problem-solving skills: children reach the stage of abstract thinking more quickly and are able to form various hypotheses to solve problems, 3) ability to discern the true purpose of the sender's communication hidden "between the lines", 4) ability to learn by creating new solutions from the information acquired, 5) ability to form interpersonal relationships, 6) likely delay of the onset of Alzheimer's disease symptoms by up to 5 years [Bertelle, 2011, pp. 243–244]. In terms of language, bilinguals have a better awareness of grammatical rules and phonology [Otwińska-Kasztelaniec et al., 2012, p. 11]. As far as the so-called risks are concerned, it is only worth pointing out that functioning in a bilingual environment and insufficient stimulation of both language systems can lead to semilingualism (limited bilingualism), or incomplete competence in both of them [Błasiak, 2011, pp. 38–39]. Awareness of the occurrence of semilingualism and subtractive bilingualism is particularly important for the principles of diagnosing the level of language competence in children [Błasiak, 2011, pp. 38–39, 49–50].

The importance of cultural context in the diagnosis of bilinguals is clearly articulated in the work of Krystian Barzykowski, Joanna Durlik and Halina Grzymała-Moszczyńska [2018]. The authors have constructed the so-called practical advice for dealing with people from cultures other than Polish: this includes taking

care of one's sensitivity and cultural competence understood as knowledge about cultural diversity and ability to apply it in diagnostic practice, acquiring knowledge on other cultures independently, becoming aware of one's stereotypes and prejudices, contacting cultural consultants (assistants), perceiving how cultural conditions can affect the interaction between the individual under examination and the person examining the bilingual. In the light of these findings, the speech therapist should have not only developed cultural competence but also awareness of the cultural identification of the bilingual. In this respect, the findings of Grosjean, who presented four cultural configurations, are important to consider, including identification only with culture A or culture B, biculturalism and lack of identification with either culture [Grosjean, 2008, pp. 219]. A similar framework was proposed by Josiane Hamers and Michel Blanc, namely bicultural bilingualism, monocultural bilingualism acculturated in a second language, anomic bilingualism. Another useful concept from a diagnostic point of view is that of Władysław Miodunka, combining the proposal of Hamers and Blanc with the notion of cultural valence (monocultural bilingualism implying univalence through L1, bicultural bilingualism and bivalence, bilingualism acculturated through L2 and univalence through L2, anomic bilingualism and ambivalence, and multilingualism with polyvalence) [Miodunka, 2010, p. 62].

The training of speech therapists includes neurobiological content related to the etiology of speech and language disorders. This type of knowledge can also be applied to bilingualism, more specifically to information on the structural and functional changes in the brain of bilinguals compared to monolinguals. According to research, bilinguals who started acquiring L2 before the age of 6 and regardless of the level reached in L2 have greater activity in both brain hemispheres than monolinguals. Interestingly, the predominance of left-hemispheric involvement is also observed in people speaking languages from different language families than in those using similar systems. The processing of linguistic representations involves the creation of the so-called neuronal networks in the brain, responsible for conceptual, lexical and syntactic representations. The anterior part of the left temporal gyrus, the parahippocampal gyrus and the temporo-occipital cortex are responsible for the activity of the first group. The production of lexical units in the first and second language is associated with the left inferior dorsolateral frontal cortex and the cerebellum. The same areas are responsible for the syntactic representation of the utterances in both first and second language (with the grammaticality assessment task and syntactic priming), i.e. left middle temporal gyrus and middle/inferior frontal gyrus, while other studies (on the task of detecting syntactic errors while listening and reading) indicate increased activity but differently localised: it is the middle part of the left superior temporal gyrus for L1 whilst L2 was associated with increased activity e.g. in the left inferior frontal gyrus, bilateral caudate nucleus, left pre-motor cortex and left ventrolateral prefrontal cortex [Wolny, Wodniecka, 2022, pp. 66–73].



The neurobiological consequences of bilingualism can be treated as a form of introduction to the topic of speech development of a bilingual child. The issue should be approached from two perspectives, i.e. simultaneous and sequential. The first type of acquisition refers to the development of A and Alpha language in children from mixed families (Bilingual First Language Acquisition [De Houwer, 2009, p. 9]), characterised by the same milestones as in monolingual children. The second type refers to the phenomenon of acquiring a second language after the age of three, in which four stages can be distinguished: use of the first language in communication, withdrawal from communication in favour of listening to the second language (silent period), telegraphic speech, full use of language [CPFL..., 2008, pp. 105–107]. Awareness of simultaneous and sequential language development is important not only from the perspective of the speech therapy foundations of learning, but also from the position of the two activities of the speech therapist. The first such activity is to make a diagnosis that differentiates phenomena typical of language contact from those resulting from language communication disorders. The second one can include speech therapy prevention, in this case understood as the promotion of knowledge about speech development in a bilingual environment and communication disorders in bilingual children.

The discussion of speech development processes allows for a smooth transition to the presentation of research findings on impaired communicative competence in bilingual settings. In the first place, reference is made to foreign studies, e.g. concerning specific language impairments (SLI) [e.g. Paradis et al., 2003], dyslexia [Frost, 2000], ASD [Kremer-Sadlik, 2005], mutism [Toppelberg et al., 2005] or Down's Syndrome [Kay-Raining Bird, Cleave, Trudeau, 2015]. They highlight three facts: 1) disorders may manifest themselves differently but are present in both languages, 2) the speech therapy examination should be conducted in both languages of the child, 3) bilingualism is not a source of impaired communicative competence and bilingual children are at the same risk of disorders as monolingual children. Under this topic, publications on Polish-foreign bilingualism and speech and language deficits are presented. Students become acquainted with the diagnosis of language competence in bilingual Polish-English children with alalia and with the autism spectrum [Błasiak-Tytuła, 2019] and the characteristics of selective mutism in Armenian-Polish bilingualism [Kuć, 2018]. A framework for interpreting writing errors in a Spanish-Polish boy with dyslexia was proposed by Rafał Młyński [2016], while Anna Krawczyk and Anita Lorenc [2019] showed how to organise and conduct a diagnosis of articulation in Polish-American children.

Having reviewed the above studies, one may move on to present models for diagnosing the linguistic development of bilingual children. There are three models that are distinguished in the world literature, namely BID, Dynamic Assessment and RIOT. The BID approach consists of three parts: (b)riefing, (i)nteraction, (d)ebriefing and it involves collaboration of a speech therapist with an interpreter familiar with the child's

native/ethnic language. In the briefing stage, the diagnostic team prepares for the session, establishing a detailed plan for the meeting with the parent and the child, strategies to help during the interview, rules for observing the child's non-verbal communication, interpreting strategies, selection of diagnostic tools, clear scopes of action for the speech therapist and the interpreter. In the interaction part, the team observes the child's behaviour, conducts tests and takes notes. The debriefing stage consists in transcribing speech samples, analysing the collected material and the child's behaviour, identifying deviations from the norm in the child's mother tongue/ethnic language and the child's level of proficiency, creating a diagnostic report and giving it to the parent [Langdon, Saenz, 2016, pp. 110–120]. In Poland, BID has been used to assess phonological processes in bilingual children from Ukraine [Młyński, Redkva, 2019; Młyński, 2021a, Dębski, Młyński, Redkva, 2022].

Dynamic Assessment (DA) is used when there is no access to standardised diagnostic tools. It consists of a triad, including the pre-test (assessment of the child's current skills), activities (supporting and motivating the child in his/her work, observing him/her performing tasks and a post-test (comparison of results with the pretest part and evaluation of the child's progress). The three stages of DA allow the speech therapist to identify phenomena typical of language contact and those that are likely communication disorders [Młyński, 2021b, p. 162].

RIOT is an ethnographic study of the child in the different contexts in which it functions. It consists of four components: review (review of the child's file), interview (ethnographic interviews with members of the child's educational environment), observation (observing the child's linguistic functioning in different contexts, e.g. nursery, home), test (testing communication skills in both languages using the BID or DA formula). The application of RIOT for the speech therapy diagnosis of a Russian-Polish girl was presented in his work by Młyński [2021b].

## PBL with SCL: examples of practice in the course

As mentioned earlier, the subject in question takes a hybrid form of a lecture and a seminar. The expository method of teaching is used in the course, allowing for a standard lecture as well as elements of PBL and SCL. Under SCL, students undertake the following activities:

- 1) in two groups, they discuss the definitions of bilingualism given earlier and are asked to categorise them (criterion of use and a criterion of language proficiency),
- 2) in pairs, they try to define the notions of *native language*, *second language*, *heritage language* and *foreign language*,
- 3) they discuss the typology of bilingualism with the trainer, become acquainted with the phenomena typical of interlanguage contacts and then independently carry out a classification of examples of such linguistic operations,

- 4) read research papers on the diagnosis which uses BID and RIOT to prepare multimedia presentations,
- 5) having completed two topics, each time they solve a quiz in small groups,
- 6) they act out the role of a speech therapist and a parent in a simulation of a clinical situation,
- 7) in several groups, they prepare posters summarising the whole subject.

Problem-based learning is introduced as part of the work on case studies of bilingual children with communication disorders. Students create language biographies of bilingual children who are before the diagnosis and speech therapy on the basis of the Language Experience and Proficiency Questionnaire (LEAP-Q) completed by the instructor and attached written statements, speech recordings or reading aloud of the text. Constructing the narrative and analytical parts of the biography simulates a problem that future speech therapists may face in actual practice. After it is developed, students prepare the diagnostic procedure and program the child's therapy. In order to increase the likelihood of the case, students work on a study of child from foreign, Polish community and mixed families.

While the effects of introducing SCL and PBL to the course discussed may be investigated in the future, it is now worth reading the results of global research on the implications of these teaching solutions. Eileen Abel and Mike Campbell [2010, p. 3] have verified the ideas of SCL. The results of their qualitative and quantitative analyses indicated that learners following the SCL principles and the traditional model perceived clear differences between them. The level of satisfaction with the activities as well as the level of skills acquired pointed to a greater benefit of the SCL assumptions. Students also valued SCL as a collaborative approach and believed that they had absorbed the knowledge better. PBL was also investigated. In line with SCL, it evokes positive feelings among students [Sobral, 1995], stimulates greater responsibility for learning [Rovers et al., 2018] and enables them to build skills in the management of information sources, critical thinking and teamwork [Hammel et al., 1999].

## Conclusion

The presented course proposal can be treated as a voice opening the discussion on the nature of training for speech therapists with regard to bilingualism. At this point, it is also worth noting that it is possible to differentiate the content into that dedicated to children and to adults, taking into special consideration the gerontological perspective [Wójcik-Topór, Lipa, 2018]. It also seems appropriate to popularise the assumptions of SCL and PBL given the benefits they provide and the increasing use of these approaches in global academic teaching.

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