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ALGORYTM ZASPOKAJANIA INDYWIDUALNYCH POTRZEB KOMUNIKACYJNYCH STUDENTÓW NIESŁYSZĄCYCH

Olena Drobot

*kandydat nauk pedagogicznych,
starszy pracownik naukowy Wydziału Nauczania Języka Migowego
Instytutu Pedagogiki Specjalnej i Psychologii imienia Mykoły Jarmaczenki
Narodowej Akademii Nauk Prawnych Ukrainy (Kijów, Ukraina)
ORCID ID: 0000-0002-0762-5148
lend7@ukr.net*

Anna Zamsha

*kandydat nauk psychologicznych,
Kierownik Wydziału Nauczania Języka Migowego
Instytutu Pedagogiki Specjalnej i Psychologii imienia Mykoły Jarmaczenki
Narodowej Akademii Nauk Prawnych Ukrainy (Kijów, Ukraina)
ORCID ID: 0000-0002-8843-035X*

Adnotacja. W artykule przeanalizowano potrzeby komunikacyjne studentów niesłyszących poprzez pryzmat barier komunikacyjnych, wynikających z rozbieżności między możliwościami komunikacyjnymi osoby niesłyszącej a warunkami komunikacyjnymi środowiska edukacyjnego. Zaproponowano klasyfikację barier komunikacyjnych (barier językowych, mownych i komunikacyjno-adaptacyjnych). Stwierdzono labilny charakter potrzeb komunikacyjnych studentów niesłyszących, co wynika ze zmian równowagi między ich możliwościami komunikacyjnymi a warunkami środowiska edukacyjnego.

Artykuł uzasadnia algorytm zapewniania specjalnych potrzeb komunikacyjnych studentów niesłyszących, składających się z kolejnych etapów: porównanie aktualnych możliwości komunikacyjnych studenta niesłyszącego i aktualnych możliwości środowiska edukacyjnego, w którym student niesłyszący studiuje lub planuje studiować; ocena poziomu zgodności możliwości i warunków komunikacyjnych oraz identyfikacja obecności lub braku barier komunikacyjnych; określenie potrzeb komunikacyjnych, które pojawiają się jako połączenie aktualnych barier komunikacyjnych; zastosowanie technologii dodatkowego wsparcia komunikacyjnego dla studentów niesłyszących, mającego charakter etapowy.

Słowa kluczowe: potrzeby komunikacyjne, bariery komunikacyjne w nauczaniu i uczestnictwie, studenci niesłyszący, środowisko edukacyjne, warunki komunikacyjne, możliwości komunikacyjne.

ALGORITHM FOR PROVIDING INDIVIDUAL COMMUNICATIVE NEEDS OF DEAF EDUCATORS

Olena Drobot

*PhD in Education,
Senior Researcher of Sign Language Education Division
Mykola Yarmachenko Institute of Special Education and Psychology
of National Academy of Educational Sciences of Ukraine (Kyiv, Ukraine)
ORCID ID: 0000-0002-0762-5148
lend7@ukr.net*

Anna Zamsha

*PhD in Psychology,
Head of Sign Language Education Division
Mykola Yarmachenko Institute of Special Education and Psychology
of the National Academy of Educational Sciences of Ukraine (Kyiv, Ukraine)
ORCID ID: 0000-0002-8843-035X*

Abstract. The article considers the communicative needs of deaf applicants for education through the prism of communication barriers, which are the result of the mismatch between the communicative capabilities of a deaf person and the communicative conditions of the educational environment. The classification is offered of communication barriers (language, speech and communication-adaptation barriers). The labile nature is stated of the communicative needs of deaf applicants for education, which is due to changes in the balance between their communicative abilities and the conditions of the educational environment.

The article substantiates the algorithm for providing special communicative needs of deaf applicants for education, which consists of successive stages: comparison of current communication opportunities of deaf applicants for education and current opportunities of the educational environment in which the deaf applicant for education studies or plans to study; assessing the level of compliance of communication capabilities and conditions and identifying the availability or nonavailability of communication barriers; identification of communication needs that arise as a combination of actual communication barriers; application of the technology of additional communicative support of deaf applicants for education, which has a phased nature.

Key words: communication needs, communication barriers to learning and participation, deaf applicants for education, educational environment, communication conditions, communication opportunities.

АЛГОРИТМ ЗАБЕЗПЕЧЕННЯ ІНДИВІДУАЛЬНИХ КОМУНІКАТИВНИХ ПОТРЕБ ГЛУХИХ ЗДОБУВАЧІВ ОСВІТИ

Олена Дробот

*кандидат педагогічних наук,
старший науковий співробітник відділу навчання жестової мови
Інституту спеціальної педагогіки і психології імені Миколи Ярмаченка
Національної академії педагогічних наук України (Київ, Україна)
ORCID ID: 0000-0002-0762-5148
lend7@ukr.net*

Анна Замша

*кандидат психологічних наук,
завідувач відділу навчання жестової мови
Інституту спеціальної педагогіки і психології імені Миколи Ярмаченка
Національної академії педагогічних наук України (Київ, Україна)
ORCID ID: 0000-0002-8843-035X*

Анотація. У статті розглянуто комунікативні потреби глухих здобувачів освіти через призму комунікативних бар'єрів, які є результатом невідповідності між комунікативними можливостями глухої людини й комунікативними умовами освітнього середовища. Запропоновано класифікацію комунікативних бар'єрів (мовних, мовленневих і комунікативно-адаптувальних бар'єрів). Констатовано лабільний характер комунікативних потреб глухих здобувачів освіти, що зумовлено змінами балансу між їхніми комунікативними можливостями й умовами освітнього середовища.

У роботі обґрунтовано алгоритм забезпечення особливих комунікативних потреб глухих здобувачів освіти, що складається з послідовних стадій: порівняння актуальних комунікативних можливостей глухого здобувача освіти й актуальних можливостей освітнього середовища, в якому навчається чи планує навчатися глухий здобувач освіти; оцінювання рівня відповідності комунікативних можливостей та умов і виявлення наявності чи відсутності комунікативних бар'єрів; визначення комунікативних потреб, що виникають як комбінація актуальних комунікативних бар'єрів; застосування технології додаткової комунікативної підтримки глухих здобувачів освіти, що має поетапний характер.

Ключові слова: комунікативні потреби, комунікативні бар'єри в навчанні й участі, глухі здобувачі освіти, освітнє середовище, комунікативні умови, комунікативні можливості.

Introduction. The reform of the modern educational sphere in different countries is marked by the gradual introduction of inclusive philosophy, within the time more important becomes the formation of inclusiveness as a feature, which is one of the indicators of the quality of educational institutions (Fedorenko, 2019: 224). The introduction of the idea of inclusion into the education of people with special educational needs is generally welcomed, but there is one specific category of students for whom the organization of a qualitative inclusive education is super challenging for educators (Adamyuk, 2020: 13). We are talking about deaf, deaf applicants for education. This uniqueness of the category of deaf applicants for education is pointed out in The Salamanca Statement and Framework for Action on Special Needs Education (1994), where paragraph 21 states, that deaf applicants for education have specific communication needs (Zamsha, 2021: 144). It is due to the peculiarities of communicative needs, deaf applicants for education are recommended to teach in special institutions or special classes / groups, rather than in inclusive education (Zamsha, Fedorenko, 2021: 177).

However, the theoretical analysis of literature sources on this problem shows the lack of a systematic description of the features of the emergence and formation of specific communicative needs of deaf applicants for education. This, in fact, makes it impossible for them to clearly identify and effectively adapt the educational process and environment to the individual communicative needs of deaf applicants for education, which will obviously have a negative impact on the quality of their education.

Research methods: theoretical analysis of the problem of communication of deaf applicants for education in the educational environment; systematization of information on the communicative needs of the deaf; modeling to create an algorithm for providing individual communicative needs of a deaf applicant for education.

Main part. Consideration of the communicative needs of deaf students should begin with a clear formulation of the concept of “special educational needs”, a variety of which are the communicative needs.

Scientific sources on education often mention the concept of “special educational needs”, but it is rarely given a clear definition. Every teacher understands this concept in his own way. However, for the most part, teachers tend to reduce special educational needs only to developmental disorders, that the student has (Drobot, 2016: 94). Under these conditions, the emergence and formation of special educational needs is considered only through the prism of nosology (Zamsha, 2020: 240). This becomes the basis for the development of general recommendations for the training of certain groups of students who have similar developmental disabilities. However, practice shows that students who have the same developmental disorders need completely different conditions and adaptation strategies (Zamsha, Moroz, Fedorenko, 2016: 133). Consideration of this problem exclusively from the standpoint of developmental disorders greatly simplifies the organization of a quality educational process for students with special educational needs, because in these conditions, the individual variations of limitations and opportunities that a particular individual has are leveled out.

In view of this, the concept of “special educational needs” can not be limited to the statement of a specific violation of the development of the deaf applicant for education, which is seen as a direct cause of his / her low academic achievement (Fedorenko, 2019: 320). T. Booth proposes to consider “special educational needs” in the context of the concept of “barriers to learning and participation” that may arise in a particular deaf applicant in a particular educational environment (Booth, Ainscow, 2011: 112). Therefore, the scientist proposes to shift the emphasis from developmental disorders as “features” that are unique to the individual, to such an indicator as the compliance of the educational environment with the capabilities of the individual. These barriers to learning and participation arise precisely because of the mismatch between the opportunities for learning and interaction that are acceptable to the learner and the conditions that are offered to the individual for learning and interaction in the educational process. The use of the term “barrier” implies the obligation to eliminate it as a prerequisite for education. These barriers should not be seen as permanent, they can be removed primarily by changing the conditions of the educational environment or expanding the functionality of the learner in terms of learning activities and participation. On the other hand, due to the fact, that the opportunities of the learner are not static, they change over time, improve, and thus change the rate of mismatch between the opportunities and conditions of the educational environment. Thus, becomes particularly important the issue of constant monitoring of the indicator of compliance, the basis for which is the study of the current capabilities of the applicant and the conditions of the educational environment (Zamsha, 2019: 95).

Given the above, we have reason to consider the specifics of deaf education through the concept of “special communicative needs of deaf applicants for education”, which we define as technologies of additional communicative support for deaf applicants for education to eliminate the communicative discrepancy between current communication opportunities of deaf students for learning and participation and current communicative conditions of the educational environment, which mediate the learning process and interaction of the subjects of the educational process.

In general, the procedure for identifying and eliminating communication barriers as a prerequisite for meeting individual communication needs can be depicted on Figure 1.

Thus, to meet the individual communicative needs of a deaf learner, it is necessary to compare the current, i.e. real, what are currently the communicative opportunities of the deaf and the communicative conditions of the educational environment in which he / she is or plans to send. The result of this comparison should be an assessment of the availability or absence of communication barriers.

In this context, the question arises as to what can be considered as communication barriers in education. Communication barriers are the mismatch of personal and environmental factors that hinder or prevent the effective communication of a deaf student in the educational process. Obviously, various factors can complicate the learning process, but the violation of communication processes in education is extremely significant (Zhuravlova et al., 2021: 135). Because communication is the main mechanism on which education is based, which should be considered as a means of transmitting the experience of previous generations to the next generation. This experience is crucial, because mastering it is the key to survival and self-realization for the younger generation. The quality of communication in the educational process in general is the cornerstone of quality of education, and in the context of education of the deaf becomes its central problem (Fedorenko, 2015: 81).

The key to understanding the communication barriers of deaf applicants for education is in the very concept of “communication”, which comes from the Latin word “communis”, which means “common”. Thus, communication is what makes common, in particular, makes certain information, messages, experiences, values, skills, etc. common (Drobot, 2016: 69). Community is achieved only under one condition, when the one who transmits the information and the one who receives it have common means of communication. If the information is encoded with a code that is not mastered and can not be used by the recipient, the message can not be read, i.e. the information under these conditions will not acquire common features (Babyak, 2019: 69).

There are several levels in communication as in the process of information transfer, but in the context of considering the problem of deaf students, the study of the processes of encoding and decoding information becomes especially important.

There are three main types of communication barriers that are associated with the complication or impossibility of the process of communication of a deaf student with other ones in the educational process: language, speech and communication-adaptive types of communication barriers.

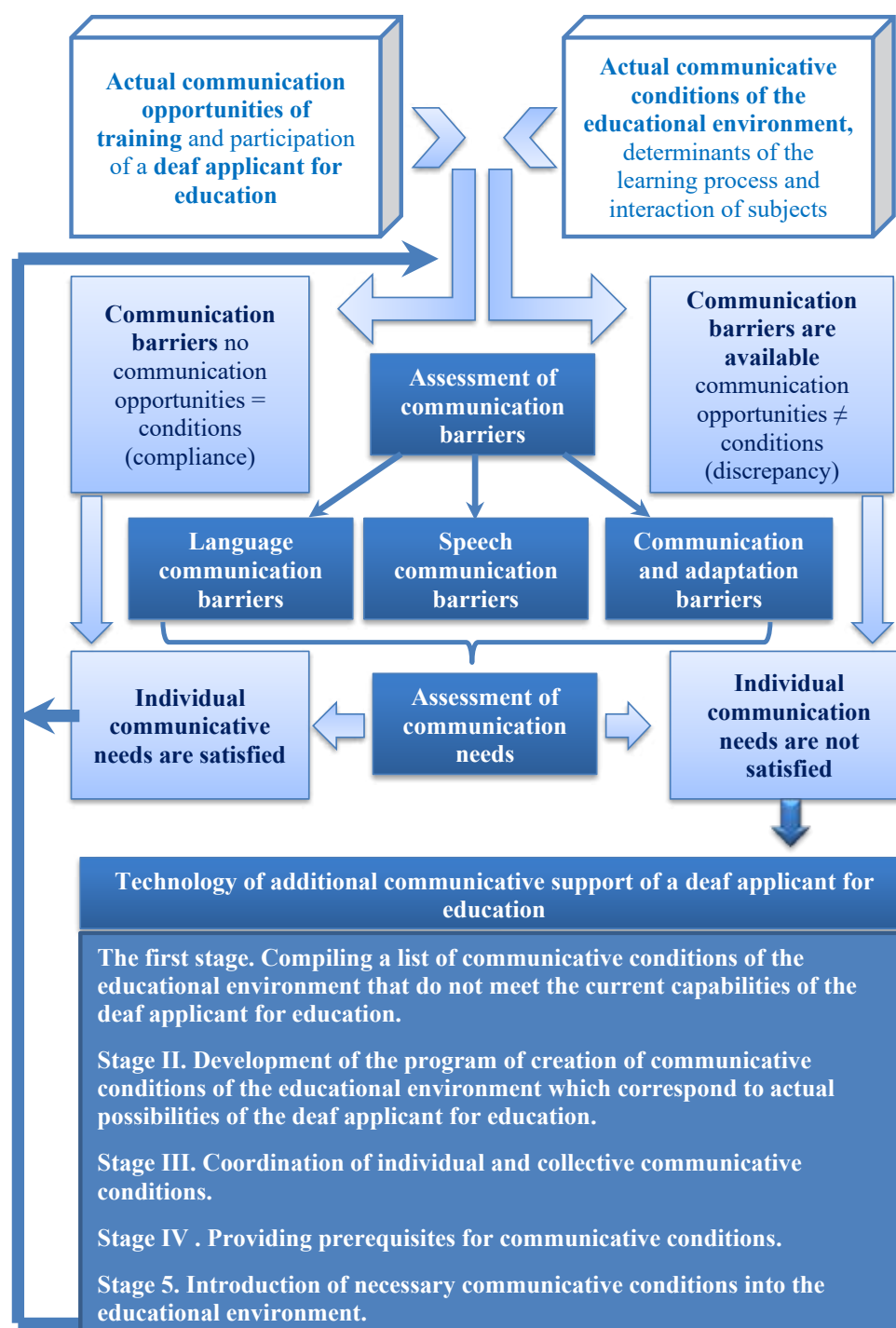


Fig. 1. Algorithm for providing individual communicative needs of a deaf applicant for education

Linguistic communication barriers essentially arise due to a mismatch between the level of mastery of a deaf learner in the language used as the main means of communication in the educational process. For example, deaf students may not have language barriers to communication. This is observed in cases where the language capabilities of the deaf correspond to the language of the educational environment. In particular, if a deaf child is born and raised in a family that uses a certain sign language as a means of communication, enters an educational institution, whose specialists use the same sign language as a means of communication in the educational process. In these circumstances, despite deafness, there will be no language barriers, as the deaf learner will learn using the language in which he / she is fluent (Drobot, 2009: 120). In contrast, if a deaf learner is a sign language speaker, and a certain verbal language is used in the educational process, which the deaf person does not speak, then there will be obstacles in learning activities and participation of the deaf learner in such educational environment. After all, in such conditions, the student will not be able to decode the information that makes up the content of education and will not be able to correctly encode their own messages in the language used as the main language of instruction (Adamyuk et al., 2018: 127).

Speech communication barriers are a type of discrepancy between the ability of a deaf applicant to produce and perceive certain types of speech and the use of these types of speech in the educational process for educational purposes. Among the types of speech, that are tested, we distinguish the following: for the national sign language – natural sign language; for the national verbal language – speaking, writing, reading and listening (for deaf students with cochlear implants) (Adamyuk et al., 2019: 38). Each of the types of speech is evaluated from the standpoint of the possibilities of its perception / production for the deaf learner. Based on this, a rating of those types of speech, which are mainly used by deaf students. Separately for receptive types of speech, and separately for productive types of speech. Then it is studied what types of speech are used in the educational environment. According to the results of the analysis, the percentage profile of the frequency of use of certain types of speech is formed, separately for each group – receptive types of speech and productive types of speech. Based on this, the speech possibilities and conditions are compared and it is determined whether they correspond to each other. In case of discrepancy, we state the existence of a speech communication barrier.

Communication-adaptive barriers are a type of mismatch between the means of compensating communication disorders caused by deafness, which are used by a deaf student and which are in the educational environment. A deaf person with a severe hearing impairment has serious difficulties in encoding and decoding information presented orally (Krausneker et al., 2020: 10). It is just to compensate the lost sensory capabilities, there are tools that can eliminate communication difficulties. As such means of communicative compensation can be considered manual articulation, which is means of manual support of oral speech, which completely translates oral speech from audio to visual code, and the one is perceived only through visual perception (Drobot, Zamsha, Fedorenko, 2017: 39). With this means of communicative compensation, it does not matter how deep the hearing impairment is, because communicative-adaptive encoding / decoding methods are used, which are based on the preserved analyzer (Drobot, 2015: 81). At the same time, participants in the educational process may not have this communicative and adaptive tool. Thus, inconsistency is formed as a barrier that makes the communication process impossible; thus forming a special communicative need of a deaf learner to use manual articulation as a communicative-adaptive tool in the educational environment (Adamiuk, Zamsha, 2020: 46). The same applies to tracing sign speech, which is a sign form of oral speech. At the same time, the ability to encode and decode tracing sign speech depends primarily on the level of mastery of the deaf learner of verbal speech in its oral form (Adamyuk, 2020: 161).

The content and structure of the communicative needs of deaf students in the current educational environment depend on the combination of these three potential communication barriers (Adamyuk, 2020: 122).

In cases where the analysis does not reveal communication barriers, it indicates that there are no unsatisfied communication needs of deaf students in this educational environment (Byrko et al., 2021: 138).

However, the educational institution is obliged to constantly monitor communication barriers in order to establish a timely imbalance between the communication capabilities of the deaf student and the communicative conditions of the educational environment. This monitoring will allow to respond flexibly to imbalances and create a communicatively accessible educational environment.

In the case when the availability of communication barriers has been identified and the structure of unmet individual communication needs has been outlined, it is necessary to apply the technology of additional communicative support to a deaf student in this educational environment. The technological approach to meeting communication needs is extremely important because it allows systematically, consistently and purposefully influence a particular phenomenon to ensure a lasting effect (Drobot, 2018: 54).

Thus, the statement of the availability of unsatisfied individual communicative needs, indicates that certain communicative conditions of the educational environment provide such forms of educational activities and participation that are functionally impossible and unacceptable for the deaf. Therefore, it is necessary to carefully analyze and create all the conditions that would meet the individual needs of each student who study together.

The technology of providing additional communicative support to a deaf learner involves five consecutive stages.

At the first stage there is a thorough analysis of the communicative conditions of the educational environment and a list of those communicative conditions that need to be provided to meet the current communicative needs of the deaf student, taken into account his/her communicative capabilities. The list contains three blocks of communicative conditions: language, speech and communicative-adaptive conditions. The analysis of conditions is carried out: those communicative conditions which are in the actual educational environment are defined; those communicative conditions are clarified which are absent in the current educational environment, but are necessary to meet the individual communicative needs of the deaf student; the communicative conditions are outlined of the actual educational environment, which can negatively affect the provision of communicative needs of deaf students; identification of conditions of the educational environment that are not actually communicative, but mediate the quality of communication of deaf students (audio or visual noise, FM systems, etc.).

The second stage is related to the development of a program to create communicative conditions in the educational environment that meet the current capabilities of the deaf student. At this stage, those communicative conditions are determined that need to be created for the accessibility of the educational environment, and which, on the contrary, need to be eliminated in order to ensure quality communication of deaf students in the educational environment.

At the third stage there is a coordination of individual and collective communicative conditions. This is an important preparatory stage to ensure quality mutual training of students with different communication needs. At this stage, it is necessary to identify a group of students who have similar communicative needs at all three levels: language, speech, communicative-adaptive. Accordingly, students with similar communication needs

should be grouped into one study group / class. In cases where it is not possible to combine students according to the principle of similarity of communicative needs, subgroups are formed within the study group / class for common communicative needs, for each of which a communication assistant should be available to provide appropriate communication conditions. Such assistants can be various specialists, both professionals, in particular sign language interpreters or teachers with knowledge of sign language, and paraprofessionals, in particular assistants in manual articulation, gesture transliteration, etc.

The fourth stage is characterized by the creation of preconditions as a basis that will contribute to the creation of the necessary communicative conditions. In particular, at this stage there is a search for specialists who should provide communication needs, if necessary. This stage may include the training of teachers so that they master the necessary communication and adaptation tools to meet the current communicative needs of deaf students. It is also created those conditions of the educational environment that are not actually communicative but affect the quality of communication (noise elimination, provision of additional technical means, etc.).

The fifth stage involves the introduction of special communicative conditions in the educational environment and the implementation of the educational process of deaf students in accordance with their communicative needs.

An important aspect of the fifth stage of the application of the technology of additional communicative support is the periodic assessment of the balance between the current communicative capabilities of deaf students and the communicative conditions of the educational environment. In case of detection of imbalance of communicative possibilities and conditions must be processed a repeated passing of stages, beginning with the first one.

Conclusion. Given the above, we can draw the following conclusions:

- the study of special communication needs in the context of communication barriers to learning and participation has significant prospects;
- the communicative needs of deaf students should be considered through ways to eliminate communication barriers that arise due to the mismatch between the current communication capabilities of deaf students and the current communicative conditions of the educational environment;
- it is necessary to differentiate communication barriers into three classification groups: language-communication; speech-communicative; communication and adaptation barriers;
- due to the fact that communication needs are not related to hearing impairment, they are not static in nature;
- the labile nature of communicative needs is due to changes in the balance between the communicative capabilities of deaf students and the conditions of the educational environment;
- the algorithm for providing special communicative needs of deaf students has a stage character: the stage of comparing the current communicative capabilities of the deaf student and the current opportunities of the educational environment in which the deaf student studies or plans to study; stage of assessing the level of compliance of communication capabilities and conditions and identifying the availability or absence of communication barriers; stage of determining communication needs that arise as a combination of current communication barriers; stage of application of the technology of additional communicative support of deaf students to eliminate the communicative discrepancy between the actual communicative capabilities of the deaf student for learning and participation and the current communicative conditions of the educational environment, which determine the learning process and interaction of educational subjects.

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