DOI: 10.5281/zenodo.4016804 UDC: 81'276.6:61+378.661





# Identifying levels of professional communication language skills training

### \*Aliona Busuioc, Victoria Vintu

Department of Romanian Language and Modern Languages
Nicolae Testemitanu State University of Medicine and Pharmacy, Chisinau, the Republic of Moldova

Authors' ORCID iDs, academic degrees and contributions are available at the end of the article

'Corresponding author: aliona.busuioc@usmf.md Manuscript received August 07, 2020; revised manuscript September 07, 2020; published online September 15, 2020

#### **Abstract**

Background: The characteristic of the levels of professional communication skills is used by foreign medical students in the formation of the specialized language in Romanian. The professional communication is presented by the criteria and the levels of training of the professional communication skills. Material and methods: The method of official documents analysis, scientific observation, case study, questionnaire method, tests provided with the examination and evaluation of the situation in the field of professional communication skills at foreign medical students were elaborated. Based on the specialized text, the low, medium or high levels of training of the professional communication skills of the specialized language were identified.

Results: The experiment was conducted at *Nicolae Testemitanu* State University of Medicine and Pharmacy, 72 second-year foreign medical students were involved, General Medicine study program. The levels of training of professional communication skills of the specialized language were identified through the integrated set of knowledge, skills and attitudes for each level. The production of oral / written messages and the ability to form sentences, texts in specialized language, in social and professional interactions, in order to perform service tasks were determined by the system of knowledge, skills and attitudes.

Conclusions: Based on the questionnaires and the compared values of the evaluation test, the training levels of the professional communication skills of the specialized language at the foreign medical students were identified.

Key words: specialized language, knowledge, skills, attitudes.

#### Cite this article

Busuioc A, Vintu V. Identifying levels of professional communication language skills training. Mold Med J. 2020;63(4):18-22. doi: 10.5281/zenodo.4016804.

#### Introduction

To have professional skills means to have a set of specific features and characteristics: to research and examine different professional situations, to relate a general principle to a particular case, to put into practice the specialized knowledge, to use specific skills, to collaborate with people in the group, to clarify an unpredictable problem or situation, to inform or to send some information etc.

Academic knowledge in a scientific educational field and knowledge of academic or empirical institutions in a professional field [1], an interdisciplinary approach, a medical education [2], clearly play an important role in the reception and comprehension of texts in a foreign language [3], relating to these fields [4], in the formation and analysis of medical terms.

All this would allow to obtain the competencies resulting from expressing a field according to a certain level; thus, we can identify the following characteristics of professional communication competence:

- 1. To communicate in the specialized language;
- 2. To put knowledge into practice through professional treatment of the field;
- 3. To present special features and characteristics based on a learned subject;

- 4. To render and explain by appropriate means the content of a communication, sources, notes, indications, etc.;
- 5. To inform problems, solutions, information, etc. both teammates and the patients he will treat;
- 6. To develop learning skills in order to continue their studies in the following cycles (secondary, residency, doctorate, etc.).

According to Sorin Cristea [5] "The superior pedagogical stake consists in creating favorable premises for the development of communication skills in a foreign language at the level of plurilingual and pluricultural competence [6] necessary in the perspective of present and future evolutions of the postmodern, informational, knowledge-based society."

The components of the professional communication competence express languages and terminology [7], knowledge, research, examination of professional situations, specific delimitation of professional activity, importance of the Romanian medical lexicon in the terminological content [8-10] etc. In order to identify the level of training of the professional communication competence, in our case of the specialized language in Romanian for foreign medical students; the experiment allowed us to assess the level of communication at the socio-cultural and linguistic level [11]

of foreign students according to the Common European Framework of Reference for Languages; we identified the needs and priorities for the formation of the specialized language in Romanian for foreign students; we have developed criteria for evaluating the level of training in professional communication skills, etc.

#### Material and methods

In order to establish the level of linguistic communication in Romanian for foreign medical students, we used applied scientific methods such as: test, questionnaire, opinion poll, etc.

Scientific documentation is manifested by researching bibliographic sources and gathering information in the field, examining specialized sites; recording and summarizing some fundamental principles, theses; research, essentialization, confrontation and verification of sources, information, data; systematic review of the examined content.

The biographical method (anamnesis) was put into practice in the pre-experimental stage, in order to know the level of possession of the Romanian language, the significance of knowing the Romanian language, communication within the institution, with colleagues, in society, clinics, hospitals, etc. before starting to study specialized language.

The scientific observation manifested itself as evidence of reflection, description and analysis of the researched field. In the experiment we capitalized on findings at the pre-experimental stage, which allowed us to classify, complete, rectify, modify some actions at the finding stage; the experimental evaluation was performed at the training stage; by comparing the results we managed to carry out the control experiment, which contributed to the systematization of the research results and the formulation of conclusions and recommendations.

The interview method allowed us to obtain information from the foreign students investigated to identify and collect data, visions to the research problem. Through individual and group interviews, an inventory was drawn up containing a set of established problems / difficulties that foreign medical students encounter in the formation of professional language; elaboration, correction, completion and development of research tools and strategies.

The test method (individual, group test) allowed us to evaluate and establish the level of linguistic communication skills in Romanian of foreign medical students.

The questionnaire method was put into practice in order to test the opinions, interpretations and convictions of foreign medical students regarding the formation of the specialized language in Romanian. Oral (direct) and written (indirect) questioning in combination with individual and group discussion allowed us to identify the motivation, levels of knowledge and training of specialized language for foreign medical students.

Data processing or statistical method consisted of testing and validating the hypothesis and the representative sample; the longitudinal analysis followed the evolution of the experimental group; data collection and process-

ing, analysis, presentation in the form of tables, diagrams, graphs, formulation of conclusions gave precision and rigor to the researched topic.

The graphical representation of the statistical data included the combination of two basic methods: numerical and graphical. The numerical method allowed us to calculate the mean deviation variability of the researched situation. The graphical method visually identified the calculated data: the histogram graph, the frequency polygon, the bar graph, the PIE graph were useful tools in the concrete exemplification by providing valuable information.

The experiment was performed at Nicolae Testemitanu State University of Medicine and Pharmacy, Department of Romanian Language and Medical Terminology. 72 secondyear medical students, study program General Medicine (35 students – experimental group, 37 students – control group) were involved in the experiment. The experimental research was carried out at several stages during three academic semesters: the second semester, the academic year 2015-2016 and the first and second semesters of the academic year 2016-2017: the pre-experimental experiment, the finding experiment, the training experiment, the control experiment. Foreign students were involved in the experiment, individual and group studies were combined; according to the conditions of realization it is a natural experiment; according to the mode of intervention it is a provoked and invoked experiment; according to the treated issue it is a pedagogical experiment; according to the number of variables it is a multivariate one; according to the research level it is a transversal and longitudinal type; according to the spent time, it is of average duration, it took place over a period of a year and a half (17 months, three semesters).

## **Results and dicussion**

To identify the level of training of professional communication skills in medical students by comparing the results recorded by the two groups in the experiment: the experimental group and the control group, there were elaborated:

- The initial questionnaire to identify the level of professional communication competence;
- The test for assessing the level of linguistic communication competence in Romanian B2-C1;
- The questionnaire for identifying the communication needs of foreign students in the specialized language;
- The grid with the indicators for evaluating the level of professional communication competence of medical students;
- Criteria for assessing the level of training of professional communication skills of medical students.

The test for assessing the level of linguistic communication competence A2 and the test for assessing the level of linguistic communication competence in Romanian B2-C1, was aimed to establish the level of linguistic competence in communication for foreign medical students. The evaluation test was elaborated based on the paper Evaluation tests in Romanian [12].

The test on determining the level of linguistic communication competence comprises 5 components: Listening comprehension (20 points), Comprehension of a written text (20 points), Grammar and vocabulary (20 points), Creative text production (20 points), Oral examination (20 points).

The evaluation process showed the profile of the experimental and control samples, which can be characterized according to several criteria. Based on the accumulated score, they were identified in the following grades: unsatisfactory, satisfactory, good, very good and excellent.

In this regard, we established the level of linguistic communication competence in Romanian for foreign medical students, developed on the basis of the distribution tables.

The research on the level of identification was expressed based on knowledge, skills and attitudes [13-18].

# Characteristics of the levels of training of professional communication skills of the specialized language in Romanian at foreign medical students

## Low level Knowledge

The foreign medical students possess minimal knowledge, do not possess / do not know about decoding a sent message and understanding the content of a specialized text proposed for audition; identification or discovery according to certain particularities of the characteristic features of the audited text; identification of grammatical categories in written texts; vocabulary, knowledge of new terms, and their delimitation from different medical contexts; production of oral messages in specialized language, in social and professional interactions, in order to perform service tasks. They have insufficient information about the studied subject and correct usage of the specialized vocabulary; production of specialized written messages, in order to perform professional activities.

## Intermediate level Knowledge

The foreign medical students have partial, incomplete knowledge of decoding a sent message and understanding the content of a specialized text proposed for audition; identification or discovery according to certain particularities of the characteristic features of the audited text; identification of grammatical categories in written texts; vocabulary, knowledge of new terms, and their delimitation from different medical contexts; production of oral messages in specialized language, in social and professional interactions, in order to perform service tasks. They have insufficient information about the studied subject and correct usage of the specialized vocabulary; production of specialized written messages, in order to carry out professional activities; knowledge of the usual expressions frequently encountered on topics that have professional relevance or about professional activity, as they do not know enough about the field; intentionally simulating to reproduce a situation model from medical practice; participation in discussions in medical practice; production of oral messages in specialized language, in social and professional interactions, in order

to perform service tasks; production of specialized written messages, in order to carry out professional activities.

## High level Knowledge

The foreign medical students have extensive, deep, complete, consistent knowledge about decoding a sent message and understanding the content of a specialized text proposed for audition; identification or discovery according to certain particularities of the characteristic features of the audited text; identification, of grammatical categories in written texts; vocabulary knowledge of new terms, and their delimitation from different medical contexts; production of oral messages in specialized language, in social and professional interactions, in order to perform service tasks; production of specialized written messages, in order to perform professional activities; knowledge of the usual expressions frequently encountered on topics that have professional relevance, or about professional activity, but do not know enough about the field; intentionally simulating to reproduce a situation model from medical practice. They are ready for the participation in discussions in medical practice; production of oral messages in specialized language, in social and professional interactions, in order to perform service tasks; production of specialized written messages, in order to perform professional activities; distinguishing and admitting the particular point of view of the one who produces a specialized audio text; lack of mistakes / quality of writing correctly in medical thematic contexts; presentation of a real fact, a communication situation from medical practice; they show through arguments an integral and detailed skill of the subject and elaborate texts.

## Low level Capacities

The foreign medical students possess minimum capacities, do not have capacities in reading various medical texts on professional topics; participation in discussions of personal and professional interest; identifying the general and particular meaning of the specialized text; assimilation of textual units depending on communication; learning to form specialized statements using medical terms; the use of medical terms with the knowledge of the specialized lexicon; initiating and holding a specialized conversation; understanding and producing specialized written texts; elaboration and explanation of professional communication situations.

## **Medium level Capacities**

The foreign medical students have partial, incomplete abilities in reading various texts on professional topics; participation in discussions of personal and professional interest; identifying the general and particular meaning of the specialized text; assimilation of textual units depending on communication cues; learning to form specialized statements using medical terms; the use of medical terms with the knowledge of the specialized lexicon; decoding medical terms from specialized texts; initiating and holding a specialized conversation; understanding and producing specialized written texts; elaboration and explanation of professional communication situations; formulating questions in order to find an answer; examination and wide exposure

of the information presented in the specialized text; producing, writing and reacting in writing to information transmitted orally, etc.; capturing and recording information from the audited text by performing the exercises.

## **High level Capacities**

The foreign medical students possess large, deep capacities, which express, complete, consistent proficiency in reading various texts on professional topics; participation in discussions of personal and professional interest; identifying the general and particular meaning of the specialized text; assimilation of textual units depending on communication cues; learning to form specialized statements using medical terms; the use of medical terms with the knowledge of the specialized lexicon; decoding medical terms from specialized texts; initiating and holding a specialized conversation; understanding and producing specialized written texts; elaboration and explanation of professional communication situations; formulating questions in order to find an answer; examination and wide exposure to the information presented in the specialized text; producing, writing and reacting in writing to information transmitted orally, etc.; capturing and recording information from the text heard by performing the exercises; arguing one's own opinion in relation to writing a specialized text; associating the specialized text with a case, a socio-professional situation; explaination and comment on the issuer's opinion; selecting information from the specialized text to create and communicate new ideas.

## Low level Attitudes

The foreign medical students do not express, do not apply, do not understand, do not present arguments in proposing solutions to a particular problem with a professional context; critical attitude and arguments in order to convince; decisions in solving a health problem; curiosity for understanding messages heard on specialized topics; willingness to communicate using specialized language in professional contexts.

### **Intermediate level Attitudes**

The foreign medical students express partially or incompletely on the basis of arguments their interest in proposing solutions to a particular problem with a professional context; critical attitude and arguments in order to convince; decisions in solving a health problem; curiosity for understanding messages heard on specialized topics; willingness to communicate using specialized language in professional contexts; interest in conversations about problems, health recommendations.

## **High level Attitudes**

The foreign medical students demonstrate on the basis of arguments and prove interest in proposing solutions to a particular problem with a professional context; critical attitude and present arguments in order to convince; decisions in solving a health problem; curiosity for understanding audited messages on specialized topics; willingness to communicate using specialized language in professional contexts; interest in conversations about problems, health recommendations; willingness to examine several opinions on a

medical case, deliberations; conversations between doctor and patient, etc.; collaboration in professional contexts with specialists in the medical field.

#### **Conclusions**

The competence in the educational, instructional process becomes a component part of the educated one and belongs to a category with an elaborated educational capacity, has a triadic structure, is externalized in different levels of development, depending on the age and orientation in a certain field. However, the competence with the greatest influence on the future professional activity, even the didactic one, of the students studying this discipline, remains the transfer of the competences of learning foreign languages to the study of the specialized disciplines. Based on the evaluation tests of the investigative-experimental approach to the formation of students' medical language, we developed the study on the levels of the formation of professional communication skills in the specialized Romanian language for foreign medical students.

#### References

- 1. Leshner AI. Student-centered, modernized graduate STEM education. Science. 2018;360(6392):969-970. doi: 10.1126/science.aau0590.
- Garcia P, Armstrong R, Zaman MH. Models of education in medicine, public health, and engineering. Science. 2014;34(6202):1281-1283. doi: 10.1126/science.1258782.
- 3. Naznean A. Provocări şi dificultăți în traducerea textelor medicale din şi în limbile română şi engleză [Challenges and difficulties in translating medical texts from and into Romanian and English] [dissertation abstract]. Iasi: Alexandru Ioan Cuza University of Iaşi; 2014. p. 4-8. Romanian.
- Council of Europe. Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion volume with new descriptors. Strasbourg: The Council; 2018 [cited 2019 Apr 11]. Available from: https://rm.coe.int/cefr-companion-volume-with-new-descriptors-2018/1680787989.
- Cristea S. Competența comunicării în limbi străine [Competence in communication in foreign languages]. Didactica Pro (Chisinau). 2014;(4/86):51-56. Romanian.
- 6. Humoreanu (Găinariu) D. Coduri și interpretarea lor semiolingvistică în limbajul medical [Codes and their semiolinguistic interpretation in medical language] [dissertation abstract]. Suceava: Ștefan cel Mare University of Suceava; 2017. 33 p. [cited 2019 Aug 12]. Available from: https://usv.ro/fisiere\_utilizator/file/Doctorat/2017/06/gainariu/rezumat%20teza%20Gainariu(Humoreanu).pdf. Romanian.
- 7. Toma A. Terminologia lexicală și discursivă în studierea limbajelor specializate din secolul al XIX-lea [Lexical and discursive terminology in the study of specialized languages in the 19th century]. Studia Universitatis Petru Maior. Philologia (Romania). 2010;(1-2):98-106. Romanian.
- 8. Staicu SN. Aspecte ale polisemiei şi sinonimiei lexicale în terminologia medicală [Aspects of lexical polysemy and synonymy in medical terminology]. In: Quaestiones Romanicae: Papers of the International Colloquium Communication and Culture in Romance Europe. 2nd ed. / 2013 Sep 24-25. Seghedin: JATEPress; 2013. p. 426-433. Romanian.
- Vîntu V, Chiriac A, Trebeş T, Busuioc A. The importance of multimedia in teaching/learning the specialized languages. In: Roceanu I, editor. 15th International Scientific Conference "eLearning and Software for Education"; 2019 Apr 11-12; Bucharest. Vol. 2. Bucharest: "Carol I" National Defence University Publishing House; 2019. p. 453-458. doi: 10.12753/2066-026x-19-132.

- 10. Staicu SN. Medical terminological units: types of oppositions. In: Boldea I, editor. Proceedings of the International Conference Globalization, Intercultural Dialogue and National Identity; 2016 May 19; Tîrgu-Mureş, Romania. Tîrgu-Mureş: Arhipelag XXI Press; 2016. p. 201-203
- 11. Butiurcă D. Impactul politicilor lingvistice asupra terminologiei/ translatorului. [The impact of linguistic policies upon terminology/ the translator]. Studia Universitatis Petru Maior. Philologia (Romania). 2013;(15):35-45. Romanian.
- 12. Zavadschi A, Barbăneagră A, Corniciuc S, et al. Teste de evaluare la limba română [Evaluation tests for the Romanian language]. Chisinau: Poligraf-Design; 2011. p. 26-47.
- 13. McGaghie WC. Medical education research as translational science. Sci Transl Med. 2010;2(19):19cm8. doi: 10.1126/scitranslmed.3000679.
- 14. Rider EA, Keefer CH. Communication skills competencies: definitions and a teaching toolbox. Med Educ. 2006;40(7):624-9. doi: 10.1111/j.1365-2929.2006.02500.x.
- Vagan A. Medical students' perceptions of identity in communication skills training: a qualitative study. Med Educ. 2009;43(3):254-9. doi: 10.1111/j.1365-2923.2008.03278.x.

- 16. Nagy IK. English for special purposes: specialized languages and problems of terminology. Acta Universitatis Sapientiae. Philologica. 2014;6(2):261-273. doi: 10.1515/ausp-2015-0018.
- 17. Bărdăşan G, Căpălnăşan E. Modalități de valorificare a descriptorilor de competență din cadrul european comun de referință pentru limbi în predarea limbajelor specializate la programul pregătitor de limba română [Ways of exploiting the descriptors of competences from the European framework of references for languages in teaching specialised vocabulary to the preparatory programme of Romanian]. Sudii de Știință și Cultură [Sci Cult Stud] (Arad). 2019;15(1):53-64. Romanian.
- 18. Bărdăşan G. Optimizarea dezvoltării competenței de comunicare profesională în limba română la studenții anului pregătitor [Optimising the acquisition of professional communication skills in Romanian by the students of the Preparatory year]. In: Quaestiones Romanicae: Papers of the International Colloquium Communication and Culture in Romance Europe. 6th ed. / 2017 June 16-17. Seghedin: JATEPress; 2018. p. 149-156. Romanian.

## Authors' ORCID iDs and academic degrees

Aliona Busuioc, PhilologyD, Assistant Professor, PhD Applicant – https://orcid.org/0000-0002-4010-0108. Victoria Vintu, PhilologyD, PhilologyPhD, Associate Professor – https://orcid.org/0000-0002-4515-122X.

#### Authors' contribution

AB established well-defined models; VV formatted specialized language of foreign medical students as effective benchmarks in substantiating and learning the medical language by foreign medical students. Both authors revised and approved the final version of the manuscript.

#### **Funding**

This study was supported by *Nicolae Testemitanu* State University of Medicine and Pharmacy. The authors are independent and take responsibility for the integrity of the data and accuracy of the data analysis.

## Ethics approval and consent to participate

Written informed consent was obtained from all participants in the study.

#### **Conflict of Interests**

There are no known conflicts of interests and financial or non-financial support associated with this publication.

