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Optimizing the Selection of Assessment Tools Used in Foreign Language Training in a Non-linguistic University

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Abstract

Transition of the higher education system to the competence-based paradigm and the development of professional standards urge the search for new approaches to assessing the learning outcomes and causes continuous improvement of the existing assessment tools. The paper discusses issues related to the formation of an assessment kit for the “Foreign Language for Business Communication” as a course offered to MSc students of non-linguistic universities. The study’s goal is to optimize the selection of assessment tools to provide for the fuller implementation of their competence potential.

The authors used the following research methods: observation, surveying MSc students and lecturers, pedagogical modeling, statistical data interpretation. The theoretical provisions were verified during the pedagogical experiment. The practical relevance of the study consists in the development of methodological recommendations for optimizing the selection of assessment tools (as exemplified by the “Foreign Language for Business Communication” course). The authors have conducted a survey to determine how fully and effectively the assessment tools are implemented. The survey results have determined the range of applicable assessment tools, which correlate with the prescribed competencies. Based on the survey results, the authors developed guidelines for optimizing the kits of assessment tools of foreign language training within MSc programs in a non-linguistic university. The authors suggest that the range of assessment tools should be expanded and diversified to ensure the most effective ongoing assessment of students’ learning outcomes. The focus should be made on specific types of learning activities, which contribute most to the development of identified competencies.

Keywords: assessment tools, foreign language training, non-linguistic university, learning outcomes, competency-based approach.

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Introduction

Didactic designing is practically implemented in universities taking into account a competency-based approach. One of the main problems is designing an assessment system to determine the level of students'/graduates' competencies prescribed by the contextualized syllabi (Kuznetsov & Takanova, 2009). The considered approach implies that in the process of study, students should learn to develop independent and detached thinking and be prepared for actions in real-life conditions (Sergeeva & Yakovleva, 2019). Since the competency-based approach involves the transition from the classical assessment of knowledge and skills to assessment of competencies, there arise some problems associated with ensuring an adequate assessment of learning outcomes. Conventional assessment of the quality of graduates' training based on knowledge and skills demonstrated at the intermediate and final exams, does not adequately characterize the actual level of their readiness for successful professional activity (Letter of the Ministry of Education of the Russian Federation, 2002).

Also, a new and fundamentally important feature of the new approach is that it doesn't aim at finding errors or shortcomings in the student's work; instead its goal is to determine the degree of readiness for the upcoming professional activity and to develop clear motivation. Therefore, students should adequately visualize their future professional activities implying the use of a foreign language (Alipichev, 2015).

Purpose and objectives of the study

Purpose of the study is to optimize the selection of assessment tools to provide for the fuller implementation of their competence potential in the framework of foreign language training in a non-language university.

Literature review

The most successful implementation of the competency-based approach in education requires that new assessment methods should be developed. Speaking about the fundamental principles of forming the kits of assessment tools, Resnick, L.B. and Resnick, D.P. (1992) note the importance of three of them: first, compliance with the study goals; second, taking into account the nature of the tested learning outcomes, and third, implementation of the control functions in the study process. A notion should be taken that the stage of controlling the level of competences developed (especially the professional ones) is an integral component of the study process at the university since it provides effective feedback not only between students and their teacher but also the teacher and the requirements of the contextualized syllabi; in addition, it provides for more instrumentalized monitoring of individual learning outcomes.

Assessment of the results of mastering the training program is also the object of scientific works of many domestic experts, including Yefremova (2010), Solovova (2015), Zvonnikov and Chelyshkova (2010), and others. The relevance of this problem is caused by the fact that successful implementation of a competency-based approach in education is not possible without effective tools and methods for assessing the development of competencies.

Since the competency-based approach is practice-oriented, the variety of assessment tools allows activating the study process. This can be done through the use of assessment tools correlating the developed competences with the requirements for practitioners. Thus, there is an objective need to develop new assessment methods and, in particular, to optimize the kits of assessment tools.

The assessment kit is defined as “a set of teaching materials designed to establish compliance (or non-compliance) with the requirements of the Federal State Educational Standard of higher professional education as to the level of mastering the main study program in a specific area of training or a specialty”. These methodological materials include a set of control and assessment materials (typical tasks (exercises), quizzes, tests, etc.) and methods of their use to assess the development level of the prescribed competencies and the actual achievement level of expected learning outcomes (Prilipko, 2014). In particular, assessment kits may include materials that determine the assessment procedures – a description of the assessment conditions, assignments (procedures, time, equipment, etc.) (Kuznetsov & Schaveleva, 2017). Assessment kits are formed separately for each training field and profile, as well as for each subject (module). Assessment kits aim at organizing and planning students' independent work, as well as assessing the quality of mastering the basic syllabi.

The main tasks of assessment kits include:

- ongoing monitoring of students' performance to determine operational effectiveness of their study activities;
- intermediate assessment, i.e. stating the degree of achieving the planned learning outcomes in accordance with the terms established by the curriculum.

According to many methodologists (Davydova, 2012; Kuznetsov & Schaveleva, 2017), the kits of assessment tools should provide a comprehensive, objective and reliable assessment of the quality of learning outcomes, rather than focusing on fixing shortcomings. They should prevent using any biased approach and exclude low information content of the assessment, while stating clear rules for making the final grades.

The widespread dissemination of the idea of a competency-based approach has resulted in various methodological recommendations on the formation of assessments kits. These recommendations may serve as a theoretical basis for further optimization. So, for example, according to the Russian professor Yefremova (2010), the basic principles to be used by methodologists in the preparation of assessment kits should include:

- valid control assessment materials;
- compliance of the content of materials with the level and stage of training;
- clearly defined assessment criteria;
- the most objective and productive assessment methods;
- involvement of highly qualified specialists;
- clearly defined recommendations for follow-up actions.

Some researchers draw attention to the fact that modeling quasi-professional activity is the best way enabling teachers to most fully and accurately assess particular competences developed in students (Alipichev & Kuznetsov, 2011). However, the situation modeling is the most difficult stage in the formation of assessment kits, due to the complex structure of each competence (Danilov, Ovchinnikov, Gitman, & Stolbov, 2012).

Many experts also rightly emphasize the fact that the greatest difficulty in assessing under competency-based training is that the development of competences can be only observed through the "involvement" of a person in the performance of a certain activity (Smyshlyayeva, 2009).

In order for assessment kits to fully reflect the development of competences, when compiling them, it is necessary to take into account some features of control in general. So, according to a number of Russian researchers, the most important aspects to be taken into account include the approved assessment frequency, clear and precise assessment procedure, multi-stage assessment, uniform assessment technology and assessment criteria for all students (Borovkov, Kiselova, & Romanov, 2016).

Thus, the main task facing the developers of the contextualized syllabi and assessment kits is to carefully analyze the competences that students should master while studying the module, and to search for effective methods of testing the knowledge acquired by students, taking into account specific features of the implementation of the competency-based approach in education.

Methodology

Undoubtedly, an effective implementation by future specialists of their professional functions implies such training, the structure and content of which are isomorphic to the types of upcoming professional activity. In other words, the main situations of professional communication should be worked out during the training process. In this paper, an attempt is made to consider the basic requirements for the selection of assessment tools as exemplified by the “Foreign Language for Business Communication” course offered to MSc students in a number of engineering areas of training. The aims of the course include the improvement and further development of previously acquired knowledge and skills of using foreign languages in various types of communication, the development of professional communicative competence, which implies the assimilation of language material and the mastery of different types of speech activity within the framework of the course, expanding the vocabulary due to general professional and economic lexical units, as well as the acquisition of applied knowledge and skills in the field of business communication.

However, an analysis of existing textbooks and teaching manuals shows that most training materials offered poorly reflect the field of professional activity of future graduates, the offered topics are wide enough, and the tasks do not always adequately reflect the role repertoire of mechanical engineers, as well as competences formed in the study process. It is necessary that students should have a clearer idea of the problems specialists face in their practical activities, in particular, what situations of communication require the use of a foreign language, and also how they should design algorithms for solving typical professional problems (Alipichev & Takanova, 2019).

In terms of the content, such a course should include materials related to the problems of job search in an international company, as well as business correspondence on various aspects of the enterprise’s activities in the field of import and maintenance of foreign agricultural machinery. The offered tasks, to a certain extent imitating the professional activities of specialists, are designed to contribute to the formation of conscious motivation to perform upcoming professional activities, finding solutions and discussion of professional issues with foreign colleagues and the information search using foreign language sources.

The experimental site of the study was Russian Timiryazev State Agrarian University.

To solve the research problem, the following research methods were used: observation, surveying MSc students and lecturers, pedagogical modeling, statistical data processing and interpretation. The offered theoretical provisions were verified during the pedagogical experiment.

At the first stage of the experiment (2018-2019), the authors analyzed the study and methodical documentation of the “Foreign Language for Business Communication” course taught to first-year MSc students of training field 27.04.01 – Standardization and Metrology.

At the next stage (spring 2019), 40 MSc students of 1-2 years of training field 27.04.01 – Standardization and Metrology and 15 lecturers of the “Foreign Language for Business Communication” course were surveyed to determine how fully and effectively the assessment tools provided by the contextualized syllabus are implemented. The survey data showed the most frequently used assessment tools and their correlation with the prescribed competencies.

At the third stage (2019-2020), based on the survey results, the authors developed guidelines for optimizing the assessment tools of the “Foreign Language for Business Communication” course and developed new assessment tools that are currently being actively implemented.

Results

Table 1 and Figure 1 show survey results obtained from 40 MSc students of 1-2 years in 1-2 years of training field 27.04.01 – Standardization and Metrology. The results show the frequency of using the assessment tools in the “Foreign Language for Business Communication” course (academic years 2017/2018 and 2018/2019).

Table 1. Evaluation of the frequency of using certain assessment tools in the “Foreign Language for Business Communication” course (% of the total number of students surveyed)

Assessment tools	More frequently, %	Less frequently, %	Not used, %
Tasks for working with texts (reading, interpretation and translation, retelling)	91	9	0
Tasks for working with audio texts	0	15	85
Oral communication on the proposed topic (presentation)	58	37	5
Test (lexical and grammar exercises)	66	34	0
Discussion	17	32	41
Paper writing (essays, articles)	50	32	18
Role-playing games	0	34	66
Case study tasks	0	28	72

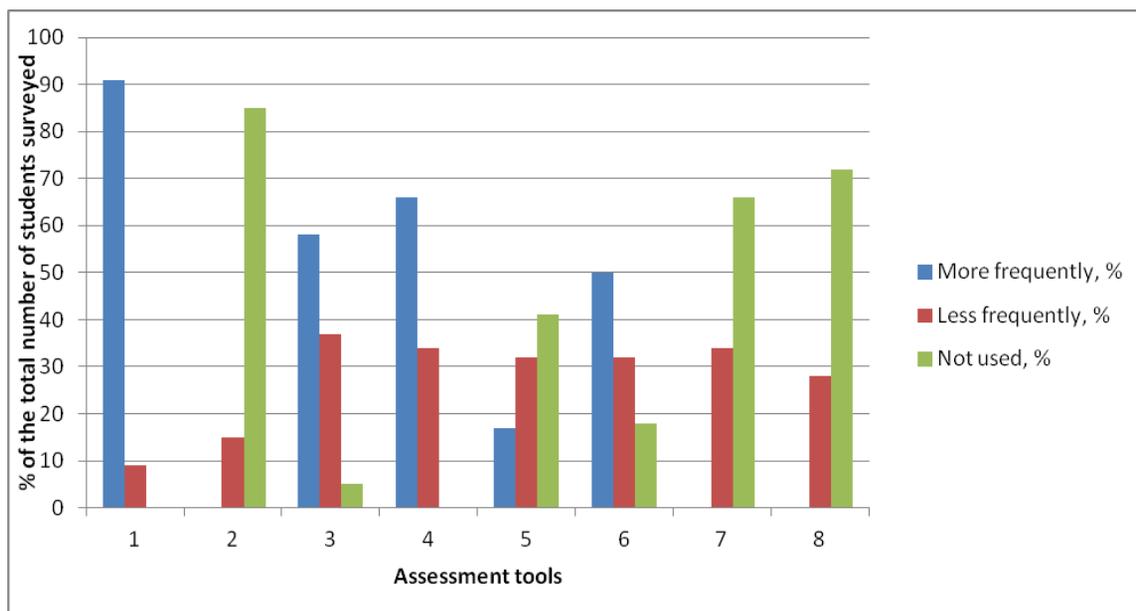


Figure 1. Evaluation of the frequency of using certain assessment tools in the “Foreign Language for Business Communication” course (% of the total number of students surveyed)

Legend for assessment tools:

1. Tasks for working with texts (reading, interpretation and translation, retelling)
2. Tasks for working with audio texts
3. Oral communication on the proposed topic (presentation)
4. Test (lexical and grammar exercises)
5. Discussion
6. Paper writing (essays, articles)
7. Role-playing games
8. Case study tasks

At the next stage of the study, a survey of 12 language teachers of the "Foreign Language for Business Communication" course was conducted in Russian Timiryazev State Agrarian University. It helped to determine the most appropriate and effective assessment tools of foreign language training. Based on both surveys, the authors developed guidelines for optimizing the assessment tools of foreign language training within MSc programs offered in a non-linguistic university.

The lecturers were asked to suppose, which assessment tools (used for the ongoing control) are most effective for assessing the under-mentioned competences developed in MSc students of training field 27.04.01 – Standardization and Metrology. The considered competences are General Competence OK-1

(“Readiness for oral and written communication in Russian and foreign languages for solving the problems associated with professional activity”) and Professional Competence PK-22 (“Readiness for the collection, processing, analysis, systematization and generalization of scientific and technical information, domestic and foreign experience in the field of research, the selection of rational methods and means used for solving practical problems, the development of work plans and algorithms for research and advanced technical developments, the preparation of individual tasks to be performed by other people, the drafting of scientific and technical reports, reviews and publications based on the research and development results”) (Federal State Educational Standard of higher education in training field 27.04.01 Standardization and Metrology (2014)).

Table 2. Evaluation of the effectiveness of using assessment tools to determine the competence level developed in MSc students of the “Foreign Language for Business Communication” course (% of the total number of lecturers surveyed)

Assessment tools	Commonly used	Most effective
Tasks for working with texts (reading, interpretation and translation, retelling)	100	53
Tasks for working with audio texts	13	80
Oral communication on the proposed topic (presentation)	60	67
Test (lexical and grammar exercises)	80	40
Discussion	42	73
Paper writing (essays, articles)	27	60
Role-playing games	20	87
Case study tasks	13	93

Figure 2. Evaluation of the effectiveness of using assessment tools to determine the competence level developed in MSc students of the “Foreign Language for Business Communication” course (% of the total number of lecturers surveyed)

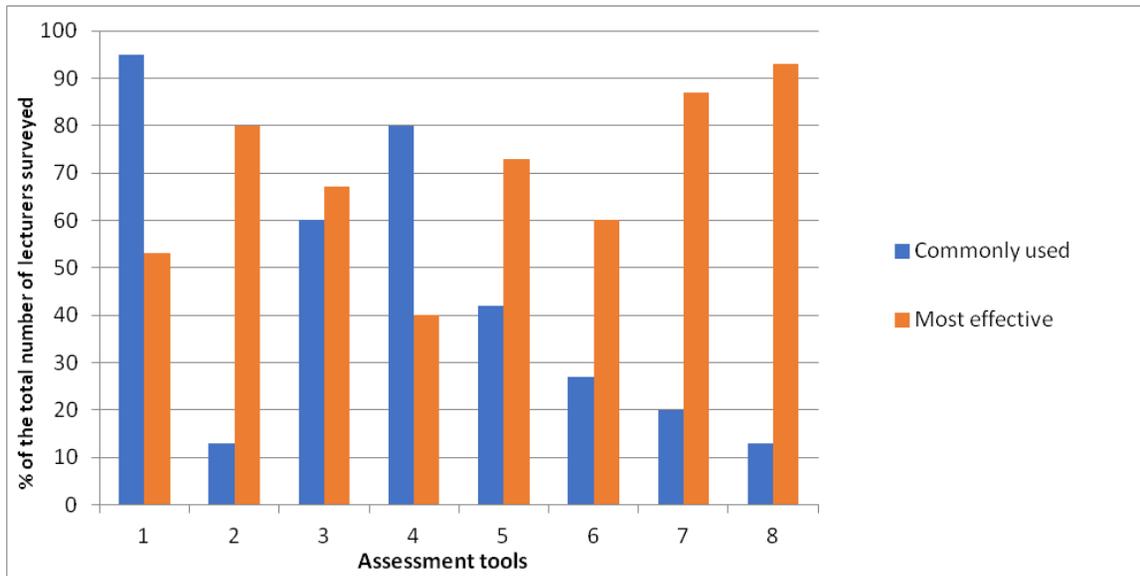


Figure 2. Evaluation of the effectiveness of using assessment tools to determine the competence level developed in MSc students of the “Foreign Language for Business Communication” course (% of the total number of lecturers surveyed)

Legend for assessment tools:

1. Tasks for working with texts (reading, interpretation and translation, retelling)
2. Tasks for working with audio texts
3. Oral communication on the proposed topic (presentation)
4. Test (lexical and grammar exercises)
5. Discussion
6. Paper writing (essays, articles)
7. Role-playing games
8. Case study tasks

The study results have revealed that the least frequently used assessment tools for ongoing control include a role-playing game (20%), a case study, and tasks based on audio texts (13% each). At the same time, a number of lecturers (80%) believe that working with audio texts can be especially effective, due to the fact that many students and novice specialists have significant difficulties in hearing foreign speech (during negotiations, talking on the phone, watching videos etc.). Similarly, 87% and 93% of lecturers speak in favor of assessment tools such as role-playing games and case studies, respectively. According to most lecturers, the reason for the extremely limited use of very useful and at the same time interactive training technologies is the lack of a sufficient methodological base (video and audio materials, game scenarios, descriptions of problematic situations, etc.) and the experience of introducing such types of study activities in practical classes.

Discussions

Accordingly, the assessment materials and tools were substantially revised for the training groups of the 2019/2020 academic year. In particular, according to the survey results and the subsequent methodological work, such assessment tools as listening assignments and analysis of the practical situations (case studying) were included in the assessment kits for periodic use by lecturers as part of the ongoing control.

Thus, as shown by the experience of the Department of Foreign and Russian Languages of Russian Timiryazev State Agrarian University, in addition to typical lexical and grammar exercises, the most valid and representative are the assessment tools (materials) described below.

1) problem-search and creative tasks for working with texts / audio texts (topics: *job search, corporate etiquette rules, features of conducting business negotiations and public speaking*):

- find in the text certain information / given words (expressions) in Russian;
- make a plan of the text and retell the text (based on the plan);
- restore missing words in the text of the exercise (sense prediction);
- complete unfinished sentences / restore the beginning/ending of the sentence (establishment of cause-and-effect relationships);
- arrange the text sentences in a logical order;
- dub a video clip / continue the character's speech;
- prepare your recommendations based on what you have read / listened to.

2) topics for discussion (debates, round tables):

- the interrelationship between the character, temperament and personal traits of agricultural engineers and professional requirements;
- typical pragmatic and lexical-and-grammatical errors in the content of the resume and a cover letter;
- typical interview questions and requirements for the behavior of a job seeker during an interview in an international company;
- typical communicative mistakes made during telephone calls;
- features of business etiquette in a cross-cultural context (for example, in dealing with representatives of different countries and cultures).

3) tasks for the case study analysis

- An example of a written assignment:

“A foreign company has opened a vacancy for a position according to your qualification. Write a motivation letter to the HR Department.

Give the reason for contacting the company, the source of your information, state your professional and personal qualities, as well as work experience in this area, which makes you eligible for this position, and indicates the time and date convenient for you to participate in a job interview.”

- An example of an oral assignment:

“You have an opportunity to take a summer internship in a foreign company. You have graduated from a technical university, but you have not had taken any practical training abroad before, although you have experience in internships with importers of foreign agricultural machinery. Prepare questions for a phone call about discussing internship conditions and your compliance with the requirements, as well as fixing the interview time. The lecturer will act as a representative of the internship organizers.

Indicate your advantages and express your readiness to develop and to improve your skills during the internship.”

4) role-playing game “Applying for a job in a foreign company”

1. Topic (problem): the applicants are expected to present their goals and intentions, level of education and achievements in order to obtain a vacant position in a foreign company.
2. The game concept: to role-play a communication situation arising during the conversation between the selection committee members and applicants for vacant positions – graduates of Russian universities.
3. Roles: two to three “selection committee members” and three “applicants”.
4. Role tasks of the “applicants”: conducting a self-presentation as part of an oral interview (demonstration of a slide show or video) in order to attract the attention of the selection committee members.
5. Role tasks of “the selection committee members”:
 - participate in a conversation with the applicants for a vacant position, ask provocative questions and discuss various aspects of future work for the company;
 - make a reasoned positive or negative decision to offer a vacant position to the applicant.
6. The game scenario: the applicants present themselves in a foreign language, “the selection committee members” ask them various questions, and, based on the results of all presentations, state their motivated decision as to which candidate they have found the most eligible one and why.

7. Expected results:

- the formation of students' stable skills of communicative behavior in communication situations related to the presentation of information, its discussion, assessment and adoption of a certain grounded decision;
- development of speech skills necessary and sufficient for the implementation of the communicative functions of presenting information, persuasion and discussion.

Each assessment tool assumes the existence of clear assessment criteria (on the traditional 5-point scale or the “pass/fail” scale). Currently, the Department is actively working to refine these criteria, taking into account the experience gained using the considered assessment tools.

Conclusion

The study has generalized scientific and pedagogical experience of determining the effectiveness of using assessment tools to assess competences prescribed in the contextualized syllabi of particular subjects. The results have revealed that the range of typically used assessment tools should be expanded while determining the optimal role for each assessment tool in the study process. According to the survey results, it has been revealed that some of the assessment tools that, according to lecturers, can be effectively used in practice, were not widely used or were not provided for in the contextualized syllabus of the “Foreign Language for Business Communication” course (tasks for working with audio texts, case study analysis, role-playing simulation games). A survey of students has shown that, in practice, unfortunately, not all the assessment tools specified in the work program are sufficiently actively implemented by lecturers in the “Foreign Language for Business Communication” course. At the same time, a number of “conventional” assessment tools (tasks for working with texts, lexical and grammar exercises and tests) do not fully contribute to the development of professional competencies.

Based on the data obtained, a number of methodological recommendations have been developed to optimize the assessment kit for the “Foreign Language for Business Communication” course of training direction 27.04.01 – Standardization and Metrology, the introduction of which can contribute to greater variability and effectiveness of assessment while checking the development of PK-22 and OK-1, in particular:

- include such means as role-playing game, analysis of practical situations, tasks for working with audio texts as assessment tools for ongoing control;

- expand the use of discussion as an assessment tool, for which to work out a list of topics and practical problematic situations for discussion;
- constantly enrich the range of assessment tools, taking into account current trends in education related to digitalization and the development of distance learning programs.

It is important to note that the methodological recommendations presented above relate to the current assessment procedure in the “Foreign Language for Business Communication” course but they also are invariant components for other courses within the curriculum for MSc students. As for the determination of approaches to the design of assessment kits for the implementation of the intermediate and final assessment of MSc students, this problem requires further multi-aspect research.

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