Psychological and Pedagogical Conditions of Integration of Immigrants into the German Society

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Abstract---Among the new migration challenges of the modern world, perhaps the most acute is the issue of the integration of migrants. As a result of globalisation, events in the world are connected as communicating vessels and, the more unresolved problems in Africa or the Middle East, the stronger the desire of those in need of assistance to move to industrial countries with humane social welfare policies. In this regard, public interest in the problems of the European Union, including Germany, related to the influx of refugees through the Balkan route at the turn of 2015, is holding. The purpose of this paper is to present the results of a study conducted with students of integration courses at the People’s University of Frankfurt am Main (VHS Frankfurt am Main) in the period from 2017 to 2020, and to demonstrate specially created psychological and pedagogical conditions that contribute to the development of a higher and better level of ability to integrate immigrants into the cultural and linguistic environment of Germany during the acquisition of the German language. In order to form the ability of immigrants to integrate into the cultural and linguistic environment of the FRG when teaching German, the study identified effective psychological and pedagogical conditions presented in the author’s reference book "Practical recommendations for teachers of German as a foreign language". A pilot testing programme was also developed and implemented, consisting of three stages: ascertaining, transforming, and concluding. The use of the Wilcoxon signed-rank test allowed obtaining evidence...
in favour of the effectiveness of the impact of experimental training on an experimental group of students.

**Keywords**—cultural and linguistic environment, foreign language, immigrants, integration course, psychological and pedagogical conditions.

**Introduction**

At the turn of 2014–2015 “Europe became the centre of attraction for refugees, it was enough to get to any country of the Schengen Area, then to move freely around the European Union” (Kravchenko, 2016). The multiple increase in the flow of migrants and refugees from the Middle East and Africa through the Balkan route and the problems associated with their integration into the European community (granting political asylum, means for providing social benefits, employment, cultural and linguistic adaptation), served as the basis for creating a situation that is now considered as a European integration crisis. In this regard, the public interest in the problems of the European Union, including the Federal Republic of Germany (hereinafter – FRG), related to the influx of refugees through the Balkan route at the turn of 2015, does not weaken, which is reflected in the growing number of publications and active discussion of immigration policy (Indicators of Immigrant Integration, 2015). There is a need to transfer the system of traditional values of the host country (language, culture, laws, history) to the refugees, so that there would be no tragedies (such as New Year’s Eve 2016 in the square in front of the Cologne Cathedral).

It should also be noted that immigration in Europe is not limited to refugees. The incentive factor for immigrants is not only political asylum, the policy of providing social benefits, but also the opportunity to get a job. Currently, FRG is one of the world’s poles of economic and technological development, and for more than 65 years has attracted immigrants from less prosperous countries of the world (mainly from Southern and Eastern Europe). The effect of the “economic miracle” of 1948, which led to the first wave of migration in 1955, persists today: according to the German Federal Office of Statistics (Statistisches Bundesamt, 2020) as of October 2020, 21.2 million people with a migration background lived in Germany, which accounted for 26% of the total population.

Thus, the current immigration processes in the European Union in general and in FRG, in particular, determine the essential need for the integration of migrants into society, which involves solving issues related to their participation in the economic and social life of the host countries. Among them, the most important issue is the introduction of immigrants into the cultural and linguistic environment.

Cultural and linguistic environment is "a historically formed association of people based on a common language and culture living in the same territory" (Azimov, 2009). The Federal Republic of Germany today is not a homogeneous cultural monolingual state, which is represented by persons of German nationality who communicate in pure German and adhere to the same religion, but a multi-
ethnic, multi-linguistic and multi-religious country. Germany did not initially set itself the task of assimilating immigrants. FRG has not become a "melting pot" in which cultures are assimilated. The German multinational society is a "patchwork", where representatives of different cultures mostly coexist peacefully for more than half a century. The state takes effective measures to implement social cohesion of the population and finances a number of long-term projects that promote the integration of immigrants through their active participation in public life, opening the host society to new members, as well as providing fair chances for self-development and mutual tolerance. For the successful implementation of the measures taken by the state, it is necessary, first of all, for immigrants to enter the cultural and linguistic environment of the country.

The solution of this issue is inextricably linked with the study of the state language. The language is the main carrier of cultural information and the expression of the national mentality, so it is the study of the state language that is one of the main tools for the integration of immigrants. "In a country with a large part of the population without knowledge of the language spoken by the majority of the population, integration problems are programmed. There is a threat of segregation, that is, the division of society into different language groups. This is a problem observed in the United States, the United Kingdom, and more recently in Scandinavia, and brings many negative consequences" (Straubhaar, 2018). In Germany, the key to the successful integration of immigrants into the cultural and linguistic environment is the German language. Thus, the concept of integration is defined as the need to teach immigrants the German language and acquaint them with the basic laws of the host country.

The core of state integration measures in Germany is the integration course, which consists of a language course (establishment of language competence) and an orientation course (training in law and order, history, and culture) courses. Each person in need of political asylum is already given a document granting the right to complete the integration course for 600 academic hours to study German up to the B1 level, according to the directive "On common European competencies in foreign language proficiency", plus 100 academic hours to prepare for the test "Life in Germany". Integration is considered formally successful if the immigrant, after completing the integration course, successfully passed the German language exam at the threshold level B1 of category B (independent proficiency) on the CEFR scale and the test "Life in Germany" (BAMF, 2015). On January 1, 2005, the Law on Immigration entered into force in Germany, which provides for the formation of integration under the motto "Promote and demand" (Fördern und Fordern). The content basis of the integration courses is the "Framework curriculum for integration courses – German as a second language" (Rahmencurriculum für Integrationskurse – Deutsch als Zweitsprache), developed by the Goethe Institute on behalf of the Federal Office for Migration and Refugees, which includes topics that teach foreigners the language, law and order, culture, and history of Germany. One thing remains an axiom: it is crucial for immigrants to take integration courses. This is an essential tool for their successful integration into the cultural and linguistic environment of the host country (Aristova, 2016; Mikkonen et al., 2016).
It is important to note that the success of the entry and integration of immigrants into the foreign cultural environment of the host country depends not so much on the external efforts of the state (legislation, mandatory courses), but on the desire of the migrants themselves to integrate. Often, the disinterest of immigrants in the learning process is associated with a number of problems, among which the main one is the desire of foreigners who have arrived in the country to work and receive social security, and not to get acquainted with a foreign country, people, laws, cultural traditions and learn German. In most cases, this is conditioned by the cardinal difference between the cultural and linguistic environment of Germany with its values and norms and the values and norms of behaviour of immigrants. An even more important problem in this regard is the lack of well-trained teachers – highly qualified linguists who are able to ensure the proper quality of language courses in Germany (especially in rural areas) and take into account the different heterogeneity of the student groups.

Thus, an important state task – the integration of immigrants into the cultural and linguistic environment falls on the shoulders of ordinary linguists who teach German in integration courses. It is they who must break down the internal barriers built by immigrants on the way to entering a new society, and create the necessary conditions for foreigners to strive for the natural need to belong to the community (A. Maslow), after the host state has satisfied their physiological (organic) need and need for security. It is necessary to interest them, to help them understand that they have no other way to peaceful coexistence than integration into the community that has accepted them. In this regard, the research problem has been formulated: how can a teacher create favourable psychological and pedagogical conditions for the integration of immigrants into the cultural and linguistic environment of FRG when teaching them German, and how can the teacher help immigrants to form certain qualities for their effective ability to integrate? Thus, the study for the first time raises the following questions: a) definition of the theoretical and methodological substantiation of the concept "increasing the ability of immigrants to integrate into the cultural and linguistic environment of FRG when teaching German"; b) development of a content and technological complex that helps to increase the ability of immigrants to integrate into the cultural and linguistic environment of FRG in the course of mastering the German language; c) introduction of specially created psychological and pedagogical conditions in the educational process at integration courses, presented by the author’s reference book "Practical recommendations for teachers of German as a foreign language".

This study offers special psychological and pedagogical conditions that ensure the improvement of the quality of integration courses (Shaw et al., 1995; Jiang et al., 2020; Ritonga et al., 2021), that is, the creation of favourable conditions in the classroom for immigrants to make efforts to learn the state language. This study is devoted to the development and implementation of a content and technological complex that helps to increase the ability of immigrants to integrate into the cultural and linguistic environment of FRG in the course of mastering the German language, for which the main essential characteristics of heterogeneous groups of foreigners were initially identified and the main structural components of the ability of immigrants to integrate into the cultural and linguistic environment of Germany were identified.
The results obtained confirmed the hypothesis that specially created psychological and pedagogical conditions, the development of the uniquely designed handbook "Practical recommendations for teachers of German as a foreign language" and the implementation of its recommendations in the educational process contribute to increasing the ability of immigrants to integrate into the cultural and linguistic environment of FRG when teaching German (Hayakawa et al., 2016; Takeuchi, 2003).

**Literature review**

The integration of immigrants living in Germany into its cultural and linguistic environment is closely linked to the heterogeneity of groups of foreigners studying German. Heterogeneity is found by gender, age, level of education and knowledge of German or other languages; existing contact with Germans, countries from which students emigrated, profession, speed of assimilation of educational material, learning strategy, learning habits, mores and customs, goals, motivation, and many other factors. In pedagogical and psychological aspects, the concept of heterogeneity denotes *heterogeneity* in one group and causes wide scientific discussions, gaining increasing popularity. The concept of "heterogeneity" (Homogeneity and heterogeneity, 2005) and the problems associated with it are the subject of close attention of modern teachers. The development of personal data of students based on the use of the potential hidden in multiculturalism and in the dynamics of the group was investigated by Feldmeyer (2014). The work of the German teacher Klippert (2016), is devoted to the issue of school development and methods, problems related to the teaching and upbringing of adolescents with a migration background. The study of the age factor in teaching German in a group of adults is devoted to the work of Roche (2003), professor at the Institute of German as a Foreign Language at the Ludwig-Maximilians-University in Munich. The experience of working with heterogeneous groups of students in difficult historical conditions by leading teachers and psychologists is presented in the works of a team of consultants of the educational and cultural centre Hoechst J. Farivar, G. Mohammadi, A. Thomsen.

Academic success is impossible without an individual approach to students. This area of pedagogy and andragogy in the modern "global village" is studied under the term "internal differentiation". German teachers A. Feldmeyer, H. Klippert, F. Müller, participants of the Alfamar project at the Philip University of Marburg under the guidance of Professor of German Studies R. Albert made a great contribution to the development of methods for the application of internal differentiation in pedagogy and andragogy. Key requirements for professional training and retraining of German teachers were developed by teacher Unruh (2011).

The study of the possibilities of applying "internal differentiation" in modern educational institutions is based on the historical works of world-famous teachers. The study of the cultural and moral development of human abilities originated in antiquity (Cicero "De officiis") and in the 14th century became the main idea of classical humanism of the Renaissance. The idea of general education in a public school was put forward by Comenius (1993) and was distinguished by her interest in the personality of the child. Educational work of
Rousseau (1963), continued Comenius’ reformatory pedagogy. Pestalozzi (1975), studied the mechanisms of awakening the desire to know and accept the new world around based on satisfaction of the vital needs of life (intrinsic motivation). The pedagogy of games in the scientific world was discovered by Pestalozzi’s student Fröbel (1947). Scottish and British educators – Brockhaus (1987) and Lancaster (1996), were the creators of the monitor learning system independently from each other. The essence of the protagonists of the idea of “internal differentiation” is a system of mutual learning – a form of educational work in which older and/or knowledgeable students help young or weak students in collective work, as well as a form of active actions of the students themselves, in which all five basic human feelings are used, if possible.

An important aspect of training and education is the motivation of the subjects of the educational process. A. Maslow’s pyramid of needs is one of the most popular theories of motivation (Maslow, 2014; Biletska et al., 2021). The natural reaction of a person – resistance to change, their denial were studied by psychologist Kübler-Ross (1983), professor of leadership management at Harvard Business School John Kotter, and others (Krutova-Soliman, 2009). The definition of psychological and pedagogical conditions for the integration of immigrants into the cultural and linguistic environment is based on pedagogical approaches to the construction of the educational process. The activity approach was comprehensively developed by the outstanding Soviet psychologists Vygotsky (1926) and Leontiev (1975). The competence-based approach is presented in the works of Chomsky (1972), Zimnyaya (1812), Khutorskoy (2017). Competence models were developed by Weinert (2001) and others. The basics of an individual approach using internal differentiation are reflected in the works of Meyer (2007).

Thus, the conducted literature review indicates a sufficiently deep degree of study of issues related to the integration of heterogeneous groups of immigrants into the cultural and linguistic environment. However, it can be stated that a) the basic essential characteristics of heterogeneous groups of foreign migrants in Germany are not sufficiently studied; b) the main structural components of the ability of immigrants to integrate into the cultural and linguistic environment of Germany are not defined;) the content and technological support of the process of integration of migrants into the cultural and linguistic environment of Germany in the course of mastering the German language has not been developed.

**Materials and Methods**

The empirical basis of the study was the results obtained during the organisation and conduct of a three-stage pilot testing with students of integration courses at the People’s University of Frankfurt am Main (VHS Frankfurt am Main). Integration courses are conducted within the framework of the state order and are regulated by the current legislation (Kukona et al., 2011; Lee & Lee, 2014). Chapter 3 "Promotion of integration", Section 43 "Integration course", paragraph 2 of the "Immigration Law of the Federal Republic of Germany (Gesetz zur Steuerung und Begrenzung der Zuwanderung) states: "The efforts of foreigners aimed at integration are supported by the integration course".
From the students of four integration language courses, an experimental group (EG) – 37 people and a control group (CG) – 38 people were formed. When selecting parallel groups of subjects, the requirements of sample uniformity were taken into account. Along with the students, the experiment was attended by teachers and senior teachers of the integration courses of the People's University of Frankfurt am Main, who acted as experts on the technologies used and the developed content and technological support. In total, more than 120 respondents took part in the pilot testing. The period of planning and conducting pilot testing was three years: from 2017 to 2020.

The general sample consisted of more than 1,500 adult and younger immigrants over the course of 8 years of observation of immigrants. The beginning of the observations was the teaching experience during a pedagogical internship in secondary schools in Lower Saxony in 2012-2013 in the city of Lüneburg. In order for the final results to have a high degree of reliability and representativeness, groups of subjects were selected from the general sample, the selection of which took into account the principle of heterogeneity.

The implementation of the content and technology complex included three interrelated stages. At the first, ascertaining stage, the students of the EG and CG participated in the diagnosis of their ability to integrate into the cultural and linguistic environment of FRG based on the application of tests of the levels of knowledge of the German language (from A1 to B1). At the second, transformative stage, the control group was excluded from the experiment, and the students of this group were trained using conventional, generally accepted techniques and technologies. The students from the experimental group were placed in specially created conditions to increase their ability to integrate into the cultural and linguistic environment of FRG through the use of a set of techniques and technologies contained in the uniquely designed reference book "Practical recommendations for teachers of German as a foreign language". The third, final, stage was conducted by analogy with the first, that is, students of both groups were involved in it.

At the first stage (December 2017-December 2019), the following diagnostic complex was used to identify the initial/initial levels of each of the components of the immigrant’s ability to integrate into the cultural and linguistic environment of Germany (motivational and tolerant, cognitive and perceptive, and communicative and speech components):

- To assess the level of the motivational and tolerant component of the ability of immigrants to integrate into the cultural and linguistic environment, the uniquely designed questionnaire "Me and my (future) children in Germany" was used, containing 20 questions at the level of foreign language proficiency A1 – the level of survival according to the CEFR scale. The survey was conducted in the form of an interview, the teacher asked questions (20 in total), checking whether everyone understood its meaning. After each question, the subjects had to put a cross on a piece of paper in the corresponding column "ja" / "nein". Interpretation of the results: one point is given to all "yes" answers to the questions 1, 2, 3, 11, 12, 13, 14, 18, 19 and 20, as well as all the "no" answers to the questions 4, 5, 6, 7, 8, 9, 10, 15, 16 and 17. The procedure for
processing the results was carried out by calculating the algebraic sum of points scored by each respondent. To distribute the results obtained by the corresponding levels (high, medium, low), the following scale was used: those who scored 20-16 points were assigned a high level; 15-12 points were assigned a moderate level; those who received 11 or less points were assigned a low level.

To identify the level of formedness of the cognitive and perceptive component of the ability of immigrants to integrate into the cultural and linguistic environment, to draw a distinction of the knowledge of the German language from the survival level A1 to the pre-threshold level A2 on the CEFR scale, four tests were conducted. The tests were conducted after the students had studied certain topics from the daily life of immigrants in Germany, prescribed by the current curriculum. These are: 2.1. "Health and disease" (CG/EG1 Test 2, Kapitel 10 "Gesundheit und Krankheit") from the textbook used in the course "Schritte plus Neu 2, Niveau A1/2" (Kalender, 2016). The maximum number of points that students could score was 40 points; 2.2. "At home" (CG/EG1 Test 3, Kapitel 2 "Zu Hause") from the textbook used in the course "Schritte plus Neu 3, Niveau A2/1" (Kalender, 2017). The maximum number of points was 40; 2.3. "What are you doing today?" (CG/EG3 Test 1, Kapitel 5 "Was machst du heute?") of the textbook used in the course "Linie 1, Deutsch im Alltag und Beruf A1.1" (Althaus & Linie, 2019). The maximum number of points that students could score was 40 points; 2.2. "The balcony is beautiful" (CG/EG3 Test 2, Kapitel 8 "Der Balkon ist schön"). The maximum number of points was 35.

The procedure for processing the results was carried out by calculating the algebraic sum of points scored by each respondent. If the students scored from 100% to 75% of the correct answers, they were assigned to the high level, if they scored from 74% to 60% – to the moderate, those who scored less than 59% did not pass the test, and they were assigned a low level.

To determine the level of formedness of the communicative and speech component, the study used methodology of test tasks in the section "Speaking in dialogue and in monologue" for the level of knowledge of the German language corresponding to each subgroup from the survival level A1 to the pre-threshold level A2 on the CEFR scale. Testing of speech skills and abilities of students was carried out after measuring the levels of the cognitive and perceptive component, that is, after the above-described testing for knowledge of certain topics from the textbooks used in the courses "Schritte plus Neu 2, Niveau A1/2", "Schritte plus Neu 3, Niveau A2/1" and "Linie 1, Deutsch im Alltag und Beruf A1.1" in the sections "Listening", "Reading" and "Writing". The following were conducted: 3.1. Model test of the Goethe Institute for the level of the Goethe A1 Certificate "Start Deutsch" in the section "Speaking in dialogue and in monologue" in February 2018. The test consisted of three parts: Part 1. Monologue with the task to introduce yourself: tell your name, age, country, place of residence, languages, profession and hobby (maximum 3 points); Part 2. A dialogue with a partner on the task "Request information and give information" on the household topic specified on the card. For each correct question, candidates receive 2 points, for each correct answer – one point (the maximum number of points for each participant in the dialogue is 6); Part 3. The dialogue with the partner on the task "Formulate requests and respond to them" is similar to part 2, but the cards instead of words show drawings of objects from everyday life. For each correct request, candidates receive 2
The maximum number of points that students could score in the "Speaking in dialogue and in monologue" section of the "Start Deutsch 1" model test was 15 points. The distribution of respondents by level was carried out according to the key: 15-12 points – high level, 11-9-medium, 8 points and less-low level; 3.2. A model test for a productive type of speech activity – speaking – at the pre-threshold level of elementary foreign language proficiency A2 to independent proficiency at the threshold level B1. This means that students who score more than 60 points have knowledge at level B1, and those who score less than 60 points are tested for speech proficiency at level A2. "German language test for immigrants A2-B1" tele GG GmbH (CG/EG1 Modelltest A2-B1) (Hantschel, 2009). The key to the test for the level A2 on the CEFR scale: high level – 60-41 points, moderate – 40-35 points, low – 34 points or less; 3.3. The test for saying "What are you doing today?" (CG/EG3 Test 1, Kapitel 5 "Was machst du heute?") (Althaus & Linie, 2019). The maximum students could score 5 points for this speech task for the test. Key to the text: high level – 5-4 points, medium – 3 points, low – 2 points or less; 3.4. Test for speaking "Beautiful Balcony" (CG/EG3 Test 2, Kapitel 8 "Der Balkon ist schön") (Althaus & Linie, 2019). This test was carried out by analogy with the Goethe Institute model test "Start Deutsch 1", part 2, described above. Each candidate can get a maximum of 5 points for completing this task correctly. Key to the text: high level – 5-4 points, medium – 3 points, low – 2 points or less.

The procedure for processing the results was carried out by a simple mathematical calculation of the number of students who scored respectively low, medium and high levels and recalculating them as a percentage. For example, the calculation of the level of formedness of the motivational and tolerant component in students of integration courses is as follows: the number of students in each subgroup who scored low, medium and high levels on the key was calculated, then recalculated as a percentage of X according to the formula:

\[
X = \frac{Y_{\text{fact}}}{Y_{\text{max}}} * 100, \tag{1}
\]

where: \(Y_{\text{fact}}\) – the number of students in the subgroup who scored in accordance with the high level (8 students), with the moderate (2) and low level (8); \(Y_{\text{max}}\) – the number of students in the subgroup (18 students). Thus, in CG1, the levels of formedness of the motivational and tolerant component in students were as follows: high level – 44.444\%=8/18*100; medium level – 11.111\%=2/18*100; low level – 44.444\%=8/18*100. The same formula is used to calculate the percentages in each subgroup for each questionnaire or test and for each component. Then the average values of the level of formedness of the motivational and tolerant component as a percentage in the control (CG) and experimental group (EG) were calculated using the arithmetic mean formula. The average value in mathematics and statistics is defined as a number equal to the sum of all the numbers in a set divided by their number.

The results of the data obtained at the first stage for both groups of immigrants (control and experimental) showed that almost a third of all probands have a low level of integration ability. This fact led to the idea that without the creation of new favourable psychological and pedagogical conditions (Valeeva & Karimova,
Therefore, it was decided to move on to the next stage – the transformative stage, which was to qualitatively and quantitatively increase the level of immigrants' ability to integrate into the cultural and linguistic environment of Germany during the acquisition of the German language.

The second or transformative stage (August 2018- January 2020), at this stage, the provisions of the proposed hypothesis were tested. In order to track the dynamics of increasing the ability to integrate and confirm the effectiveness of a set of technologies that contribute to the development of immigrants' ability to integrate into the cultural and linguistic environment of FRG in the course of mastering the German language, the uniquely designed handbook "Practical recommendations for teachers of German as a foreign language" was developed and implemented, based on the developed and improved set of effective techniques and technologies of the "good lesson" by Hilbert Meyer. The uniquely designed handbook "Practical recommendations for teachers of German as a foreign language" includes recommendations for conducting all phases of the lesson: the first phase – the Fundamentum principle & Additum, presentation of the goals and content of the German lesson in accordance with the curriculum, a practical example of "Dictation with pictures", an example of quantitative internal differentiation by speed on the example of "Dictation with pictures", ideas and tips for everyday work in German lessons, variants of the first phrases of the lesson (implementation of the communicative beginning), the ritual of greeting and farewell, a description of the technique "wordless impulse instead of words"; the second phase of the lesson – the motivation phase – the vocabulary hedgehog as a collection of ideas; the third phase – the stage of consolidation – the draw of speakers and educational conversation, global and detailed understanding of the listening task, "echo and mirror", the formation of pairs, the phase of silence for memorising parts of the dialogue; the fourth phase of the lesson – the use of learned material – the idea of transmitting a role-playing game, "karaoke" as a reinforcement of learned material, vocabulary and grammar exercises, "snowball" as a reinforcement of learned material, "free time".

At the third, final stage (February 2020 – December 2020), using the same methods as at the first stage, the level of formedness of the ability of immigrants to integrate into the cultural and linguistic environment was diagnosed in the course of mastering the German language in students of the control and experimental groups based on the diagnostic tools presented above. Further, the analysis of the results obtained was carried out and practical recommendations were developed for linguists-teachers to improve the ability of students to integrate.

As part of the comparative analysis, the final results of identifying the levels of formedness of the ability of immigrants to integrate into the cultural and linguistic environment of Germany during the acquisition of the German language by students of the experimental and control groups were correlated with the data of the ascertaining stage. This allowed recording a quantitative and qualitative improvement in the results in the experimental group after teaching according to the new method (Krutova-Soliman, 2020).
Results and Discussion

The conducted survey allowed to state the following results. The theoretical and methodological analysis of the concept "increasing the ability of immigrants to integrate into the cultural and linguistic environment of FRG when teaching German" based on the structural and functional approach allowed identifying three main structural components of this ability. These are motivational and tolerant, cognitive and perceptive, and communicative and speech components. The motivational and tolerant component includes the motivation of the immigrant not only to learn and realise the new world around them, but also to accept this world, tolerance to the foreign cultural and linguistic environment. The cognitive and perceptive component involves the perception of the new surrounding world not by emotions, but by the knowledge of it by the mind, and represents the ability of an immigrant to accept new information, learn the language of the host country, acquire knowledge about culture and society, about its norms and values, as well as the active activity of an immigrant aimed at acquiring and developing this knowledge. The communicative and speech component assumes the desire and ability of the immigrant to communicate in German, while showing a desire to make social contacts in the new society, which implies active listening, speech, an active response to it, that is, the immigrant’s feeling of an intrusive (internal) need to learn German.

The first, ascertaining, stage of the experiment involved identifying the initial level of formedness of the ability of immigrants to integrate into the cultural and linguistic environment of FRG when teaching German to students of the control and experimental groups, the content of which is represented by three components: motivational and tolerant, cognitive and perceptive and communicative and speech. To identify the level of each of the components, the diagnostic tools presented above were used. For greater clarity, the tabulation method was used, placing the results obtained in the table (Table 1).

<table>
<thead>
<tr>
<th>Levels</th>
<th>Components of the ability to integrate students of integration courses</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Motivational and tolerant</td>
</tr>
<tr>
<td></td>
<td>EG</td>
</tr>
<tr>
<td>High</td>
<td>51.47</td>
</tr>
<tr>
<td>Moderate</td>
<td>23.38</td>
</tr>
<tr>
<td>Low</td>
<td>25.15</td>
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</tbody>
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In general, the analysis of the data obtained at the ascertaining stage of pilot testing revealed the following. 48.8% of students showed a high level of integration ability in the EG, while only 26.4% showed a high level of integration ability in the CG, and the difference was 22.4%. At the same time, the formed moderate level is 13.9% higher in students of the CG – 40.9% than in students of the EG – 27%. The lowest difference of 8.5% was shown by both groups at a low level of integration ability, with indicators of 24.2% in EG and 32.7% in CG. The
level of heterogeneity in integration courses was so high that the difference in performance in both groups can be considered acceptable for comparison. The identified levels are demonstrated using the diagram method (Figure 1).

![Figure 1. The levels of formedness of the ability to integration of students in EG and CG at the ascertaining stage (2017-2019) from 100%](image)

Further, to confirm the absence of reliable statistical differences between the control and experimental groups at the ascertaining stage, the Wilcoxon signed-rank test was used. First, a test case of calculating the value of the Wilcoxon test was performed to make sure that the formulas were correct. Here is a formula for calculating the signed-rank test. Let there be two samples: \{X_i\}, \ i=1,2,..., \ N and \{Y_j\}, \ j=1,2,..., \ M. Next, define \(a_i\) as the number of elements from \{Y_j\}: \(Y_j > X_i\), and \(b_i\) as the number of elements from \{Y_j\}: \(Y_j = X_i\). Then

\[
U = \sum_{i=1}^{N} a_i + \frac{1}{2} \sum_{i=1}^{N} b_i
\]  

(2)

Empirical significance of the Wilcoxon test:

\[
W = \frac{|N \cdot M - U|}{\sqrt{N \cdot M \cdot (N+M+1)/12}}.
\]

(3)

Compare \(W\) with the critical value \(W_{0.05} = 1.96\). If \(W > 1.96\), then the confidence of the differences between the samples \{X_i\} and \{Y_j\} is at least 95%. If \(W \leq 1.96\), then the samples match the significance level of 0.05. Next, the values of the \(W\)-criterion were calculated, which at the initial stage showed:

- by motivational and tolerant component:
  - CG1 and EG1 (\(W = 0.9736\), the groups are close);
  - CG3 and EG3 (\(W = 0.0812\), the groups are close);
- by cognitive and perceptive component:
  - CG1 and EG1 (\(W = 1.4852\), the groups are close);
  - CG3 and EG3 (\(W = 2.7321\), the groups are significantly different);
- by the communicative and speech component:
- CG1 and EG1 (W = 0.9736, the groups are close);
- CG3 and EG3 (W = 0.3517, the groups are close).

Thus, the calculated Wilcoxon signed-rank test proved that the two groups being compared are similar in structure.

Having obtained the results on the formedness of the ability of immigrants to integrate into the cultural and linguistic environment of FRG during the acquisition of the German language in general and its components in particular, it was concluded that it is necessary to organise special and consistent training that can change the initial indicators in the future and ensure the dynamics of the formed qualities, that is, to increase the level of this ability. The introduction of the uniquely designed techniques and technologies into the educational process was carried out as part of the next transformative stage of the experiment.

The second, transformative stage of the test involved the introduction of the uniquely designed handbook "Practical recommendations for teachers of German as a foreign language" in working with immigrants. At this stage of the study, the theoretical provisions of the proposed hypothesis were tested, a set of effective techniques and technologies for adapting arriving immigrants in the country was developed and improved, and the techniques and technologies of the "good lesson" by Hilbert Meyer were tested in order to increase the level of immigrants' ability to integrate into the cultural and linguistic environment of Germany during the acquisition of the German language.

As a result of the implementation of the practical recommendations presented in the handbook in the educational process, the following was stated. As part of the motivational and tolerant component of the ability to integrate, the students of the experimental group began to show a greater interest in German society. They began not only to perceive and realise the new world around them, but also to accept it, and showed their willingness to live in peace and harmony with people of different nationalities, races and faiths in a single geographical space. The motivation of the students of the experimental group to learn German, which is the key to integration, also increased. The cognitive and perceptive component of the ability of immigrants to integrate also received a change: the students of the experimental group began to study German more actively, striving to master it at the threshold level B1 according to the CEFR system, reduced absenteeism, began to work actively not only in the classroom but also independently outside the classroom. They began to gain more points when testing their knowledge of the German language, described by the CEFR descriptors for receptive and productive types of speech activity: listening, reading, and writing.

It is also necessary to note the desire and ability to "get into speech" in students placed in special pedagogical conditions. Thus, the level of the communicative and speech component of their ability to integrate has increased. Students began to work more purposefully at the lessons of interethnic communication in an unfamiliar intermediary language and scored more points when testing their knowledge of the German language in the most difficult productive type of speech activity – speaking. They began to regularly use the acquired knowledge in
practice, suppressing the embarrassment of saying something wrong and being ridiculed, began to make great efforts to get out of their diaspora and communicate with the local population on an everyday level.

The third, final, stage of the pilot test was designed to verify the reliability of the reported qualitative conclusions. At this stage, both experimental and control groups were included in the survey to track how much the situation has changed in terms of improving the quantitative and qualitative level of the ability of immigrants to integrate into the cultural and linguistic environment of FRG during the acquisition of the German language. After the diagnosis, the results of EG and CG were analysed (Table 2).

Table 2
Indicators of the formedness of the main components of the ability to integrate students in EG and CG at the ascertaining stage (2017-2019) from 100%

<table>
<thead>
<tr>
<th>Levels</th>
<th>Components of the ability to integrate students of integration courses</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Motivational and tolerant</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td>67.79</td>
<td>26.94</td>
<td>77.79</td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td>29.71</td>
<td>57.5</td>
<td>16.32</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>2.50</td>
<td>15.56</td>
<td>5.88</td>
</tr>
<tr>
<td></td>
<td>Cognitive and perceptive</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76.18</td>
<td>55.56</td>
<td>15.88</td>
</tr>
<tr>
<td></td>
<td>Communication and speech</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.94</td>
<td>16.67</td>
<td>15.88</td>
</tr>
</tbody>
</table>

The results of the analysis of the final indicators obtained by averaging over all three components are shown in the diagram (Figure 2).

![Figure 2. Levels of formedness of the ability to integrate students of integration courses in EG and CG at the final stage (2018-2020) from 100%](image)

To conduct a comparative analysis of the results obtained at the initial and final stages, these data were combined into a single table (Table 3).
Table 3

The levels of formedness of the ability to integrate students of integration courses in EG and CG at the ascertaining and final stages from 100%.

<table>
<thead>
<tr>
<th>Levels</th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initial stage</td>
<td>Final stage</td>
</tr>
<tr>
<td>High</td>
<td>48.82</td>
<td>73.92</td>
</tr>
<tr>
<td>Moderate</td>
<td>27.01</td>
<td>20.64</td>
</tr>
<tr>
<td>Low</td>
<td>24.17</td>
<td>5.44</td>
</tr>
</tbody>
</table>

The final averaged indicators of the pilot test at the ascertaining and final stages are presented using the diagram (Figure 3).

![Diagram](image)

Figure 3. The levels of formedness of the ability to integrate students of integration courses in EG and CG at the ascertaining and final stages from 100%.

To obtain evidence in favour of the effectiveness of the impact of experimental training on EG students, the method of statistical and mathematical processing of the results of the study and the Wilcoxon signed-rank test were used. The calculated values of the W-test showed:

1) by motivational and tolerant component:
   - CG1 and EG1 (W = 0.9736, the groups are close);
   - CG1 and EG1 at the final stage (W = 2.9209, the groups are different);
   - CG3 and EG3 (W = 0.0812, the groups are close);
   - CG3 and EG3 at the final stage (W = 2.3398, the groups are different);

2) by cognitive and perceptive component:
   - CG1 and EG1 (W = 0.9736, the groups are close);
   - CG1 and EG1 at the final stage (W = 2.9209, the groups are different);
   - CG3 and EG3 (W = 0.0812, the groups are close);
   - CG3 and EG3 at the final stage (W = 2.4886, the groups are significantly different);

3) by the communicative and speech component:
   - CG1 and EG1 at the initial stage (W = 0.9736, the groups are close);
- CG1 and EG1 (W = 1.7988, the groups have become more distinct, but the criterion value is slightly lower than the critical value of 1.96);
- CG3 and EG3 (W = 0.0812, the groups are close);
- CG3 and EG3 (W = 0.6492, the groups have become more distinct, but still very similar).

In general, as part of a comparative analysis of the results obtained at the initial and final stages of the methods of statistical and mathematical processing of the results, a quantitatively and qualitatively higher level of the ability of immigrants to integrate into the cultural and linguistic environment of FRG was recorded in the course of mastering the German language among the students of the experimental group at the final stage of the study.

Conclusion

The study confirmed the assumption that specially created psychological and pedagogical conditions, which are the introduction of the recommendations of the uniquely designed handbook "Practical recommendations for teachers of German as a foreign language" into the educational activities of immigrants, are effective and contribute to the development of a higher and better level of the ability of immigrants to integrate into the cultural and linguistic environment of FRG when learning German. The developed content and technological complex of this handbook can become a conceptual basis for the compilation of educational and methodological manuals for linguists, both at state integration courses and in private language schools. "Practical recommendations for teachers of German as a foreign language" can enrich the methodological work of linguists who teach the state language as a foreign language in any host country, which will contribute to a more effective integration of foreigners into the cultural and linguistic environment of FRG.

Comparison of the results using the comparative method within one group – experimental or control – allowed drawing the following conclusion. At the ascertaining stage, there were 22.4% more students in the experimental group with a high level of formedness of all three components than students with the same level in the control group, at the final stage their number increased by 25.1% (73.9% from the EG and 48.8% CG). The number of students with a moderate level of formedness of the main components increased by 3.1% in the control group from 40.9% at the ascertaining stage to 44% at the final stage and decreased by 6.4% in the experimental group from 27% at the ascertaining stage to 20.6% at the final stage. The percentage of students with a low level of formedness of motivational and tolerant, cognitive and perceptive, and communicative and speech components decreased at the final stage and amounted to 5.4% in the EG and 19.9% in the CG.

These data indicate the effectiveness of the proposed mechanisms for achieving the goal and solving the set research tasks and prove the productivity of the proposed psychological and pedagogical conditions. The developed content and technological complex of the handbook "Practical recommendations for teachers of German as a foreign language" can become a conceptual basis for the preparation of teaching aids for linguists, both at state integration courses and in
private language schools. "Practical recommendations for teachers of German as a foreign language" can enrich the methodological work of linguists who teach the state language as a foreign language in any host country, which will contribute to more effective integration of foreigners into the cultural and linguistic environment of the host society. The results of the study may also be of interest to scientists and universities involved in improving the skills of teachers.

In addition, the topic of the dissertation is relevant and deserves further development in the future. A good teacher can teach from a phone book. But how exactly can a teacher create favourable psychological and pedagogical conditions in the classroom? Despite all the heterogeneity, the success of learning is impossible without an individual approach to each student within the existing group. Internal differentiation is a process where students create a climate in the classroom in which the skills, abilities and interests of an individual are best revealed. And from the many textbooks, the linguist must choose and prepare the training material for each individual lesson, so that after the lesson the fact can be stated: "The specific goal of the lesson has been achieved".

References


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Zimnyaya, I. A. (1812). *Competence and competency.*