18th PCSF 2018
Professional Culture of the Specialist of the Future

FORMING OF PROFESSIONAL CULTURE VIA INTERNATIONALIZATION OF STUDENTS

D. G. Arseniev (a), V. V. Krasnoshchekov (b)*
*Corresponding author

(a) Peter the Great St. Petersburg Polytechnic University (SPbPU), Polytechnicheskaya 29, Saint Petersburg, 195251 Russia, vicerector.int@spbstu.ru
(b) Peter the Great St. Petersburg Polytechnic University (SPbPU), Polytechnicheskaya 29, Saint Petersburg, 195251 Russia, victor@imop.spbstu.ru

Abstract

One of the main components of the comprehensive internationalization of the university is the internationalization of students, as it is one of the factors shaping the professional culture of a graduate of a university in the modern world. Academic mobility is a priority direction of internationalization of students. However, various barriers hamper its development, the main one being the financial barrier in recent years. In addition, uncontrolled exit mobility contributes to brain drain from Russia, i.e. it is a problem of a national scale. The concept of internal internationalization, developed with the aim of alleviating the inequalities between the educational systems of states in general and universities in particular, helps with success to overcome both negative factors. In accordance with this concept, universities should conduct a set of internationalization activities not related to exit mobility and involve a wide range of students and workers. Accordingly, internationalization becomes a tool for the formation of international aspects of the professional culture of most students. The proposed system for forming of professional culture via supporting the internationalization of students includes three models: the participation of students in short-term international programs of their institution, the tutoring of foreign students of long-term educational programs and the participation of students in the implementation of international student projects. The article compares the characteristics of all models, as well as recommendations for their implementation.

© 2018 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Higher education, internationalization, professional culture, short-term international educational programs, student projects, tutoring.
1. Introduction

The inevitable consequence of the globalization of the world order is the internationalization of higher education, which is, thus, an objectively conditioned process of integrating higher education institutions into the world educational environment (de Wit, Gacel-Avila, Jones, & Jooste, 2017).

1.1. The notion of internationalization

Over the past 30 years, the notion of internationalization has undergone a number of changes. The first was the descriptive definitions of J. Knight, oriented toward the Western civilization (Knight, 2004). Then Söderqvist (2007), directed the course of internationalization towards the achievement of high and noble goals. To date the academic community came to the concept of comprehensive or complex internationalization of Jones, who emphasizes the results of internationalization for domestic consumers - students and teachers (de Wit et al., 2017). Obviously, the modern view of the internationalization of the university makes it not only an instrument for increasing the competitiveness of the university (Fokina, 2014), but also a basis for implementing the social responsibility function of the university (Lavrov & Stepanova, 2012), and a factor in improving the quality of training at the university (van Damme, 2000).

1.2. Forms of internationalization of students

Forms of internationalization of students are diverse. The only external form is external academic mobility, including short-term that means the participation in programs not related to obtaining a diploma, practice abroad, participation in scientific events like conferences, seminars, project meetings. The modern view of the internationalization of students makes us pay attention to its internal forms. The first is improving the preparation of a foreign language; mastering of non-philological disciplines in a foreign language, including those provided by invited foreign experts (Galichin, 2015). The second is the introduction of international content in the content of lectures (de Wit, & Leask, 2015). The third is mastering of massive open online courses (MOOC), developed abroad (Badarch, Tokareva, & Tsvetkova, 2014). The forth is participation in international programs and projects of your own university. The fifth is intercultural learning and everyday communication with international students in international groups etc.

1.3. Internal (inclusive) internationalization

A number of negative consequences of internationalization, such as growing inequality among higher education institutions, ignoring national and regional specifics, unrestrained commercialization (Kuzminyh, Krasilnikova, & Powell, 2015), is fairly criticized (Egron-Polak, 2014), which led researchers and practitioners to turn to the idea of internal internationalization (Beelen & Jones, 2015). The strategy of internal internationalization allows conducting internationalization initiatives to all universities, regardless of the region of localization and place in the educational ratings. De Wit and Jones indicate the influence of internal internationalization on the professional culture of students (de Wit, & Jones, 2018).
2. Problem Statement

2.1. Importance of internal internationalization

Among the intra-university levels of internationalization, of course, the most important is the level of students and graduate students. The internationalization of students with the aim of forming a professional culture of graduates can even be regarded as the main goal of internationalization, to which all other components of the process contribute. This provision requires additional explanations, since it is quite new for the Russian higher school.

2.2. Barriers to academic mobility

Academic community recognizes that external academic mobility is the most effective form of internationalization of students (Galichin, 2015). Nevertheless, many barriers to the mobility of Russian students arise. If the language barrier was the most difficult in the past decade, the financial barrier (Kozyrin, 2011), which is connected with the sharp and unprofitable change in currency rates that occurred in December 2014 and is still in effect, has become the main obstacle. Therefore, the university should support students in solving problems of overcoming barriers (Mishchenko & Shelenkova, 2011). The problem of finding models for deepening the internal internationalization of the university seems to be relevant.

2.3. Problems of the formation of professional culture

In recent years, it has become a common opinion that the main (formal) higher education is not able to meet the needs of modern employers regarding the level of professional graduates' culture (Gavrilova & Zaprudnova, 2016). To acquire the necessary competences, it is suggested to use the opportunities of non-formal education (Babaeva, 2014), or, for example, corporate training (Kuznetsov, 2017). An alternative approach is the directed activity of the university on the formation of additional professional competencies using the synergy of resources of formal and non-formal education (Stromov, Sysoev, & Zavialov, 2018). Formation of such an important component of modern professional culture as intercultural competence in a systematic, institutionalized form related to the process of internal internationalization has not yet been given due attention in Russian universities (Dmitrienko & Konovalenko, 2015).

3. Research Questions

The study involved obtaining answers to the following questions:

- What is the effect of the internationalization of students on the formation of the professional culture of graduates?
- What indicators of internationalization affect the various aspects of the formation of professional culture?
- Why institutional support for the internationalization of students important?
- What are the models for the formation of a professional culture through internationalization?
What are the characteristics of models for the formation of professional culture through internationalization?

What are the differences between the models of the formation of a professional culture through internationalization?

Which groups of competencies are most important in the implementation of each of the models?

What recommendations we give to universities on the implementation of various models for the formation of a professional culture through internationalization?

4. Purpose of the Study

Based on the analysis of sources it is obvious that there is an objective need to develop a system for supporting the internationalization of Russian students, characterized by multitasking and variability (Proskura & Minin, 2014). This system bases on the concept of internal internationalization and influences on forming a professional graduate culture.

The purpose of this study is

- To show that internal internationalization has a multifaceted and positive impact on various aspects of the formation of the professional culture of graduates.
- To build models for the formation of professional graduate culture through the internationalization of students.
- To give comparative characteristics of the constructed models and recommendations for their implementation.

5. Research Methods

We use several methods in current research.

5.1. References

The main research method was the study of existing domestic and foreign sources on the internationalization of students, the support of internationalization initiatives and the formation of a professional culture of graduates through internationalization. If the sources for internationalization are numerous, then there were no sources describing specific methods of forming a professional culture through internationalization.

5.2. Polling data from previous own research

We aimed at previous research at identifying the professionally important qualities of the personality of Russian students participating in short-term international educational programs. These students were part of the team, managing the program, and performed the functions of tutors for foreign students. We used polling and statistical processing of the received information on a sample of more than 200 students. Some results of this study you can find in a special paper (Krasnoshchekov & Krasnoshchekov, 2014).
5.3. **Studying the best practices**

Finally, to build models for the formation of a professional culture of graduates through the internationalization of students we take into consideration the experience of other Russian universities. Partly we analysed the content of university websites. In addition, we use the method of interviews with employees of international divisions of Russian universities. We take in account the experience of such universities as

- Moscow State University,
- Peoples' Friendship University of Russia (RUDN),
- Russian Presidential Academy of National Economy,
- St. Petersburg State University,
- Peter the Great St. Petersburg Polytechnic University,
- Tambov State Technical University,
- Derzhavin Tambov State University, Tomsk State University,
- Tomsk Polytechnic University,
- Ural Federal University named after the first President of Russia BN Yeltsin,
- Southern Federal University.

6. **Findings**

6.1. **Relationship between internal internationalization and the process of forming a professional graduate's culture**

As we showed, internal internationalization has a multifaceted and positive impact on various aspects of the formation of the professional culture of graduates.

In previous research, we showed that students participating in international educational programs acquire such professionally important qualities as responsibility, independence, sociability. There is an assimilation of the values of multiculturalism and corporatism. Participation in internationalization initiatives promotes the development of universal and professional competencies like intercultural competencies, managerial competencies, and project competencies (Krasnoshchekov & Krasnoshchekov, 2014).

The internationalization indicators are also important. For example, improving the position of the university in international rankings leads, on the one hand, to improving the quality of applicants, by attracting the best of them, then the level of professional culture of graduates increase.

On the other hand, the improvement of the rating situation leads to an increase in the international relations of the university, since higher educational institutions prefer to cooperate with universities that have higher or approximately equal positions in educational ratings. Accordingly, opportunities for teaching exchanges that lead to an improvement in the quality of the educational process are increasing, which certainly affects the degree of internationalization of students and the formation of a professional culture of graduates.
6.2. Necessity and possibility of participation of students in internationalization initiatives

On the one hand, even if the university has a policy and strategy for internationalization, the activities of staff workers are not enough to implement internationalization initiatives, it is necessary to attract the resources of Russian students and graduate students. On the other hand, there is a need for foreign students of the university in communication and assistance from Russian peers. The research data of the Russian Association of Russian Language Teachers confirm this. Foreign students indicate a clearly insufficient degree of their involvement in intercultural communication with Russian students (Verbitskaya & Korotyshev, 2017). If one of the communicating parties evaluates communication as insufficient, it is unlikely that it led to an increase in competencies in this area of the second side (Russian students). This means that to ensure the growth of professional culture through internal internationalization, a certain degree of institutionalization within the international units is necessary. That is, it is necessary to direct the activities of the leadership of the university unit to develop organizational forms of supporting internal internationalization.

6.3. The first model of forming a professional graduate culture by supporting the internationalization of students

The essence of the first model of internationalization consists in attracting Russian students to participate in international short-term programs (de Wit & Jones, 2018), implemented in their own university. At Peter the Great St. Petersburg Polytechnic University, this model has been developed and implemented for more than 10 years, so we can talk about its effectiveness. The components of the model have received wide coverage in the works of the author and his colleagues, which are completely impossible to cite here (Krasnoshchekov, 2016). The model is constantly developing in accordance with the concept of continuous quality improvement and diversifies.

6.4. The second model of forming a professional graduate culture by supporting the internationalization of students

The second model of internationalization grew out of traditional tutoring with foreign students studying at the university on basic and additional long-term educational programs. Various structures directed this work. Its institutionalization took place a year and a half ago under the auspices of the volunteer student organization Tutor Forces (Nedelko, 2017). After that, regular, wide-ranging and diverse educational work with foreign students became possible, as well as the training of Russian students in specially organized tutor schools. Thus, we built tutoring activity into the system of internationalization of Russian students. With the implementation of the second model, we achieved a tangible synergetic effect based on the merger of tasks for the adaptation of foreign students and the internationalization of Russian students.

6.5. The third model of forming a professional graduate culture by supporting the internationalization of students

The third model of internationalization bases on attracting Russian students to the implementation of international student projects (Krasnoshchekov & Trapitsyn, 2015). With joint project activities with
foreign partners, there is an active improvement of the intercultural competencies of Russian students, which is a significant contribution to their internationalization. The implementation of international student projects and the implementation of international educational programs are in close connection, in the form of which the face-to-face meetings of project participants can take place. The components of non-formal education can also be involved in project activities of students.

6.6. Comparison of the characteristics of the models of professional culture formation through the internationalization of students.

In Table 01 we present the characteristics of the three named models of the system of internationalization of Russian students.

Table 01. Comparison of the characteristics of models of the formation of professional culture of Russian students through internationalization

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Model 1 - participation in short-term international educational programs</th>
<th>Model 2 - tutoring of foreign students</th>
<th>Model 3 - participation in international student projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>By the duration of the program</td>
<td>Constantly</td>
<td>By project date</td>
</tr>
<tr>
<td>Number of participants</td>
<td>From 5 to 20 on each program</td>
<td>Up to 60 at a time</td>
<td>From 5 to 15 on each project</td>
</tr>
<tr>
<td>Form of participation</td>
<td>Volunteering / Practice</td>
<td>Volunteering</td>
<td>Initiative group / part of the core program / practice discipline</td>
</tr>
<tr>
<td>Regulation of activities</td>
<td>Requirements for the implementation of the program or assignment for practice</td>
<td>Plan for tutorial work and charter Tutor Forces</td>
<td>Terms of Reference or work program of the discipline or assignment for practice</td>
</tr>
<tr>
<td>Ratio of components of formal and non-formal education</td>
<td>Integration</td>
<td>Primarily non-formal education</td>
<td>Integration</td>
</tr>
<tr>
<td>Choice of participation in the implementation of the model</td>
<td>Mainly free choice and selection procedures</td>
<td>Free choice and selection procedures</td>
<td>Free choice, either as part of an academic group</td>
</tr>
<tr>
<td>The main types of competences developed</td>
<td>Language, intercultural, managerial, leadership</td>
<td>Language, intercultural, leadership</td>
<td>Language, intercultural, project</td>
</tr>
<tr>
<td>Opportunities for improving intercultural competence</td>
<td>High</td>
<td>Medium to high</td>
<td>Low to high</td>
</tr>
<tr>
<td>Type of relations with foreign students</td>
<td>Cooperation and mentoring</td>
<td>Mentoring</td>
<td>Cooperation</td>
</tr>
</tbody>
</table>

The characteristics given in Table 01 are of two large categories. We can conditionally call the as organizational and pedagogical, the last four as psychological and pedagogical. Comparison of the
characteristics shows a certain closeness (according to five characteristics) of short-term programs and projects. This proximity can become even closer if educational programs are the part of the implementation (Krasnoshchekov & Trapitsyn, 2015). The main difference is the lack of freedom of choice in the project activity, if it is the part of the disciplines of the basic professional educational programs. Obviously, the freedom of choice, as well as the preliminary selection of participants, largely contribute to the participation in the internationalization activities of motivated students. Motivation is one of the guarantees of the success of these activities and the implementation of models as a whole.

7. Conclusion

7.1. Formation of value orientations and development of students' competences

You noticed the greatest discrepancies in the psychological and pedagogical characteristics. For all models, their combinations are different. In the conditions of a possible lack of freedom of choice and group work on the project, some participants of the student project avoid or minimize foreign-language communication, which reduces their level of developed intercultural competence.

The last two characteristics in many ways determine the values accepted and the degree of acceptance. It is, first, the values of multiculturalism and corporatism. The authors first began to consider international short-term programs in this aspect about 10 years ago; subsequent studies gave new emphases and confirmed in general the validity of the initial assumptions. If the interpretations of the value of multiculturalism as a whole are unambiguous, then we should clarify the notion of corporatism due to some of its negative connotation of the humanitarian science of the Soviet period.

Corporate values of the academic environment closely connect with the notion of corporate identity, that is, a certain degree of identification of the student's personality with the teaching institution. We distinguish two components in the structure of corporate identity. First component is cognitive (knowledge of the institution, its values, history, traditions and norms, self-awareness of its member). Second component is affective (pride in belonging to one's institution, satisfaction with membership). We mention the only positive attitudes of the affective component of corporatism formed in students performing the functions of tutors.

7.2. Development of mentoring relationships

The establishment of mentoring relationships between Russian students and foreign students characterize the first two models of internationalization. These relations are the most conducive to the formation of our students' values of corporatism and patriotism, in contrast to the project activities. If the implementation of programs with tutoring elements accompany the implementation of projects, then the students have opportunities for the development of positive value orientations.

7.3. Recommendations for the introduction of models for the formation of professional culture

The system of supporting the internationalization of students can function in any university, since it consists of three various models. It is possible to implement either independently of each other or in
integration manner. In small universities the can develop some of the models only. In large universities, they can implement several parallel schemes within each model, for example, at the level of institutes, higher schools or departments.

References

Babaeva, E. S. (2014). Sravnitel'nuy analiz formal'nogo i neformal'nogo obrazovaniya Сравнительный анализ формального и неформального образования [Comparative analysis of formal and non-formal education]. University Herald, 6, 234-237. [in Rus.].

Badarch, D., Tokareva, N.G., & Tsvetkova, M.S. (2014). MOOC: rekonstrukciya vysshego obrazovaniya [MOOC: reconstruction of higher education]. Higher Education in Russia, 10, 135-146. [in Rus.].

Krasnoshchekov, V. V., & Trapitsyn, S. Y. (2015). Mezhdunarodnyj rynek obrazovatel'nuyh uslug: osnovye karakteristiki i tendencii razvitiya [International market of educational services: basic characteristics and development trends]. Moscow, Russia: Delo Publ. [in Rus.].

Krasnoshchekov, A. V., & Krasnoshchekov, V. V. (2014) Analiz lichnyh kachestv rossijskih studentov – uchastnikov mezhdunarodnyh obrazovatel'nyh programm [Analysis of personal qualities of Russian students participating in international educational programs]. In Актуальные проблемы педагогики и психологии [Actual problems of pedagogy and psychology] (pp. 65-69). Ufa: Аетена Publ. [in Rus.].


Kuznetsov, V. V. (2017). Korporativnoe obrazovanie: soderzhanie i suschnost' [Corporate education: Content and essence]. Domestic and foreign pedagogy, 1. 51-60. [in Rus.]


Nedelko, P. S. (2017). Organizaciya deyatel'nosti studencheskoy volonterskoj organizacii po rabote s inostrannymi obuchayushchimisya [Organization of the student volunteer organization for work with foreign students]. In Aktual'nye voprosy mezhdunarodnogo sootrudnichestva v obrazovanii [Actual issues of international cooperation in education] (pp. 177-184). St. Petersburg, Russia: Polytechnic University Press. [in Rus.]

Proskura, O. V., & Minin, M. G. (2014). Kompleksnaya podgotovka studentov k uchastiyu v programmah mezhdunarodnoj akademicheskoy mobil'nosti [Comprehensive preparation of students for participation in international academic mobility programs]. Vector of science of Togliatti State University: Pedagogy, psychology, 4. 143-145. [in Rus.]


