Abstract: The article reveals the experience of Canadian universities in the sphere of internationalization and its implementation into the academic process of the Ukrainian higher agrarian education. The authors of the article examined works of Canadian researchers concerning internationalization in higher education, the process of adaptation of international students to the foreign environment, in particular, those which describe the outcomes of students, belonging to non-European intellectual traditions. It was found out that the Canadian strategies in internationalization had resulted in increasing quality of education and scientific research by establishing links with international partners due to the active academic mobility, multicultural awareness and integration into the world scientific society. Analysing and resuming the materials, the questionnaires were compiled to identify the initial level of adaptation of international students to the Ukrainian agrarian university, focused on housing information, challenges, learning the English and Ukrainian languages, university authority support for international students, etc. Assuming findings of the study, pedagogical conditions, appropriate to successful adaptation of international students to the academic and cultural environment of the university were distinguished. The intercultural trainings programme was targeted to facilitate the process of international students’ adaptation to the new multicultural academic environment, as well as provide the necessary skills for intercultural communication.

Keywords: internationalization; higher education; international students; adaptation; academic environment.

1. Introduction

The emphasis on academic internationalization is one of the main tendencies that affect the reforms of higher education in the world. In accordance with Mobility Strategy 2020 for the European Higher Education Area (EHEA, 2012), European countries are encouraged to work out and implement national educational strategies for internationalization and mobility.

The priority task of agrarian universities in Ukraine is to develop the bilateral and multilateral international relations, educational and scientific projects. It is essential now because of Ukraine’s entry into the international educational space and promotion of Ukrainian educational services to the international market that require organization of the process of adaptation of international students to the academic environment of higher education institutions. Although Ukraine has not yet become a member of the European programmes of academic mobility, training of international students is carried out within the framework of intergovernmental agreements, through inter-university cooperation. Nowadays more than 66,310 international students from 147 countries study in higher education institutions of Ukraine (Study in Ukraine, 2018).

Students, postgraduates and lecturers from Sumy National Agrarian University (Ukraine) gain valuable knowledge and practical experience at the universities of Canada, Germany, Poland, the USA and other countries of the world. Nowadays cooperation with new partner organizations is under way on the basis of collaboration agreements signed by Sumy National Agrarian University (Ukraine) with College of International Business ISM (Slovakia), University of Hradec Kralove (Czech Republic), Guizhou University (China) (SNAU, 2018).

Sumy National Agrarian University is continuously working on establishing partnerships with Western Canadian University Consortium, which includes the Faculty of Agrarian Sciences of University of Saskatchewan, University of Alberta, University of Manitoba on such areas as “exchange of lecturers and students” and “organization of joint research activities”. The internship in Canada is a special opportunity for students to obtain profound knowledge and improve practical skills in the agrarian industry. In 2016, the representative of University of Manitoba (Canada) Dr. E. Tyrchenevich, senior research assistant in the department of agricultural production, visited Sumy National Agrarian University. He provided lectures and seminars on the subject of agrarian higher education.
institutions, international exchange programmes for students and joint scientific research for agricultural business in Canada (SNAU, 2018).

The article is aimed to study the strategies of Canadian universities on internationalization and intercultural adaptation; extrapolate them into the practice of the Ukrainian university with the focus on Chinese students as the largest group of international students in Sumy National Ukrainian University.

Sumy National Agrarian University is one of the most popular universities in the Northeastern region. It has the status of an international university. The number of international students in Sumy National Agrarian University increased from 16 in 2010 to 390 in 2018. Primarily the international students come from China (148), Turkmenistan (95), Turkey (55), Azerbaijan (25), Zimbabwe (22) and Nigeria (20) (SNAU, 2018).

2. Materials and methods

To solve the tasks of the research, the following set of methods was used:

- theoretical methods, namely document analysis carried out to collect information on internationalization in higher education; synthesis of scientific knowledge on the concept of “internationalization of higher education”; extrapolation of Canadian researchers findings concerning internationalization in higher education, the process of adaptation of international students to the academic environment of the Ukrainian university; systematization of theoretical data;

- empirical methods, such as diagnostic tools (observation, questionnaires, initiated with Chinese students in order to identify the level of their adaptation to the Ukrainian agrarian university); students’ interviews focused on housing information, challenges, university authorities supports, etc.

3. Results

Currently there are 494,525 international students in Canada. According to the statistics, China is the largest provider of international students: the students from China make up 28% of Canada’s international student population, followed by students from India (25%), South Korea (5%), France (4%) and United States (3%) (CBIÉ, 2018).

Canada’s higher education system is well-known for its high quality and efficiency at home and abroad. In terms of internationalization, Canada’s key point is its reputation for high standards in education and
scientific research. The increasing enrolment of international students in Canadian higher education institutions proves its evident achievements in the internationalization process. The country ranks as the world’s fourth most popular destination for international students. In 2014, the Association of Canadian Deans of Education manifested an Accord on the Internationalization of Education. The Accord declares economic and social justice and equity; reciprocity as the foundation for engaging in internationalization activities; global sustainability; intercultural awareness, ethical engagement, understanding, respect and equity of access to education (ACDE, 2014).

While main strategies in the sphere of education are authorized by the provinces and territories officials, educational institutions hold a high degree of autonomy in the academic issues. In fact, seventy-two percent of Canadian universities are engaged in initiatives to internationalize the curriculum; of those, 82% coordinate activities that develop students’ international perspectives; 53% integrate international students’ perspectives into classroom learning; and 44% provide professional development for faculty to help them integrate international/intercultural dimensions into their teaching. Eighty-one per cent of Canadian universities offer collaborative academic programmes with international partners, a major increase over the last eight years, when it indicated solely 48%. Today, 63% of those that are involved in such academic programmes offer dual or double degree programmes and 45% offer joint degree programmes (ACDE, 2014).

Internationally, the research fields of teaching and learning for international students and internationalization of the curriculum tend to lack a conceptual framework to underpin and transform research and practice. However, the most universal definition of internationalization is put forward by J. Knight. Consequently, the researcher emphasizes that internationalization is a process of integrating an international, intercultural and global dimensions into the goals, primary functions and delivery of higher education at the institutional and national levels. Internationalization is interpreted as a long and steady process of enriching the international dimension of all areas of university activity and is not limited to its specific form. This study integrates various aspects of internationalization, such as institutional strategy, academic mobility of students and lecturers, including issues concerning curricular reform and quality of education, research, international development projects, staff development and delivery of educational programmes abroad (Knight, 2012).
An important aspect of internationalization is the formulation of its tasks, which take place in the context of political, economic, academic and cultural directions. J. Qiang’s research indicated that the main objective of the internationalization of higher education is to raise awareness and respect for other peoples, cultures, civilizations, and life values. The author supported the idea of establishing links between communities of people; emphasized the need for the mutual enrichment of the cultures of different nations; proved the necessity of introducing the internationalization of higher education as a response to the demands of the present. The researcher noted that the goal of internationalization of higher education is internationalization itself, while in many countries it is reviewed as a means of fulfilling the tasks of improving the quality of education, restructuring and modernization of higher education systems and services (Qiang, 2003).

R. D. Trilokekar & G. A. Jones presented a report on recent tendencies of internationalization in Canadian universities. International education in the form of student mobility is one of the peculiarities of this report. They worked out the strategy to both attract the best and brightest international undergraduate and graduate students, giving the potential revenue associated with expanding the Canadian market. International education is valued as a trade, but it is also viewed as an important source for satisfying the needs of the Canadian labour market. Canadian students are encouraged as well to study abroad for developing their outlook and global perspective (Trilokekar & Jones, 2013).

N. Arthur studied the ways of supporting international students through strengthening their social resources. The researcher proved that procedures of recruiting international students to higher education institutions must be supported with preparation of the campus community for engaging with this diverse population. The motives of international students for pursuing international studies, including academic and career goals, are facilitated through building strong relationships with members of the host institution and social integration of international students. It is important for international students’ academic performance to build a sense of connection to the destination country and to determine their post-graduation career plans. The author singles out the main social resources for supporting international students’ transitions that include academic faculty, counselors, and domestic students’ assistance. The author stresses that these groups require special preparation to support international students through a high-quality educational experience and adaptation to the conditions of living and learning in a new cultural and academic environment. Increasing the cross-cultural learning of all members of the campus community is a
core factor for the success of international students and offers them a unique possibility to create relationships with domestic students (Arthur, 2017).

There is a wide variety of researches that set out international (Chinese, in particular) students’ experiences in Canadian universities, relevant to and being of special value to our study.

For instance, T. Anderson explored the internationalization aspects of the state of Canadian Higher Education that caused a broad discussion of Canadian postsecondary internationalization. The author conducted a longitudinal, multiple-case study to investigate the second-language socialization of seven foreign Chinese PhD students at a large Canadian university. He examined many challenges and frustrations that the participants had faced through in-depth interviews, narrative inquiry, and document analysis. The students discussed various challenges they had met acculturating into their respective academic literacies and discourses during their programmes, that resulted in vastly different degrees of success. The complications of their entry into the English academy included gaining high grades, writing comprehensive exams and dissertation proposals, presenting reports at conferences, and writing articles and abstracts for publication (in several languages) (Anderson, 2015).

Y. Guo & S. Guo studied the internationalization strategies and policies at a university in Western Canada from the point of view of international undergraduates. The research found out several persistent problems concerning a neoliberal approach that treats internationalization as a marketing strategy, limited internationalization of the curriculum, and gaps between the internationalization policy and the experience of international students. The study resulted in many important implications for providing social facilitation as a university authority support appropriate to international students and for internationalization policy in higher education (Guo & Guo, 2017).

C. Wang presented the research of Chinese students studying in Canada on “2+2” joint programmes, emphasizing on many challenges, including language, credit transfer, academic study, and social life, that Chinese international students may face while studying in Canada. Immersion in the host culture and familiarization of international students with the language as well as improvement of the academic lexicon in their field are fulfilled through socializing with native speakers, taking an active part in workshops, seminars and volunteer activities. International students need to learn about local laws because it not only helps them to protect themselves, but also prevent them from breaking the law.
provide a special opportunity for international students to explore different ways in teaching and assessment in China and Canada. Experiencing and comparing two different education systems may benefit them by developing their critical thinking. The positive elements of the programme enable students to enhance their knowledge and skills, while the challenging elements stimulate them and allow them to develop their work of ethic, confidence, and independence (Wang, 2018).

Other researchers (Calder, Richter, Mao, Kovacs Burns, Mogale, & Danko, 2016) also examined international students’ experiences in Canada from the adaptation aspect. The authors studied the reasons of Canadian universities to recruit international students, such as to maintain global contacts and reputation, to increase enrolment and to generate revenue from tuition. International students faced unique challenges comparing with domestic students. The researchers obtained valuable academic and social findings from a survey and interviews with international graduate students, university personnel, and service providers assisting students. The students told about problems concerning search for an affordable, adequate, and suitable housing; finances, stemming from their ability to work or find employment, and from currency fluctuations; as well as integration into a new academic and an unfamiliar society. Administrators described the certain limits to the assistance they could provide. Both groups suggested changes to facilitate international students’ housing and financial issues (Calder, et. al., 2016).

J. Liu studied internationalization of higher education from the point of view of international students’ intercultural adaptation in Canada. Resuming the materials of the research, the author gave the following recommendations as to provide workplace diversity training and engage international students in campus activity design and planning. Diversity training teaches employees the proper way to interact with people of culturally diverse backgrounds, as well as increases cultural awareness, knowledge and communication. It can benefit an organization by preventing civil rights violations, increasing relationships among identity groups, and promoting better teamwork. This research confirms the necessity to hire multilingual employees in order to improve management of international students’ anxiety and uncertainty related to intercultural adaptation. The author points out the importance of creating more inclusive learning environment taking into account the variety of international students’ needs and interests (Liu, 2017).
The principal research subjects and strategies relevant to them, put forward by the Canadian scholars, as well as implemented in the academic environment, are summarized in the table 1.

**Table 1. Principal Subjects and Strategies on Internationalization of Higher Education in Canada**

<table>
<thead>
<tr>
<th>Scholar</th>
<th>Research subject</th>
<th>Strategies put forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Knight</td>
<td>internationalization</td>
<td>institutional strategy, academic mobility of students and lecturers, delivery of educational programmes abroad</td>
</tr>
<tr>
<td>J. Qiang</td>
<td>objective of internationalization</td>
<td>raising awareness and respect for other peoples, cultures, civilizations, and life values</td>
</tr>
<tr>
<td>R. D. Trilokekar, G. A. Jones</td>
<td>student mobility</td>
<td>attracting the best and brightest international undergraduate and graduate students to satisfy the needs of the Canadian labour market</td>
</tr>
<tr>
<td>N. Arthur</td>
<td>intercultural adaptation</td>
<td>building strong ties with members of the host institution and social integration of international students</td>
</tr>
<tr>
<td>T. Anderson</td>
<td>challenges that international students face</td>
<td>university-provided academic support programs to facilitate both academic and linguistic support</td>
</tr>
<tr>
<td>Y. Guo &amp; S. Guo</td>
<td>social facilitation</td>
<td>providing the university authority support for international students and involving them in social activity planning and</td>
</tr>
</tbody>
</table>
The theoretic aspect of the study prompted us to search for grounds and effective methodological tools for the adaptation of international students to the academic environment of Sumy National Agrarian University, distinguishing primarily the existing points, such as challenges and frustrations, that may come across the Chinese students learning experience.

4. Challenges the Chinese students face in Ukraine

Since 2018, Sumy National Agrarian University is involved into the process of active cooperation with Chinese higher education institutions. The students of Sumy National Agrarian University were trained at Zi Yang Institute of Zhejiang University of Agriculture and Forestry. The Ukrainian students participated in academic process and scientific research, as well as learned Chinese culture and traditions. The students of Zi Yang Zhejiang University of Agriculture and Forestry took an internship at Sumy National Agrarian University. The programme included theoretical and practical classes, participation in the work of scientific research laboratories. The Chinese students started learning the Ukrainian language, culture and traditions. Successful mutual fulfillment of international internship resulted in the implementation of the next phase of the project – training on the 2 + 2 principle and recognition of diplomas of higher education by Ukraine and China.
The agreement about joint postgraduate training between Sumy National Agrarian University and Henan Institute of Science and Technology envisages Masters’ training during the first year on the basis of Sumy National Agrarian University, conducting research in China for six months and, finally, preparing and then defense of Master’s work in Ukraine for the next six months. Postgraduate students will study the first year in Ukraine, then take practical research in China for two years, after that they will study for the last year and have a defense of candidate’s theses at Sumy National Agrarian University. In the frames of the programme each postgraduate student collaborates with two supervisors: a lecturer from Sumy National Agrarian University is responsible for theoretical training, while a tutor from Henan Institute of Science and Technology supports practical research of students in China.

What challenges may the Chinese students face while adapting to the academic and cultural environment of Sumy National Agrarian University? The process of adaptation is a usual and natural phenomenon for any person who appears in an unfamiliar environment (Coelen, 2016). To indicate the main problems of adaptation including physiological, sociopsychological, legal, cultural, communicative, academic aspects, the special questionnaires were compiled. Also, necessary information was collected through observation over the participants, discussions and interviews with them.

The data of 148 questionnaires had been processed. Analyzing the responses of the international students to the questionnaires, we found out that, on arrival in Ukraine, it was the most difficult for them to get used to the weather (28%), the need to communicate in a foreign language (25%), the difficulty of getting used to another way of life (16%) and the characteristics of Ukrainian cuisine (14%); 17% of the respondents undertook the problems with transport as well.

The conditions of accommodation in the university hostel had not suited more than half of international students (53%); as the reasons for dissatisfaction, the most of them mentioned sanitary conditions (21%), security work (19%), lack of leisure facilities and (13%). Despite the poor evaluation of the housing conditions of the students’ hostel, the activities of the leadership and the staff of the hostel of Sumy National Agrarian University, the very fact of the residence of international students in the dormitory had had a beneficial effect on their adaptation to university reality due to relations, built with a large number of students, the exchange of learning experience and life in Ukraine.

Another challenge the Chinese students experienced during their study at the university is an academic adaptation. It is important to note that
although the international students experienced some difficulties in adapting to a different curriculum and pedagogy, most of the respondents characterized their relationships with lecturers as positive; they said that lecturers always offered their help and understood the students’ problems. 96% of the Chinese students had settled friendly terms with Ukrainian students, only 4% had experienced some tension in their socialization. Most of the students mentioned the active role of communities in solving their problems, while only some of them had addressed for help to the university leadership.

Sumy National Agrarian University offers the English-language programmes for Chinese students; they also attend the Ukrainian courses. Although the Chinese students study in English, many of them meet problems in understanding English. In our opinion, the degree of stress with language difficulties may negatively affect their academic achievement. According to the results of the questionnaire it was found out that 88% of the Chinese students had met language difficulties during the educational process and only 12% of the respondents had had complications in everyday communication. 55% of the international students noted that they had had difficulties in understanding the lecturers and answering in an oral form (33%). 76% of the Chinese students considered the Ukrainian language to be too difficult to study; 24% of the respondents indicated that they already understood some Ukrainian phrases. Most of the international students considered their level of proficiency in Ukrainian to be sufficient for everyday communication, but it was not sufficient for the educational process (comprehension of lecture materials, oral answers). However, fluency in English and Ukrainian was not regarded as a dominant factor in successful adaptation. The most important were friendly and supporting relations, while knowledge of the English and Ukrainian languages (29%) had almost the same value as financial issues (25%).

5. Discussion

Analysis and systematization of obtained scientific information resulted in extrapolation of Canadian experience into the academic and cultural environment of Sumy National Agrarian University, so the following pedagogical conditions were identified:

a) the development and implementation of the programme of Chinese students’ adaptation to the university’s academic and cultural environment;
b) intercultural communication ensured for all participants in the process of adaptation;

c) application of monitoring as a tool for assessment of the successful adaptation of Chinese students to the academic and cultural environment of Sumy National Agrarian University.

While developing and implementing the programme of Chinese students’ adaptation to the academic environment of the university sociocultural, sociopsychological features of Chinese students, purposefulness, complexity and integrity of the process of adaptation have been taken into account (Altbach & Knight, 2007). The realization of the programme of adaptation applies various forms and methods of educational and extracurricular activities: lectures, practical classes, seminars, experimental research classes, scientific clubs; meetings with the leadership of the university and its structural subdivisions; briefings, trainings, round tables, conversations; excursions, visits to museums, theaters; concerts, work of creative student groups, circles, sections, sports.

The intercultural communication of all participants in the process of adaptation of the Chinese students to the academic environment of the university is based on the communicative interaction between individuals who represent diversity cultures and have their own language code, conventions of behaviour, value scales, customs and traditions (Chao, 2014). So, the multicultural programme in SNAU involves all subjects of the adaptation process: lecturers, tutors, Ukrainian students, representatives of the administration of the university, Chinese students. Intercultural communication becomes the leading means to support the multicultural character of adaptation work, effective interaction of international students with the academic environment. It helps to prevent interpersonal, interethnic conflicts with other students, promotes emotional comfort of international students, create a new style of behavior (Liu, 2017).

This pedagogical condition is realized through intercultural (diversity) trainings. They allow international (Chinese) students to learn the Ukrainian culture, to compare it with the essential features of another country (China, Canada, for instance), to present models of behaviour, sociocultural norms, values of the Ukrainian society; the ability to see the situation from the perspectives of people of culturally diverse backgrounds, to act adequately, to develop respect, tolerant attitude and empathy, to manage their own emotional state, reactions in the process of intercultural communication and interaction with the academic environment (Padalka, 2012). Among the main topics of intercultural trainings are: “Acquaintance”, “Etiquette in Ukraine (in China)”, “Holidays”, etc. The introduction of one-
day diversity trainings is considered to be an essential element of the effective formation of new sociocultural settings of students, which will facilitate the early days of adaptation in the new multicultural environment, as well as provide the necessary skills for intercultural communication experience (Zhang & Xu, 2000).

The structure of the training should include, first of all, acquaintance and search for common interests among students. At this stage, each individual overcomes the barrier of own ‘I’ and begins to learn more about the surrounding people (Kaleniuk, Honta, Verbovyi, & Kholiavko, 2011). The next step is to fulfill common tasks that will help instructors and students to identify the strong and weak points of each student, determine their role in the group and see how they can work together. It is interesting to solve an artificially created conflict situation, which will allow students to build more close relationships. The final stage of such a diversity intercultural training is the acquaintance in the format of interactive conversation with the culture of the international students’ countries, the peculiarities of verbal and non-verbal communication and the importance of intercultural interaction, its role in further personal and professional life (Wang, 2018).

The process of Chinese students’ adaptation to the academic environment of Sumy National Agrarian University is supported by applying monitoring as a means of assessing the success of adapting Chinese students to the academic environment in Ukraine. Such forms and methods as collection, storage, systematization, application of information in the process of adaptation are implemented during monitoring. They allow to differentiate Chinese students by the levels of adaptation to the academic environment of the university in order to determine the internal factors effecting the fulfillment of adaptation of Chinese students to the academic environment of the university; motivate its dynamics; adjust the forms and methods of Chinese students’ adaptation to the particular situation (Anderson, 2015).

Monitoring of Chinese students adaptation is based on the following principles: the objectivity of the received information, adequacy, predictability, visibility. They provide the implementation of informational, diagnostic, comparison, reflexive and integrative functions (Altbach & Knight, 2007). The monitoring process takes place during three phases: preparatory (establishing the state of adaptation of Chinese students to the academic environment of the university), activity (implementation of the programme of adaptation of Chinese students to the academic environment of universities) and analysis and correction (assessment of the success of
adaptation work) (de Wit, Hunter, & Howard, 2015). Among the methods used during the monitoring of adaptation, surveillance, interviews, questionnaires, testing, analysis of the results of the obtained data are carried out.

6. Conclusion

The findings of our research showed that Canadian higher education has valuable pedagogical achievements in training international students. Consequently, the findings of the research revealed the directions of problem solving in the national higher agrarian education, taking into consideration the principal strategies in internationalization of higher education in Canada. However, international education and international students exist around the world, not only in Western countries, so it is necessary to admit that the field is changing rapidly in terms of the countries (Ukraine, for instance) that now offer international education. Much of the commonly referenced literature in this field represents ‘Western’ views and reflects mostly the traffic of international students from East to West. So it was of special value and interest for us to study the growing body of work of scientists who represent the other non Anglophone countries, and regard the topic of internationalization and adaptation in Canadian universities from the perspective of non European epistemologies and intellectual traditions such as Asian/Confucian (Chinese) ones (Guo & Guo, 2017; Liu, 2017; Qiang, 2003; Wang, 2018; Zhang & Xu, 2000; etc.).

The analysis of the questionnaires, created to determine the initial state of international students’ adaptation, let us conclude that the vast majority of international students, on arrival in Ukraine, face many difficulties, highlighting their physiological (habituation to the climate, cuisine), and sociopsychological nature (adaptation to living conditions, norms of behaviour and requirements of educational activity).

Theoretic extrapolation of the research outcomes prompted working up pedagogical conditions, necessary for successful adaptation of international students to the academic environment of Sumy National Agrarian University. Among them are the development and implementation of the programme of international students’ adaptation to the university’s academic and cultural environment; intercultural communication ensured for all participants in the process of adaptation; application of monitoring as a tool for assessment of the successful adaptation of Chinese students to the academic and cultural environment of the university.
References


