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## РОЛЬ ВОЛОДІННЯ АНГЛІЙСЬКОЮ МОВОЮ В ПІДВИЩЕННІ ЯКОСТІ АКТУАРНОЇ ОСВІТИ: ВИКЛИКИ ТА ПЕРСПЕКТИВИ В УКРАЇНІ

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## ENGLISH LANGUAGE PROFICIENCY IN ACTUARIAL EDUCATION QUALITY IMPROVEMENT: CHALLENGES AND OPPORTUNITIES IN UKRAINE

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## АНОТАЦІЯ

**Формулювання проблеми.** Стаття є внеском у дискусію про важливість володіння англійською мовою для професії актуарія в сучасному глобалізованому світі. Враховуючи той факт, що система актуарної освіти в Україні зараз знаходиться на стадії становлення, а отже, значною мірою спирається на міжнародні стандарти, встановлені міжнародними актуарними організаціями, ми припускаємо, що англійська мова може бути ефективним інструментом професійного розвитку не лише для кваліфікованих спеціалістів, але й для актуаріїв-початківців. Дослідження має на меті виявити взаємозалежність між належним знаннями англійської мови, розвитком актуарної освіти в Україні та отриманням міжнародно визнаних актуарних сертифікатів майбутніми українськими спеціалістами, а також популяризацією професії актуарія в нашій країні.

**Матеріали та методи.** У даному дослідженні використовуються якісні методи педагогічного теоретичного аналізу (навчальних планів, законодавчих документів, наукових ресурсів) та спостереження, що ілюструють практику підготовки фахівців-актуаріїв України, а також аналіз внутрішніх звітів і документів міжнародних актуарних організацій; на основі синтезу педагогічних знань автори розробили практичні рекомендації щодо вдосконалення актуарної освіти в Україні.

**Результати.** Стаття є однією з перших комплексних спроб проаналізувати роль володіння англійською мовою в професійному розвитку актуаріїв-початківців в Україні та виробити практичні рекомендації з цього питання. На основі аналізу відповідних джерел ми виявили, що володіння англійською мовою може вестися актуарну професію та освіту в Україні на якісно новий рівень. Проте знання англійської мови не вважається пріоритетом на рівні національних освітніх норм і стандартів. Запропоновано можливі шляхи виходу з такої ситуації, націлені на покращення викладання англійської мови, співробітництва з міжнародними актуарними організаціями та формування психологічної готовності українських делегатів та професіоналів до публічного спілкування професійною англійською на зустрічах та івентах, організованих професійними об'єднаннями цих фахівців по всьому світу.

**Висновки.** Роль англійської компетенції для професіоналів-актуаріїв в Україні має бути пріоритетною, оскільки сама професія

## ABSTRACT

**Formulation of the problem.** The paper is a contribution to the discussion of the importance of English proficiency for the actuarial profession in the present-day globalized world. Given the fact that the system of actuarial education in Ukraine is currently at the stage of its formation and hence relies greatly on the international standards set by actuarial organizations, we hypothesize that an English language is an effective tool of professional advancement not only for qualified professionals but also for aspiring actuaries. The study aims to investigate interdependencies between good English skills, the development of actuarial education in Ukraine, and attaining internationally recognized actuarial credentials by Ukrainian actuarial candidates as well as the promotion of the profession of an actuary in the country.

**Materials and methods.** The current research utilizes the qualitative methods of the pedagogical theoretical analysis (curricula, legislative documents, scientific resources) and observations illustrating the practice of actuarial professionals' training in Ukraine and as well as the analysis of international actuarial organizations' internal reports and documents; the authors also employ the synthesis of pedagogical knowledge to draw up some practical recommendations on the improvement of actuarial education in Ukraine.

**Results.** The paper is one of the first comprehensive attempts to analyze the role of English proficiency in aspiring actuaries' professional development in Ukraine and to work out some recommendations on the issue. Based on the analysis of the relevant sources we have identified that English mastery can bring the actuarial profession and education in Ukraine to a qualitatively new level. However, English skills are not considered to be a priority at the level of the national educational norms and regulations. We suggest that possible ways out are improved English instruction, cooperation with international actuarial organizations, and forming psychological readiness in delegates and professionals to speak professional English publicly.

**Conclusion.** The role of English competence for actuarial professionals in Ukraine should be prioritized since the profession itself is regulated by the international standards guiding particular eligibility criteria to be recognized by the word actuarial community as a qualified actuary worldwide. We believe that the proposed recommendations will improve actuarial professional education and the existing language training and will help to bring the profession in general to a qualitatively new level.

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регулюється міжнародними стандартами, які визначають, зокрема, критерії набуття статусу кваліфікованого актуарія у всьому світі. Вважаємо, що запропоновані рекомендації виведуть актуарну професійну підготовку, рівень володіння англійською та професію актуарія в цілому на якісно новий рівень.

**КЛЮЧОВІ СЛОВА:** актуарії; актуарна освіта; знання англійської мови; міжнародні актуарні організації; рекомендації.

**KEYWORDS:** actuaries; actuarial education; English proficiency; international actuarial organizations; recommendations.

## INTRODUCTION

Transformational processes in the economic system of Ukraine and other developing countries are characterized by the transition from state control over the key areas of socio-economic life to the market mechanism. They involve reliance on free enterprise principles, market pricing, various forms of ownership of the means of production, competition, and contractual relations between economic entities. Despite the significant advantages of the market system involving flexibility, the ability to respond quickly to market needs, and, most importantly, economic freedom, it has several serious shortcomings including exposure to risks of different nature, bankruptcy threats, cyclical development, recessions, economic crises, and economic depressions. Developed countries in Europe, the United States, and Canada prepare some sort of a countermeasure in the labor market – actuarial professionals who can calculate reserves, insurance rates, and pension contributions providing financial stability and even the opportunity to make a profit during economic downturns using mathematical and statistical methods. Thus, we claim that qualified actuaries' training is a dictate of the times.

The analysis of the actuarial training system in Ukraine has shown some contradictions between the needs of the Ukrainian insurance market, its legal framework, and the number of actuaries which can be currently prepared by the domestic educational system; world qualification requirements for such specialists and their insufficient consideration in the national practice of attaining a qualified actuary status; inadequacy of the scientific-methodical, content and technological component of these specialists' training; availability of best practices, educational resources, educational trajectories and successful actuarial education experience in developed countries and Ukrainian aspiring actuaries' insufficient English competence for their acquisition and becoming a fully qualified actuary according to international requirements. The latter controversy and the role of English skills in actuaries' professional development are thoroughly addressed in the paper.

The current study follows the track of the previous research discussing the importance of English for businesses and typical problems encountered by non-native English speakers in the English-speaking environment (Harzing et. al, 2011; Fondo, 2019; Bellos, 2009; Louhiala-Salminen et. al, 2005; Poncini, 2003). However, we aim to analyze the role of English proficiency in the actuarial education system in Ukraine and the development of the profession in the country as well as to elaborate on some practical recommendations for addressing existing problems that are relatively uncovered issues in the scientific literature.

## MATERIALS AND METHODS

The current research utilizes the qualitative methods of the pedagogical theoretical analysis (curricula, legislative documents, scientific resources) and observations illustrating the practice of actuarial professionals' training in Ukraine and as well as the analysis of international actuarial organizations' internal reports and documents reflecting their policy on the problem of linguistic challenges and barriers and possible ways of their mitigation. The synthesis of pedagogical knowledge was used to propose recommendations remedying the existing language-induced problems Ukrainian actuaries encounter now and then.

## RESULTS AND DISCUSSION

The importance of a good command of the English language comes from the fact that actuarial education in Ukraine, as well as the insurance market in general, is in its infancy, so, for the time being, there are no sufficient practices to generalize them into powerful learning and teaching support kits – we have only ten years of experience in training such specialists at national universities (the specialty “Actuarial and Financial Mathematics” included into the field of knowledge 0402 Physics and Mathematics were first introduced under the Resolution of the Cabinet of Ministers of Ukraine “On the approval of the list of specialties for higher educational institutions according to educational and qualification levels of a specialist and master” No.787 (2010). The constructive use of foreign experience and resources is currently an indispensable component of the national actuarial education system's functioning. Interactive learning can be considered the main means of forming necessary knowledge and skills in actuarial science – professional forums, webinars, seminars, online courses, thematic groups on social networks, etc. Foreign textbooks and manuals are no different. Most of these teaching aids are in English. Moreover, different English skills lead to ambiguity in the perception of information; a lack of Ukrainian students and practitioners' systematic and structured educational activities exacerbates the problem of the absence of Ukrainian equivalents for many insurance and financial terms. Therefore, the language factor at the present stage is generating many problems.

At the same time, the problem of quality Ukrainian-language content is recognized by leading experts in the field and educational providers as one of the key ones. In this aspect, we should consider the activities of the Probability Theory, Statistics, and Actuarial Mathematics Department of the Taras Shevchenko National University of Kyiv, based on which the first actuaries in Ukraine were trained. This Department initiated the creation of the first video channel in Ukraine, where teachers, students, and graduates illustrated the areas and methods of actuarial and financial mathematics application as well as the specifics of actuarial professional activities. Besides, based on the Center for the Training of Actuaries and Financial Analysts based at the Faculty of Mechanics and Mathematics, instructors developed training modules for Ukrainian-language courses and technical exams of the British Institute and the Faculty of Actuaries (Zubchenko & Mishura, 2016). Moreover, the traditional Department's activities are the organization and holding of seminars, workshops, and training sessions. These steps are aimed at removing a language barrier by creating Ukrainian-language teaching materials, which, of course, is an achievement, but does not qualitatively change the situation.

In our opinion, a more productive way is to improve the quality of English language teaching to students. However, the analysis of the master's program curriculum in actuarial and financial mathematics at Taras Shevchenko National University of Kyiv (2016) revealed that as of 2016 no disciplines were providing English-language training for students, neither among elective nor among compulsory subjects. In our opinion, this situation is not acceptable and needs to be changed.

However, it should be noted that the lecturers of the Probability Theory, Statistics, and Actuarial Mathematics Department are certified according to the standards of the Institute of Actuaries of Great Britain (Zubchenko & Mishura, 2016) indicating a proper level of English skills. It can be a contributory factor to the creation of English-taught programs. It should be borne in mind that the most reputable professional associations that develop tasks and assess the level of actuarial candidates' knowledge, skills, and abilities are based in the UK and the US and use their native language – English. Accordingly, the language in which exams are taken and educational programs are drawn up in English.

According to V. Cherniakhovskiy, the chairman of the Insurance Commission of the Ukrainian Society of Financial Analysts, many actuaries insist on the introduction in Ukraine of a national system of preparation for exams examinations in the Ukrainian language. However, there emerge some difficulties. After all, exam questions, which are composed of actuaries according to the British system in Ukraine, are in English. "Of course, it is possible to translate them into Ukrainian or Russian, but in most cases, these are open-ended questions that require detailed answers, which as a result will still have to be translated into a foreign language" (Shcheglova, 2010).

The insufficient level of English can be a factor negatively influencing the actuarial credentialing and exam process. It results in lowering educational standards and creates obstacles for Ukrainian actuaries on their way to obtaining internationally recognized qualifications.

A positive factor is a tendency for key professional associations to realize the influence of English-language competence on the openness of the actuarial profession in a wider range of countries. In this regard, it is worth noting that experiments related to the translation of English test systems into other languages are being intensively implemented. The Institute and Faculty of Actuaries now offer exams in Hebrew in Israel, although they are taken in English worldwide. It means that Israeli students can answer exam questions in their native language and pass actuarial exams in such a way they are qualified as full members of the Israeli Institute of Actuaries. At the level of the local professional association, professional examinations are conducted following the instructions of the Institute and the Faculty of Actuaries. It is also possible to choose English for exams (International Actuarial Association, 2014). In this case, their answer sheets are evaluated by British examiners.

Similarly, the British Institute of Actuaries cooperates with certain local professional associations that use the ST9 exam of the British system to award the Chartered Enterprise Risk Actuary (CERA) designation (International Actuarial Association, 2014). Under such arrangements, the results of the examinations taken in local languages are recognized as those meeting eligibility requirements according to the local qualification procedures.

There are other examples of similar agreements. For instance, the Russian Guild of Actuaries uses materials issued by the Institute of Actuaries and translated into Russian for preparation for actuarial exams. Although the qualifying examinations are set by this local professional organization, they are composed in absolute correspondence with the examination tasks offered by the British Association in the previous years.

The US-based Society of Actuaries' examination tasks is available in French. They are targeted at the French-speaking population of Canada. In addition, these exams are used for actuarial credentialing by the China Association of Actuaries, so the exam tasks are also available in Chinese (International Actuarial Association, 2014).

Thus, some important steps have been taken to reduce the impact of poor English on the outcomes of qualifying examinations, as, ultimately, the English language, in this case, serves only as a means of reporting candidates' knowledge and skills and not as a professional competence to be evaluated.

However, if printed teaching aids can be translated, the situation is getting more complicated when it comes to participation in conferences and other events organized by professional actuarial associations that involve the use of English as a working language as a means of international communication.

The above point is confirmed by the extracts from the Actuarial Association of Europe's (also known as *Groupe Consultatif Actuariel Européen*) internal report illustrating some frustrating concerns expressed by participants from non-English speaking countries. "I was sitting in one of the IAA Committee meetings and listening to the discussion. Suddenly I thought that the meeting was missing an essential point and I started to plan an intervention. It took a few minutes to prepare myself, especially to find the right English words, etc., and suddenly I realized that the discussion had moved on to another subject" (Rogerson-Revell, 2007). And another difficult situation is "I was in the middle of an intervention talking about that interesting subject when in the middle of a sentence I realized that I had forgotten the correct English word to use" (Rogerson-Revell, 2007). These embarrassing examples will discourage non-native speakers from taking the floor and speaking publicly.

Moreover, non-native English speakers' negative emotional experiences caused by the lack of English proficiency may result in language-based anxiety leading to hostile stereotyping and miscommunication; negative psychological strategies of eschewing participation in a discussion, or even a selective choice of opponents based on their English skills; another option can be a switchback into a participant's native language bringing in discomfort and misunderstanding (Tenzer & Pudielko, 2013; Hinds et. al, 2014; Neeley et. al, 2012; Neeley, 2013; Harzing & Pudielko, 2013). Thus, the language barrier if not addressed properly can introduce inefficiencies impeding the effective exchange of views. In such a worst-case scenario, predominantly native English speakers' voices will be heard and mostly their views will be put forward in international meetings leaving all other member organizations in the minority which is not the case in terms of the number of members. In this case, the whole point of organizing such international events for the exchange of best practices and ideas and the strengthening of the actuarial profession worldwide is lost.

Considering possible remedies and solutions to these problems, we should focus on the experience of The International Actuarial Association. Its activities are characterized by openness and the promotion of the actuarial profession. It is reflected in the liberalization of the Association's language policy. Indicatively, the organization has developed the document "Participation

of Non-Native English Speakers and New Delegates in the Work of the IAA" (2014) setting out the recommendations for creating a favorable and friendly atmosphere at events hosted by it.

According to this document, the priority is to provide support to members and delegates for whom English is not a native language, especially if they are participating in certain events for the first time. After all, given the international nature of the organization, a key priority is the creation of such a working climate that will facilitate a free exchange of views and where all participants can interact on equal terms. Consequently, it is important to create the conditions for each delegate to have the opportunity to get their point across, to get feedback, even if communication does not take place in perfect English.

It is recognized that the English proficiency level of participants in meetings, congresses, and conferences can vary from an elementary command to an advanced level. In such a diversified linguistic context, slang and idioms, local accents and pronunciation, and vocal variations can pose a serious problem (Zanola, 2012). In addition, the authors of the document note that written speech is much easier to perceive because it gives a reader enough time to process information and the opportunity to use aids, such as translation software. Therefore, all the IAA's efforts are aimed at eliminating difficulties associated with the perception and understanding of oral speech in the direct communication process.

Given the fact that both native and non-native speakers participate in IAA activities, language practice is considered important for the latter. Immersion in the language environment is encouraged by a variety of means: even coffee and lunch breaks are seen as a great opportunity for direct communication, and language skills improvement, including speaking and listening. That is why there is always a 30-minute break between work sessions, which is usually used for communication among actuarial professionals.

The awareness of the importance of removing language barriers to understanding and effective exchange of experience is evidenced by the development of some recommendations for chairpersons, native speakers, and delegates who are pre-or intermediate users of English. Thus, native speakers are recommended:

- to reduce the rate of speech and to have a clear and loud voice; to use simple and widely used vocabulary;
- if possible, prepare a summary of what the speaker is going to talk about in writing (International Actuarial Association, 2014).

For non-native speakers, the recommendations can be grouped as follows:

- to familiarize themselves with all the Association's organizational and procedural documents and documentation related to the discussion topic;
  - to prepare notes, abstracts, keywords; it helps to structure thoughts and contributes to the logical order of presentation;
  - to rehearse a speech;
  - in case of unclear points, ask clarifying questions (International Actuarial Association, 2014).
- It is recommended for the chairperson of the meetings:
- before the meeting, ask non-native English speaking representatives of local actuarial associations about the aspects they are planning to deliver a speech on;
  - to use technical means – presentations and slides as visual aids to accompany their speech;
  - to use several techniques to facilitate perception and eliminate misunderstandings: informative document ciphers, page numbering, etc.;
  - to ensure equal participation of each delegate in a discussion;
  - to apply active listening techniques (International Actuarial Association, 2014).

Thus, the recommendations take into account two important aspects: a language factor and ethical norms of business communication. That is, contrary to popular belief that actuaries deal mostly with numbers, using a mathematics sign system that is universal and understandable to all nations, English-language competence cannot be treated as unnecessary. Language training is an important component of actuarial specialists' professionalism, as a high level of English skills is a prerequisite for successful passing of qualifying exams and further professional self-development.

At the same time, it should be noted that actuaries of non-English-speaking countries are not left unattended by actuarial professional associations set up by English native speakers on the way to developing their knowledge, skills, and abilities, as the main task of actuarial professional bodies is to develop and promote the profession around the world.

In this regard, considerable attention is paid to language policy based on the principles of tolerance, equality, and openness. In our opinion, such a strategy is focused on the successful implementation of actuarial organizations' goals. However, it is somewhat atypical for the modern world characterized by globalization and integration processes, where knowledge of English is perceived as a necessary minimum for international cooperation.

We would like to point out that a good command of English turns into one of the key professional competencies that a qualified actuary should have. This is primarily because the profession is becoming more and more global. Many actuaries work in a bunch of countries or work for multi-national companies and corporations. Given global internationalization trends, it will increasingly become true in the future. This means that the importance of soft skills reflected in several actuarial credentialing system modules should be now complemented by English mastery as it is a part of these professionals' communication skills enabling them to report the results of complicated technical and statistical calculations and their forecasts to a diversified audience.

In light of the above, we would also like to stress that good English writing and speaking skills are important for Ukrainian actuaries and actuarial candidates for attaining actuarial qualifications and becoming full members of international actuarial organizations – it serves as an instrument for enhancing their professional skill sets and contributes to the fact that the needs and challenges of the profession in Ukraine are heard internationally. However, English mastery is not a priority for the system of actuarial education in Ukraine. Most actuarial candidates and professionals are left on their own in a struggle to overcome linguistic challenges. Thus, we believe that the following recommendations will remedy the existing situation:

- strengthening foreign language instruction at universities for master's degree students; an introduction of foreign language and professionally oriented English courses as a compulsory subject or an elective; ensuring the appropriate number of credits for these classes to be taken by students twice a week (10-12 ECTS credits);
- collaboration with international actuarial organizations, education institutions offering actuarial programs, and multinational corporations employing actuaries to organize international internship programs for instructors and students supervised by experienced foreign actuaries as a valuable opportunity to gain practical experience;
- introduction of English language courses for actuarial professionals working for companies and government organizations as corporate clients;
- introduction of mindset training courses to mitigate negative emotions associated with the inability to speak perfect English as well as the so-called sensitivity training to increase self-awareness and the awareness of others;
- since the problem of having standardized Ukrainian equivalents for English actuarial and insurance terminology is quite acute today, this aspect requires the collaborative efforts of professionals in this field and domestic linguists – lexicographers.

## CONCLUSIONS

The specificity of actuarial education in Ukraine lies in the fact that in our country it is an emerging field. Foreign experience and best practices could have enriched such specialists' professional training and actuarial practice bringing them closer to the internationally recognized standards. However, actuarial candidates, instructors, and professionals' lack of English proficiency creates an obstacle on the way to the successful adoption of developed countries' achievements in the field. Thus, Ukrainian actuaries' English skills need improvement. However, not much has been done to remedy the existing situation. In light of this, we single out key directions working towards which will possibly result in better English and its use as a tool to access the world's actuarial community. The proposed steps can be summarized as improved English instruction, cooperation with international actuarial organizations, and psychological readiness to speak professional English publicly.

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