

# COMPARISON OF AVIATION EDUCATION IN SLOVAKIA AND IN GREAT BRITAIN

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The article examines and summarizes the state of knowledge in the field of aviation education in the Slovak Republic and the United Kingdom. The attention is paid to the content of educational institutions in the Slovak Republic and the UK and their comparison. The work also provides insight into the current situation in the aviation education in those countries. The conclusion is devoted to comparison of educational approaches to defining strengths and weaknesses with recommendations to improve them.

Key words: education, aviation, management, education, Erasmus

## 1 ÚVOD

### 1 INTRODUCTION

Education is an essential part in the life cycle of each person. It contributes to the level of education of future generations. The aviation education system in Slovakia and in the UK at a time of rapid expansion of air transport is useful to compare as the high demands are placed on the knowledge and skills of aircraft personnel. From the fulfilment of these requirements, the number of lives depends. The aviation workers are under a lot of pressure and have much responsibility. Quality education and knowledge as a matter of fact can help alleviate the pressure that is exerted on them in their profession. It is necessary to provide adequate skills for all aviation workers in the form of education. The attractiveness of study in aviation lies in the fact that its graduates can apply for work not only at airports but also in companies related to aviation. Their application has an international dimension. The university education in the highest level aviation personnel education.

### 2 CURRENT STATUS

This chapter discusses current development in education in Slovakia and the UK.

#### 2.1 University study in Slovakia

The Faculty of Aeronautics, Technical University in Kosice was established in 2005. Despite the seemingly short period of its existence has had long experience in training both civilian as

well as military aviation experts and pilots, as a successor of the Air Force Academy of General Milan Rastislav Stefanik, in Europe and in the world renowned educational institution for more than 30 years has ensured university education.

The system of university education is simple. The students of the study program attend daily or part-time lectures and exercises. The full-time study is paid by government. Part-time students pay for their study always at the beginning of the academic year. This form is suitable for employed people, people, or for applicants who did not meet the requirements for the grade average for admission to full-time study. External students are usually taught one day a week in the afternoon.

Students of both forms study in winter and summer semester and get 60 credits for successfully completed courses that they enter at the beginning of the academic year. Within 3 years of study, the student must accumulate 180 credits that are due later admitted to the state final examination to defend the bachelor's thesis. After passing the state final examination the student gets a bachelor's degree (BCs). The student may continue in 2 - year study for obtaining the engineer (Ing.), with a completed state examination and defence of the diploma thesis.

#### 2.2 University study in the UK

The school system in the UK is different from ours in several ways. The first is a point system, with which they come into contact with pupils at primary and secondary schools. The curriculum for primary schools is set at the national level. They consist of seven primary and four secondary stages, finishing the eleventh class at age of 16.

Then the child receives the lowest academic qualifications in the country which enables to continue the study.

After the end of the eleventh grade, students can pursue further study of a specific subject in an attempt to obtain a diploma or even A level certificate, which can be regarded as the equivalent of our school-leaving examinations.

The university education and courses of higher education are offered in Britain not only at universities but also at various secondary schools or colleges. The application for full-time study a candidate realizes through UCAS, which is a web form. The whole process has several rounds and begins with the actual application through UCAS usually in mid-January. The application may be sent to more universities and specializations.

In the second round of the interviews some universities skip this round depending on the internal politics of each institution and also the interest of students. If the university or college is interested in the student, it will send a letter with the offer to study. There could be more such offers for a student or even none. The next step is to select the most interesting offer and reply.

Most offers to study are a subject selecting students according to the results of previous studies and national tests. If students are waiting for the results of A level course and do not get the expected evaluation, the University may refuse their acceptance. If this happens, the process follows by 'clearing' i.e. when universities fulfil vacancies after graduation when test results are already known.

Another difference is in the actual study at universities, where students do not choose a field of study that has just mandatory courses and credits, but instead, the student meets and interviews the tutor who helps students in preparing an individual study plan. The students express their interests, subjects they like or want to improve, but most importantly, what they want to do in the industry after graduation. The tutor gives advice, helps select subjects and looks after enough credits students have to achieve at the end of the study.

### **3 COMPARISON OF STUDY FROM DIFFERENT ASPECTS**

To understand the diversity of educational institutions involved in the aviation in the SR and in the UK it is necessary to compare their approaches and principles of operation. The comparison of the results mainly concerns the length of the study, subjects taught and successful career in the field.

#### **3.1 Duration of study and tuition fee**

The difference in the length of study is already apparent from the analysis of the current situation. The Slovak Republic is a uniform length of study for full-time and part-time students in undergraduate degree programs, typically three years for bachelor's and two years for engineering degree programs.

The difference in the UK study is in the way of responding to the part time study by extending the study from three years to four. In 2001 the British also began to use the so-called FDSc title, which we translate as qualified specialist. This title is more than the secondary school graduation, but it's less than a bachelor's degree (BSc). FDSc is studied full-time for two years, but three years part-time. It is also interesting that in the UK the title Ing. not known and they have so called MSc instead, known as Mgr. or Ing. in our country.

British are aware that part-time students need more time to study the same amount of knowledge, possibly the same quality.

While in Slovakia the full-time study is paid by the government up to the age of 26 years if the student does not exceed the standard length of study, in the UK students pay the tuition which, in some cases, may represent some tens of thousands pounds.

### 3.2 Teaching subjects

In principle, each school prepares its programs of study subjects according to its sole discretion, with regard to the focus on the program and quality knowledge and skills required for the future profession of the enrolled student. The study programs with curriculum subjects in Slovakia are approved by the Accreditation Commission, an advisory body to the Government of the Slovak Republic. Both countries are preparing curricula and courses in accordance with international aviation legislation, namely Annex 1 and Annex 6 are in the Slovak Republic adopted regulations under the designation L1 - Personnel Licensing and L6 - Operation of Aircraft - Chapter 9 - Flight crew airplane.

The Great Britain also compiled subjects in accordance with the standards already mentioned above, but a different way of approaching to the study of British schools gives students more freedom in the choice of subjects. Students prepare their own curriculum which includes a selection of more optional courses according to students' interest, but with the required number of credits for the promotion to the next grade.

Thanks to this, students can also choose subjects that attract them and are interesting for them, or they deliberately want to improve. British universities, as we were able to identify, closely cooperate with airports. This cooperation is often on the base of a contract. This is a disclosure of certain parts of the airport at a pre-arranged time, where students can verify the theoretical knowledge with practical one. This bilateral cooperation is useful for schools and for cooperation with the airport staff, including pilots and flight attendants who are available to students and answer their questions.

Airports like concluding such cooperation with aviation schools because they get access to their future employees, who are just students, but the airport management has the possibility to identify the best ones and offer them a job after graduation.

### 3.3 Success in the Labour Market

One of the most important criteria for informed decision-making for the high school graduates to study at a particular university is the application and success of its graduates in the labour market. University education reduces the average unemployment and average wage increases.

The Ministry of Education, Science, Research and Sport of the Slovak Republic in cooperation with the Office of Labour, Social and Family Affairs and the Institute of Information and Prognosis prepared the data of survey of unemployment rate of university graduates. The information should help applicants study at universities of their choices.

The Technical University of Kosice, according to the statistics of the Ministry of Education, Science, Research and Sport of the Slovak Republic is in the ninth place respectively at the graduate unemployment rate in 2009 of 9.2%. This means that 9.2% of graduates after graduation found a job in 2010. University of Zilina in this ranking had the thirteenth place with a graduation rate of unemployment to 8.2% . An average for the two Slovak schools is 8.7%.

British research indicates that college graduates unemployment has risen to its highest level in the last 17 years. The study covered the graduates of 2009 and found out that 8.9% of graduates were in January 2010 without a job. Such unemployment of university graduates was last in 1993. The National Union of Students issued a statement claiming that it is unfair and illogical to tackle unemployment of university graduates by increasing tuition fees that the government is planning.

These numbers give a clear idea of both countries and the fact that the United Kingdom and Slovakia's unemployment rate of university graduates is about the same.

#### 4 PROPOSALS FOR IMPROVEMENT

SWOT Analysis of the Aviation Training in the Slovak Republic	
Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Many experts in aviation issues</li> <li>- Rich aviation history education</li> <li>- Successful implementation of Erasmus with the Czech Republic</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of funds in education</li> <li>- Large number of university students</li> <li>- Lack of technical equipment and teaching facilities</li> </ul>
Opportunities	Risks
<ul style="list-style-type: none"> <li>- Possibility to use EU funds for development</li> <li>- Exchange programs for students to other countries for a broader understanding of the field</li> <li>- Improving conditions for employees and regular evaluation</li> </ul>	<ul style="list-style-type: none"> <li>- To keep the quality of education</li> <li>- Leaving expert teachers abroad</li> <li>- Refusal to grants from EU funds for poorly prepared application for a grant</li> </ul>

Based on this analysis we can see that Slovak educational institutions have perspective to improve. Everything depends on the financial situation and the education sector as well as the success of negotiations with other countries in exchange study.

Selected universities of both countries are involved in the Erasmus program, but their activities can be extended to other areas and program options. The Slovak Republic could focus primarily on exchanges of students and teachers with the UK or other EU countries.

The negotiations with the Czech Republic are simpler and easier to understand, but there is a lack of learning English language in the natural environment, for example in the UK which is important for aviation. As another priority we propose efficient use of EU funds and expend more effort on allocation of new grants.

SWOT Analysis of the Aviation Training in the UK	
Strengths	Weaknesses
<ul style="list-style-type: none"> <li>- Modern flight equipment universities</li> <li>- State support for university education</li> <li>- Bilateral graduation practice with surrounding airports</li> </ul>	<ul style="list-style-type: none"> <li>- a relatively small number of public universities in the vast territory of the United Kingdom</li> <li>- Increasing graduate unemployment</li> <li>- The high cost of tuition, which also full-time students pay</li> </ul>
Opportunities	Risks
<ul style="list-style-type: none"> <li>- The possibility of formation of new universities</li> <li>- A good chance to succeed in the field (many airports)</li> <li>- A reduction in tuition fees</li> </ul>	<ul style="list-style-type: none"> <li>- Difficulties in providing expert teachers</li> <li>- Outflow of students from schools because of the high tuition fees</li> </ul>

#### 5 CONCLUSIONS

The state universities in both countries have dealt with the potential to improve their performance and thereby improve air staff work. In Slovakia, this should be the creation of new bilateral agreements with other EU member states or surrounding airports for the purpose of conducting practical training.

The problem has the potential for further research in this area in the future focusing on the effectiveness of learning processes, requirements for the practice in aviation courses and the relevance of a number of subjects taught in the aviation study programs.

The aim of this comparison of aviation education has shown the similarities and differences in the countries mentioned above. Possible improvement has been designed especially and exclusively for the Slovak Republic, which is the main concern of this article.

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