

One of the key roles of higher education is to prepare top quality specialists in line with the demand on the labour market. The description of a graduate's profile in a given degree programme details the type of employment they are being prepared for during the course of study. The aspect of finding interesting and financially satisfying employment gains in significance as one of the chief motivations behind choosing to go to university. However, it has been scientifically proven that graduates of many programmes have difficulties with finding employment that would match their educational profile. At the same time employers claim they find it hard to recruit people whose competences meet their requirements. This raises a question whether too many specialists enter the market compared to the vacancies offered or maybe graduates' professional profiles are incompatible with the staffing needs of employers. Alternatively, maybe there are other factors that have an impact on the current situation that clearly adversely affects both employees and employers?

A comprehensive answer to this question is needed in the interest of all: future graduates, employers and universities. It is important for graduates who have invested a lot, both financially and otherwise, in building their knowledge capacity and who expect this investment to give a future return in the form of an attractive career path. Secondly, employers who offer jobs, which is a value in itself, will clearly expect the educational system to prepare employees who will excel in performing their duties. Thirdly, it is also in the interest of universities to have access to information that would allow them to revamp their curricula and improve the situation of their graduates on the labour market. Such an approach would also contribute to enhancing the university's prestige and ensure a constant stream of quality candidates who apply for their programmes. This is the reason why the investigators plan to conduct a research project that will answer the above questions in relation to graduates of Earth science degrees. The choice of this population is conditioned by the fact that there are nationwide studies which suggest that graduates of courses such as geography have difficulties in finding satisfying employment in their field. Over 50% of working geographers perform jobs that are clearly not related to their degree and often do not require higher education. Only one in six respondents work in a job that fully corresponds to their university degree. There is a generally low level of work satisfaction in terms of both finances and the technical aspects of the job. The lack of studies among geophysicists, geologists and oceanographers who belong to the same discipline of science as geographers, i.e. Earth science, prevents drawing any comparisons between the situation of those specialists on the labour market.

The objective of the project is to investigate actual demand for geophysicists, geologists and oceanographers in Poland and other countries which are commonly chosen by Poles as economic migration destinations. The demand is most accurately seen by browsing through job advertisements. Nowadays, when nearly 90% of job openings for university graduates are published online, such advertisements are considered the best source of information as they are updated daily and include a range of information about the job such as position, location, company type, responsibilities, and employer profile.

In order to collect all advertisements targeted at given specialists, it is necessary to develop reliable tools and methods for sourcing, collecting, verifying and analysing these resources, which is also an important task for the authors of the project. In the subsequent stages of the study the authors will establish the number of specialists wanted by employers within one calendar year. The data will be sorted by position type, job requirements and terms and conditions of the contract. Next, during the interview stage, the authors will verify whether the demand of the employers for those specialists was met. It is also interesting and important to examine the people who were hired, i.e. complied with employer requirements. At the interview stage the investigators will ask the successful candidates about their view on what factors have an impact on finding employment that is in line with the candidate's education.

To sum up, the project will provide a reliable quantitative and qualitative diagnosis of actual (vs. declarative) labour market demand for professionals from the discipline of Earth science. Moreover, as part of the project, the authors will develop methodology for collection and academic analysis of data from online job advertisements.