# PLACEMENT OF GRADUATES IN GEOGRAPHICAL DISCIPLINES OF THE FACULTY OF SCIENCE, CHARLES UNIVERSITY IN PRAGUE AT LABOUR MARKET

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**Abstract:** The paper present the main results of research project "Placement of graduates in geographical disciplines of the Faculty of Science, Charles University at labour market" (354/2004/B-GEO/PrF), backed by the Grant Agency of Charles University in Prague in 2004. The project was aimed at the analysis of the placement of graduates of geographical disciplines of the Faculty of Science, Charles University in Prague (1998 – 2004) in professional activity surveyed in a relatively short period after finishing studies.

**Key words:** geographical education; placement of graduates; professional activities of geographers; Charles University in Prague; Czechia

# 1. INTRODUCTION

The motto of the 5<sup>th</sup> Slovak-Czech-Polish Seminar held in Slovak Mojmírovce on 13 – 17 June 2005 was: "New position of a border in integrating Europe". It directly invited to present the results of the research project "Placement of graduates in geographical disciplines of the Faculty of Science, Charles University in Prague at labour market" (354/2004/B-GEO/PrF), backed by the Grant Agency of Charles University in 2004. The research aimed at the analysis of the placement of graduates in geographical disciplines of the Faculty of Science, Charles University at professional activity (in a relatively short period after the graduation) was carried out by the Department of Social Geography and Regional Development at the Faculty of Science, Charles University in Prague (Řezníčková et al., 2004). Can be perceived as a reflection of:

- 1. an increasing interest in study, number of enrolled students and increasing number of graduates (which can be reflected at success in placement at labour market);
- 2. a weakening significance of borders in integrating Europe (beside others reflected at the sphere of education and placement of graduates at labour market) and

3. changes (of a trend) in success of graduates in study at Charles University – following from the comparison with the conclusions of previous research e.g. Bičík et al. (1997).

# 2. BASES

In connection to the accession of Czechia to the EU it is more or less sure that new space for competition at education market and also possibility to place at labour market in individual member countries of the EU in different time horizons is being open. Thus it is high time to analyse the situation and suggest possible corrections of existing conception of university education aiming at improving professional qualities of graduates.

Graduates of Charles University represented in the past, and possibly represent in the present period of social-economic transformation, academically educated specialists of a high quality – undoubtedly top in comparison with a series of other universities in Czechia and at minimum comparable on international level. Considerable increase of interest in study of geographical disciplines, which has been recorded at the Faculty of Science, Charles University since mid of the 1990s, proves this statement. The number of enrolled students is increasing and the representatives of the first "populous" strong classes of geographical disciplines have been already placed at labour market.

Graduates, lecturers, management and technical equipment of universities are in a hot competition with renowned institutions of European and top standard. The reflection of this situation has an impact upon all parts of educational system.

We have assumed that graduates of geography section of Faculty of Science, Charles University in Prague as one of the products of this system are in the series of professions as in theoretical disciplines as in expected skills supportive for university education (languages, computer skills, orientation in application possibilities and so on) handicapped. Their placement at labour market is limited and depends on the intensity and quality of individual work of a graduate while the ability of university to support and develop these attributes in an appropriate direction seems restricted.

In spite of unquestionable problems with increasing unemployment current labour market in Czechia is able to accept considerable amount of specialists with highly various academic education. However this situation will not be permanent and individual faculties and disciplines should analyse conditions and requirements of labour market and adapt to some extent the results to conception and structure of study. The way of financing of universities based on allocation of finances per student however eliminates to some extent this auto regulation of universities. Quantitative standpoints play more important role than quality of education for a series of schools and disciplines. Overcrowded lecture halls, practise and seminars not enabling to apply latest forms of teaching are surely signed under the final quality of graduates.

We have come out from the thesis that Geography Section of Faculty of Science is aimed primarily at the education of specialists of academic orientation although only fractional part of graduates continue in academic sphere. Minimal space has been given to the issues positively influencing success of graduates in practice – communicating, managing and language skills, basic legal and economic orientation. In case of

pedagogical studies we have assumed that more than half of graduates will not accede into school practice. The reasons have been seen primarily at the fact that the students of pedagogical orientation have an opportunity to gain such a professional preparation in the course of their study that enable them to occupy the positions formerly taken particularly by the graduates in non-pedagogical studies of geography.

Within the scope of the grant solving we have been searching beside others for the answers to the research questions and hypotheses, which can be summed up to the following points:

- 1. Is still valid that graduates of Charles University, i.e. also the graduates in geography at the Faculty of Science, don't have difficulties with their placement at labour market? How many out of them are unemployed? (We have assumed that the total share of those who didn't succeed will be lower than 5 % Bičík et al., 1997, MŠMT 2000.)
- 2. Where in particular are geographers employed, what professions do they hold? (We have assumed that they are represented more in state sector on the contrary to the first half of the 1990s.)
- 3. What part of the graduates in pedagogical studies are not employed at education? (We have assummed that more than half of graduates will not take positions in school practice. The students of pedagogical orientation have an opportunity to gain such a professional preparation in the course of their study that enable them to occupy the positions formerly taken particularly by the graduates in non-pedagogical studies of geography.)
- 4. What do university studies lack according to graduates? (We have assumed that they will complain about non-sufficient language preparation, computer, communicative, organisational and other skills. Geography Section of the Faculty of Science is aimed primarily at the education of specialists of academic orientation although only fractional part of graduates continue in academic sphere.)
- 5. Does the increasing "quantity" of students have a negative influence on professional "quality" of graduates? (We have assumed that yes.)

#### 3. SOLVING PROCEDURE

The research was proceeding in several phases in the course of the year 2004. Available information concerning existing research on the placement of Czech graduates in practice was collected first. A questionnaire was constructed, two pilot versions were carried out and the web page for its placement was created and/or technical implementation of the inquiry (the creation of the database of responses) was solved. Further the database of respondents (graduates) was put together and they were addressed. The evaluation of responses (including comparison with previous inquiries) was carried out consecutively.

398 graduates, who finished their studies in the academic year 1998 – 1999 and the following years, were addressed in writing on the basis of the addresses obtained from the Study Department of the Faculty of Science, Charles University. In two months respondents could choose either to fill in the attached questionnaire and send it back anonymously by mail or to answer through the Internet. The entry to the web page was

enabled by using a password sent in the letter together with the questionnaire. Most respondents used the second way; only 20 respondents sent their answers by mail. Totally there were 183 responses to the questionnaire, i.e. 46 %. The share of responded graduates of pedagogical and non-pedagogical studies was 43:57 %. From the total list of respondents most graduates of pedagogical studies were of Geography-Biology combination (17 %) and Geography-History (14 %) combination. From non-pedagogical studies graduates in Social Geography (18 %) and Regional Geography (12 %) followed by Demography and Physical Geography (both 11 %) were represented most then.

The responses were internally structured depending on thematic cycle of questions e.g. according to study orientation (pedagogical, non-pedagogical), according to sex (men, women) and according to the years of graduation (older graduates from the years 1998 – 2001, younger from the years 2002 – 2004). Consecutively factor analysis of selected items was carried out and on its basis three types of graduates were identified.

### 4. RESULTS

From the responses of graduates result among others:

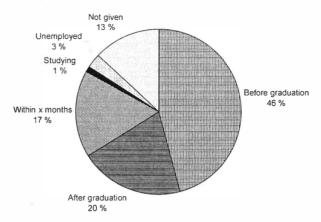
The average length of study in geographical disciplines is 5.4 years. The graduates of pedagogical studies study longer (6.0), the graduates of non-pedagogical finish mostly after 5 years. The longest studies are of those of pedagogical combination Geography-History (6.5 years). Nearly half of respondents stated that they had started their first occupation already before graduation, one fifth right after graduation. Only 1 % of respondents are involved in further studies and only 3 % of graduates stated that they were unemployed (Figure 1). Nearly 60 % of respondents started their first occupation in the branch, which they studied (Figure 2). Not all 15 % of graduates started their carrier out of their branch. Nearly half of graduates are in the role of employees, more than one fourth are in the position of manager and more than one fifth are in an executive position (Figure 3). From the total list of respondents more than 27 % are in the sphere of education, nearly one fourth in the state-government (administration), more than one fifth in science and research and nearly one fifth in the sphere of regional development (Figure 4). The graduates of pedagogical studies, working out of the branch of their studies, are involved mainly in the sphere of science and research (nearly 27 %), in state administration (20 %) and tourism (20 %). Two thirds of the graduates working in education teach at secondary schools (66 %), 28 % at basic schools and 6 % at universities and colleges. Graduates stated in absolute majority that they did not fear the loss of job. When evaluating preparation for practice, graduates stated firstly theoretical and methodological readiness and special knowledge of the field. Preparation in the spheres of communicating and organisational skills and PC literacy was evaluated negatively (Table 1 and 2).

The results of the research can be summed up into the following points:

**Starting job** – Nearly half of respondents stated that they had started their jobs already before graduation, one fifth immediately after graduation. (Getting job was from easy to very easy for 68 % of respondents – Bičík et al., 1997.)

**Unemployment** – Only 3 % of graduates/respondents stated that they were unemployed. (According to the MŠMT 2000: total non-successful graduates in a group of disciplines science = 6.3 %, social science = 4.5 %. A group of agricultural disciplines

= 9.9 % reaches the highest number then.) Outright majority of graduates stated they didn't fear the loss of job.



**Figure 1** Start of the first occupation of graduates in geographical disciplines. Source: Řezníčková, Chromý, Marada, Hudeček (2005)

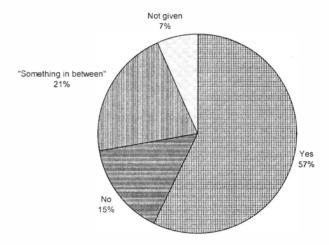


Figure 2 Start of the first occupation of graduates in the branch, which respondents studied. Source: Řezníčková, Chromý, Marada, Hudeček (2005)

Table 1 Evaluating preparation of students in geographical disciplines for practices

Skills	Graduates 1998 – 2001	Graduates 2002 – 2004	Difference
Theoretical and methodological readiness	1.79	1.78	0.01
Special knowledge of the discipline	1.88	1.85	0.03
Practical skills	2.72	2.51	0.21
Language skills/knowledge	3.39	3.29	0.10
Communicative skills	2.78	2.56	0.22
Organisational skills	2.84	2.49	0.35
Computer literacy	2.44	2.59	-0.15

Source: Řezníčková, Chromý, Marada, Hudeček (2005)

Note: average of answers; scale 1 - 4

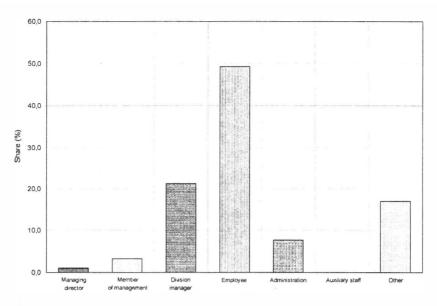


Figure 3 Position of respondents in occupation. Source: Řezníčková, Chromý, Marada, Hudeček (2005)

**Table 2** Evaluating preparation of students in geographical disciplines for practices – graduates which are working in line of study (% of a positive answers)

Skills	Very good	Quite good
Theoretical and methodological readiness	28.6	56.0
Special knowledge of the discipline	29.7	49.5
Practical skills	4.4	31.9
Language skills/knowledge	12.1	35.2
Communicative skills	4.4	29.7
Organisational skills	1.1	27.5
Computer literacy	11.0	36.3

Source: Řezníčková, Chromý, Marada, Hudeček (2005)

**Employment in branch** – Nearly 60 % of respondents started their first job in the branch they had studied. Not all 15 % of graduates started their career out of their branch.

**Position in job** – Nearly one half of graduates are in the role of employees, more than one fourth are in the position of manager and more than one fifth are in an executive position.

**Spheres/fields of activity** – From the total list of respondents more than 27 % are in the sphere of education, nearly one fourth in the state administration, more than one fifth in science and research and nearly one fifth in the sphere of regional development.

The graduates in pedagogical studies, working out of the branch of their studies, are involved mainly in the sphere of science and research (nearly 27~%), in the state-government/administration (20~%) and tourism (20~%).

The graduates in pedagogical studies working in education teach predominantly at secondary schools (66 %), 28 % at basic schools and 6 % at universities and colleges.

Evaluation of preparation for practice of profession – most graduates evaluate: theoretical and methodological readiness and special knowledge of the field positively,

preparation in the spheres of communicative and organisational skills and PC literacy negatively.

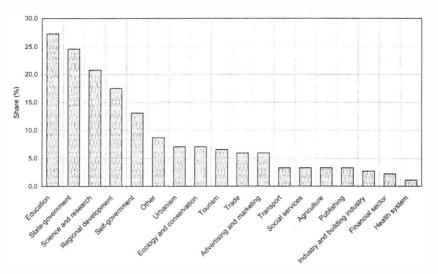


Figure 4 Sphere of occupation of respondents. Source: Řezníčková, Chromý, Marada, Hudeček (2005)

Social geographers rather prefer "professional career". Regional geographers put more emphasis on "interesting creative work" and don't put such emphasis on the "use of special education". Physical geographers put really very strong emphasis on the "use of special education" and they are interested in salary and career very little; however they are not interested either in the "use of special education" or "interesting creative work" much. Surprisingly cartographers are not much interested either in the "use of special education" or in "interesting creative work".

# 5. CONCLUSION

Evaluating of preceding studies by graduates is relatively positive. Unemployment of our graduates is relatively low. Gaining of general skills (communicative, language, organisational, PC...) is evaluated rather negatively. Roughly the same share of graduates in pedagogical (28 %) and non-pedagogical (26 %) work out of the branch studied.

The realised research is an impulse for the correction of study plans and the revision of the "profile of a graduate" in geographical disciplines at the Faculty of Science, Charles University in Prague. It can be also perceived as an appeal for a broader inquiry of graduates in geography and a comparison of faculties in Czechia and abroad.

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#### References

- BIČÍK, I., BOSCHEK, P., KAŠPAR, J., KLÍMOVÁ, H., ŘEZNÍČKOVÁ, D., SLEPIČKOVÁ, I. 1998. *Uplatnění absolventů Univerzity Karlovy* (PřF, MFF, FTVS). Závěrečná zpráva projektu FRVŠ č. 1224/1997. Univerzita Karlova Praha, Praha, 46.
- HENDRICHOVÁ, J. 1992. Teorie a praxe strategického plánování ve vysokém školství. Materiál CSVŠ, Praha, 60.
- MAŇÁK, J. 1995. Vědecká a profesní příprava na univerzitě. In: Univerzity na prahu nového tisíciletí. Sborník z mezinárodní konference, sv. I, Masarykova univerzita, Brno, 177-184.
- ŘEZNÍČKOVÁ, D. 2005. Teoretické a metodologické otázky geografického vzdělávání. Disertační práce. UK v Praze, PřF, katedra sociální geografie a regionálního rozvoje, Praha.
- ŘEZNÍČKOVÁ, D., CHROMÝ, P., MARADA, M., HUDEČEK, T. 2005. *Uplatnění absolventů geografických oborů PřF UK na trhu práce.* Závěrečná zpráva grantového projektu Grantové agentury Univerzity Karlovy č. 354/2004/B-GEO/PrF. Univerzita Karlova v Praze, Přírodovědecká fakulta, katedra sociální geografie a regionálního rozvoje, Praha.
- VÁGNER, I., NEKUDA, J., KARMAZÍKOVÁ, Š., SIROVÁTKA, T. 1996. *Uplatnění absolventů Masarykovy univerzity 1993 1995 v praxi.* Závěrečná zpráva projektu FRVŠ č. 1072/96, Masarykova univerzita, Brno, 93.

# Uplatnění absolventů geografických oborů Přírodovědecké fakulty Univerzity Karlovy v Praze na trhu práce

#### Resume

V příspěvku jsou prezentovány výstupy výzkumného projektu Uplatnění absolventů geografických oborů PřF UK na trhu práce (354/2004/B-GEO/PrF), podpořeného Grantovou agenturou UK v Praze v roce 2004. Výzkum se zaměřil na analýzu uplatnění absolventů magisterského studia geografických oborů Přírodovědecké fakulty Univerzity Karlovy v profesní činnosti, a to v poměrně krátkém období po dokončení studia. Písemným způsobem bylo osloveno 398 studentů, kteří ukončili magisterské studium ve školním roce 1998/99 a v letech následujících. Celkem na dotazník odpovědělo 183 respondentů, tj. 46 %. Podíl dotazovaných absolventů učitelského a neučitelského studia byl v poměru 43:57 %. Výsledky analýzy byly vnitřně strukturovány podle zaměření studia (učitelské, neučitelské), podle pohlaví (muži, ženy) a podle let ukončení studia (starší absolventi z let 1998 – 2001, mladší z let 2002 – 2004). Následně byla provedena faktorová analýza vybraných položek a na jejím základě byly stanoveny tři typy absolventů.

Z odpovědí respondentů mimo jiné vyplývá, že průměrná délka studia geografických oborů je 5,4 let. Déle studují učitelé (6,0), absolventi neučitelského studia končí většinou po 5 letech. Nejdéle studují učitelé kombinace zeměpis-dějepis (6,5 roku). Téměř polovina respondentů uvedla, že do prvního zaměstnání nastoupila ještě před promocí, pětina ihned po promoci. Dále studuje pouze 1 % respondentů a pouze 3 % absolventů uvedla, že jsou nezaměstnaní. Téměř 60 % respondentů nastoupilo do prvního zaměst-

nání v oboru, který vystudovali. Mimo obor pak nastoupilo necelých 15 % absolventů. Téměř polovina absolventů působí v roli zaměstnanců, více než čtvrtina zastává pozici řídícího pracovníka a více než pětina působí ve vedoucí funkci. Z celkového souboru respondentů působí více než 27 % absolventů v oblasti školství, téměř čtvrtina ve státní správě, více než pětina ve vědě a výzkumu a téměř pětina v oblasti regionálního rozvoje. Absolventi učitelského studia, kteří působí mimo vystudovaný obor, se uplatňují zejména v oblasti vědy a výzkumu (téměř 27 %), v oblasti státní správy (20 %), cestovního ruchu (20 %). Dvě třetiny absolventů, kteří působí ve školství, učí na středních (66 %), základních 28 % a vysokých školách 6 %. Absolventi v naprosté většině uváděli, že nemají strach ze ztráty zaměstnání. V hodnocení připravenosti pro výkon zaměstnání uváděli absolventi na předních místech teoretickou a metodologickou připravenost a speciální znalosti oboru. Negativně hodnotili připravenost v oblasti komunikačních a organizačních dovedností a počítačové gramotnosti. Sociální geografové spíše upřednostňují "kariéru". Regionální geografové kladou větší důraz na "zajímavou tvůrčí práci" a nepřipisují takový důraz "uplatnění odborného vzdělání". Fyzičtí geografové kladou skutečně velmi silný důraz na "uplatnění odborného vzdělání" a velmi málo se zajímají o plat a kariéru; příliš se však nezajímají ani o "zajímavou tvůrčí práci". Kartografové kupodivu příliš neusilují o "uplatnění odborného vzdělání" a ani o "zajímavou tvůrčí práci".