National convergence policy in education.
Case study Romania

Madlena NEN
Military Technical Academy, Bucharest, Romania
madlenanen@yahoo.com

Abstract. Through this study we aimed to analyse Erasmus experience, examples of good practices and perspectives on their under-represented areas of study. Erasmus mobility shall be carried out in all of the study areas. However, I found out that there are fields of study less represented.
The purpose of research was the provision of information on implementation and impact of the Erasmus program on mobility carried out by the under-represented fields of study.
The investigation was intended to direct beneficiaries of programs: students. Information we have obtained made it possible assessing the impact (nature of the effects on beneficiaries, the manner in which they were produced, etc.) and formulation of the main development directions of the programs.

Keywords: European policy, Erasmus, cohesion policy, LLP- life long learning programme, under-represented areas.

JEL Classification: I23, I28.
1. Context and evaluation methodology

The study on Erasmus mobility to under-represented areas was funded by the European Commission.

We have identified, together with our colleagues from other Agencies, the institutions in which mobilities were conducted for these areas in order to promote mobility, by examples of good practice.

The four areas of study under-represented at European level are: Architecture, Education, Life Sciences, Mathematics and Informatics.

Those countries which have participated in the study were: England, Austria, Denmark, France, Germany, Greece, Ireland, the Netherlands, Poland, Romania, Slovenia and Sweden.

1.1. Methods and assessment tools

So we used a set of methods which provide both quantitative information, as well as qualitative, in order to capture programs reality under multiple aspects

1.2. Activities carried out under the project:

- we conducted, together with the research team, a study on the number of universities with Erasmus mobility to the 4 areas of study, in each participating country;
- we made, together with the team of research, case studies about former Erasmus students that have had a mobility within the framework of the under-represented study areas and who are currently employed.

2. The results of study. Investigation lot description

National Agencies established in all participating countries are directly responsible for carrying out the Program. This implies and requires performance of contracts with the participating universities in the program and the distribution of funds allocated for decentralised actions: greater mobility for students, teaching staff mobility, intensive projects and organising mobility. National Agencies constitute the interface between the European Commission and universities and coordinate promoting and conducting program.

Universities have a major role in and for promoting Program to the students, making bilateral interuniversity agreements and ensuring academic recognition of studies carried out.

I have selected, together with the colleagues from the other National Agencies, participating universities in the respective country, taking into account the student mobility on the under-represented fields of study. Selected universities that participated in the study have filled in a questionnaire and have selected two case studies regarding former Erasmus students and who work in under-represented areas. At final Conference, which took place in Vienna, have been participated all universities selected and have been highlighted examples of good practice arising from collective experience in all universities, in order to increase mobility in the under-represented areas of study.
I have selected, together with the research team, universities that took part in the study, in order to assure:
- geographic representation at national level;
- universities representativeness, on each field of study;
- universities representativeness, taking into account their size.

Number of questionnaires applied was 96, and the number of Erasmus students who participated in the study conducted by the research team that I've initiated and led, it was about 13 500.

2.1. The survey questionnaire

I used survey questionnaire in order to obtain information from the programs beneficiaries. Research has proposed, in a first stage, the identification of two institutions, for each of the four areas of study in the 12 countries participating in the project: Architecture, Education, Mathematics and Informatics and Life Sciences.

Some Agencies have selected and a third university for participation in research.

But I mention that some agencies have experienced difficulty in selecting universities, in particular in Mathematics and Informatics.

Some universities have sent several answers. For example, in many cases, in the field of "life sciences" has been sent separate answers to the subdomains: biology, chemistry and physics. All answers were included in the study. A small number of universities did not reply to the questionnaire, and they were not invited to participate in the conference.

Distribution of the total number of questionnaires, depending on field of study, is:
- Architecture: 23.
- Education: 28.
- Mathematics and Informatics: 22.
- Life Sciences: 23.

The questionnaire includes four sections, namely:
- Section A: identifying university and the field of study;
- Section B: general aspects of university and participation in the Erasmus Program within the respective study field;
- Section C: quantitative aspects concerning the students selection, promoting Erasmus Program, academic recognition and institutional supervisor's role at the university level;
- Section D: general aspects on the progress of mobility on the mentioned study areas, the role of institutions and their motivation.

Next, we analyse the sections referred to.

Section B: general aspects regarding university and participation in the Erasmus action within the study in question

Universities participating in the study have varied, in size and type. Three universities have more than 60 000 students. Apart from these, the maximum number of students from participating universities is 35 000, and minimum of 350. Twelve universities have less than 2 000 students.
12 universities are monodisciplinary, most having as a field of study, Education; 4 universities, have as a field of study, Architecture, while a university has, as field of study, Mathematics and Informatics.

Section C: quantitative aspects concerning the students' selection, promoting Erasmus Program, academic recognition and institutional supervisor's role at the level of university

There were established two types of questions: for most questions was determined that each response to be associated with a numeric rating from 1 - totally against, to 4 - totally agree; for the other questions, the answer was "Yes" or "No". For 61% of the questions with "Yes/No", the answers were "Yes". For 67% of the answers to the questions with positive tint, the responses were "4 or 3".

Answers have been varied, 47% being "4".

- **The students selection:**
  Most universities have indicated that it has been relatively easy to select students who have studied in the under-represented areas of study.

- **The language studies:**
  In most cases, host universities have offered intensive language courses for Erasmus students. There have even been some universities who organised such courses before performing mobility. In the field Mathematics and Informatics, teaching was done in English, in most partner universities.

- **European Credit Transfer and Accumulation System (ECTS) and academic recognition:**
  Most universities replied that ECTS has been used and the credits obtained being included in the transcript of records and validated by the University of origin.

- **Practical experience (the practice, the period included in the Erasmus mobility):**
  The practice has been included in the period of mobility. Almost 50% of the respondents have specified that the period of practice has benefited from academic recognition.

- **"Outgoing" and "incoming" Erasmus students:**
  More than 70% of universities have mentioned that Erasmus students that have benefited from the mobility have been "mentors" for the new selected students. "Incoming" students have benefited from the same assessment as the other students.

- **Academic support:**
  More than three-quarters of the answers have referred to support academic granted to the Erasmus students. Universities have encouraged participation in the framework of the Erasmus Program and they have ensured a real support to the program directors, in all faculties.

- **The institutional coordinator:**
  The relationship between International Relations Department and Dean (responsible for the academic) was considered, to a large extent, as being good. In general, the institutional coordinator has contributed to the achievement of the students' selection, helping them in the performance of contracts and the curriculum establishment.
The relationship with partners:
Generally, relations with partners have been carried out through the department established at the central level. Most universities have been satisfied about the collaboration with partners; more than 60% of partner universities have monitored students progress and academic recognition of studies carried out.

Teaching Staff mobility (TS):
Half of the given answers have considered that teaching staff mobility have been significant on the respective study field. About 50% of them have considered insignificant these greater mobility.

The "extremes" have been Education Sciences – in general, achieving significant mobility and Architecture and Life Sciences – generally achieving greater insignificant mobility. Teaching staff mobility were correlated with student mobility. Most of them were considered as teaching staff mobility have been given an opportunity to visit Erasmus students and discuss university curricula.

Section D: quantitative aspects concerning the students’ selection, promoting Erasmus Program, academic recognition and institutional supervisor's role at the university level

Difficulties encountered:
More than half of the answers have pointed out that there have been no administrative difficulties. More than 40% of respondents have emphasized that they have had no linguistic difficulties, while 67% of them have denied any difficulty concerning academic recognition of studies carried out.

Financing has been regarded as representing the largest disadvantage, in this respect, 31% of the answers being "4" ("considerable obstacle").

2.2. Case studies
Case studies involving former Erasmus students who have performed greater mobility to their areas of the under-represented study and that currently are employed.

The purpose was to identify and promote examples of good practice for mobility carried out in the framework of the under-represented study areas and determine how a period of Erasmus study contributes to the labour market employment, after graduation.

Each graduate has made a declaration regarding the Erasmus mobility, which has been carried out, from the point of view of the employee.

Employers were required to make a statement on the way in which Erasmus mobility has contributed to the graduate employment.

Two students and two employers, which have had the most interesting statements for the four under-represented study areas, were invited to participate in the Conference and to give a speech there.

Consideration of case studies themselves:
Together with the research team, I have requested each university participating in the study, to present two case studies.

Not all the countries participating in the project were able to submit two case studies for under-represented study areas.
In total, there were 95 case studies.

A small number of universities sent more than two case studies: it was a special case for Mathematics and Informatics.

In both cases, Mathematics and Informatics and Life Sciences, case studies have been about students who were graduated for a short time and who, after graduation, have employed in the university.

A few case studies have been incomplete. They have been referred to difficulties in obtaining employer declaration. Some National Agencies have indicated that the reasons it would be that Erasmus mobility would not have been an important condition for employment. For a very small number of cases (less than 2%), the employer refused to release statement.

After a careful evaluation of the results obtained from all case studies, it has been established the participation of the most interesting of them to the Conference.

- **Students:**
  Three different aspects are the results of the student statements on the Erasmus experience:
  - Erasmus mobility helps when applying for a job. Responses to the four areas of study were similar, in the field of Architecture mentioning, however, the most significant role of an Erasmus mobility;
  - it was welcome the curriculum knowledge opportunity and the chance to study aspects of the field in question, aspects which are not applicable to the University of origin;
  - they highlighted the importance of possibility to improve linguistic knowledge;
  - Employers.

Some employers have written required statements ascertaining big differences. Most declarations have been short, especially those made in the field of Life Sciences.

Two aspects of the Erasmus action have been mentioned by a significant number of employers, these being:
- more than a third were referred to the importance that it may have, for a student, the experience of a different culture;
- more than a quarter said that Erasmus experience represented a factor in employment, in particular in the fields of Mathematics and Informatics and in Education.

- **For each field of study:**
  - employers in the field of Architecture have been concerned that students to be adaptable and open to new ideas; they referred to the importance of knowing a different culture;
  - employers in the area of Education have considered the importance of the experience gained in performing an Erasmus mobility, but have not talked very much about the language competence;
  - employers in Mathematics and Informatics field appreciated Erasmus mobility as "added value" being concerned especially in the knowledge of English language skills by candidates;
  - employers in the field of Life Sciences were concerned that students to be adaptable and open to new ideas.
Institutions:
Statements have been received from 52 institutions, more than 60% of them making reference to:
- differences between programs of study – In particular, for Architecture and Life Sciences;
- the positive effect on personal development (maturity and independence) – 100% of the Architecture part, and almost three-quarters of the responses given in the fields of Education, Mathematics and Informatics and Life Sciences have not considered this to be important.

More than 40% of the institutions have indicated as important and improving language skills.

Other issues mentioned:
- the Erasmus students contribution to achieve the positive image of the University of origin;
- on the return, Erasmus students share their experience to the prospective students;
- Erasmus mobility contribute to achieving and maintaining partnerships between universities.

There are the two aspects that are important:
1) Students and universities have emphasized the importance to improve language skills, while employers do not seem to be interested, especially this.
2) The employers in the field of study of "Life Sciences" have stressed the importance of adaptability and openness to new ideas, while students do not have mentioned at all this.

3. Conclusions and recommendations

3.1. Conclusions

The first objective of the project was to identify and disseminate examples of good practice, in the areas of study with a relatively small number of student mobility if we take into account their importance.

The other objective consisted in the identification of methods for removing obstacles from increasing the number of mobility.

In addition to initial problems, the project has identified a number of questions that were not originally anticipated.

The most important conclusions related to critical issues (positive achievements have been already mentioned) refer to:
- lack of communication between institutions and graduates;
- difficulties in locating graduates: for example, for Life Sciences, Mathematics and Informatics; frequently, the only ones graduates which the institutions could find were those who are still studying or working in the university;
- lack of information on what can provide the Erasmus Program; for example, language training, not only outside, but also in the framework of higher education establishments;
- the novelty situation in which the colleagues in a specific field of study and employers meet to discuss problems encountered.
3.2. Recommendations

1. Conducting studies and bilateral or multilateral conferences similar to this study. There is a real opportunity to do more in uniting all the parties concerned, in the framework of meetings, in a fundamental domain for the future of Europe.

2. Promoting "Erasmus brand": all parties involved must encourage and identify the ways in which Erasmus students to promote the Program; students should be encouraged to mention Erasmus in their CVs; value added within Erasmus, "the Erasmus factor", should be promoted opposite employers; it should be attracted the support from professional organisations to promote mobility.

3. Involvement of the business environment in the Erasmus Program. More specifically, although it is considered that the Erasmus experience endows graduates much better with a view to his employment, educational institutions do not collect data in support of this statement, and is difficult for the employers to be involved in such research, which represents a challenge.

4. Organisation of courses aimed at language training in the institution of origin, so as to be covered all subjects. Language courses in the country of destination should be available fully with ECTS credits.

5. More flexible programs of study.

6. Resolving, by the institutions of higher education, the issues related to the academic recognition, for the management of "The Study Agreements" and by implementing ECTS.

7. Organising, in the countries of origin of future Erasmus students, more intensive and short-time foreign languages courses.

8. Promoting, by the institutions of higher education, the role of the "Academic Champion" in relation to the Erasmus program.

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