

# Socrates Leonardo

## Socrates and Leonardo da Vinci in Slovenia

Impact of Socrates II and Leonardo  
da Vinci II Programmes  
in Slovenia, 2000–2006

Klemen Širok  
Valerij Dermol  
Alenka Jurič Rajh  
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Nada Trunk Širca

Management



## Socrates and Leonardo da Vinci in Slovenia



Faculty of Management Koper  
Monograph Series

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ISSN 1855-0878

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Klemen Širok  
Valerij Dermol  
Alenka Jurič Rajh  
Duša Marjetič  
Assoc. Prof. Nada Trunk Širca

*Reviewers*

Prof. Aleksandra Kornhauser Frazer  
Assist. Prof. Andreja Barle Lakota  
*Published by* · University of Primorska,  
Faculty of Management Koper,  
Cankarjeva 5, SI-6104 Koper

*Designed by* · Alen Ježovnik

*Print run* · 1000

December 2007

CIP – Kataložni zapis o publikaciji  
Narodna in univerzitetna knjižnica, Ljubljana

37(4:497.4)

SOCRATES in Leonardo da Vinci v Sloveniji :  
učinki programov Socrates II in Leonardo da Vinci II v Sloveniji  
v obdobju 2000–2006 / Klemen Širok . . . [et al.]. – Koper :  
Fakulteta za management, 2007. – (Znanstvene monografije  
Fakultete za management Koper, ISSN 1855-0878)

Vsebuje tudi angleški prevod, tiskan v obratni smeri:  
Socrates and Leonardo da Vinci in Slovenia :  
impact of Socrates II and Leonardo da Vinci II  
programmes in Slovenia, 2000–2006

ISBN 978-961-266-015-4

COBISS.SI-ID 242169856



# Contents

	List of Tables	7
	List of Figures	9
	Preface	11
	Introduction	15
	Executive Summary	19
1	Research Background	29
2	Subject of Evaluation	31
	2.1 European Communities' Funding Programmes in Education and Training	31
	2.2 Evaluation: Why and How?	36
3	Impact of Funding Programmes in Education and Training in Slovenia	45
	3.1 End-Users of Funding Programmes in Education and Training in Slovenia	45
	3.2 Impacts of Funding Programmes in Education and Training in Slovenia	50
4	Research Framework of the Evaluation and the Applied Research Approach	77
	4.1 Evaluation Framework and Methodology	79
5	Conclusions and Proposals	93
	5.1 Substantive Findings and Recommendations	93
	5.2 Guidelines for Developing the Mechanisms of Impact Monitoring and Evaluation	97
	References	99





## List of Tables

- 2.1 Leonardo da Vinci II: Actions, end-users, and programme objectives · 41
- 2.2 Socrates II: Actions, end-users, and programme objectives 1 · 42
- 2.3 Socrates II: Actions, end-users, and programme objectives 2 · 43
- 4.1 Conceptualisation of the objective Innovation in an organisation within the actions of Socrates 7 programme · 81
- 4.2 Cooperation objective operationalisation for the actions of Socrates II programme · 82
- 4.3 Action populations and response rates · 85



## List of Figures

- 3.1 Survey participants' education level · 46
- 3.2 Survey participants' social position · 47
- 3.3 Social classes in Slovenia · 48
- 3.4 Income classes in Slovenia · 49
- 3.5 Average perceived influence according to programme objectives · 53
- 3.6 Perceived influence of actions on socioeconomic status and individual's education · 55
- 3.7 Influence differences of particular actions of Socrates II · 59
- 3.8 Influence assessments comparison between individuals and organisations · 66
- 3.9 Organisations' main source of financing and the influence in the field of raising equal opportunities · 67
- 3.10 Participants' age and differences in the identified influence 1 · 68
- 3.11 Participants' age and differences in the identified influence 2 · 68
- 3.12 Participant's education and differences in identified influence · 70
- 3.13 Labour market status and differences in the identified influence · 72
- 3.14 Social classes and differences in the identified impact 1 · 73
- 3.15 Social classes and differences in the identified impact 2 · 73
- 4.1 The general part of the survey questionnaire · 84
- 4.2 The special part of the survey questionnaire · 84



## Preface

In education, space and time constantly develop new dimensions. The past intertwines with what we do today, whereas the impacts of education are always focused on the future. The same holds for space. Education i.e. the process of gaining knowledge and competences cannot withstand a simple physical conception of space. Space is not only physical here and now; it can also represent an opportunity for opening new worlds. It can represent the ability of competent movement in a completely physical space, within the complex and globalised world.

One of fundamental characteristics of the contemporary world is its complexity which should grow to be even greater in the future society. That is why it is not unusual that knowledge is exactly what enables an individual to still remain a socially active subject in such a world. Not that in past societies knowledge was unimportant, the issue at stake is that today, knowledge is becoming the central axis of social development and fundamental determinant which shapes the individual's possibilities and opportunities. It seems that contemporary society is best characterised by the term 'knowledge-based society'.

In contemporary society, the right to education cannot be conceived just as a civilisation value, a reflection of cultivated relations, however, it is increasingly becoming a right which enables an individual to survive and furthermore it is becoming a status good. Now, we have to identify the paths and types of exercising this very important right. One of key questions regards the opportunity and access to exercise this right.

There are many more aspects and ways to exercise the right to education. But, how do we know whether concrete policies actually contribute to its exercise? How is it possible in such a complex world to make an assessment and identify the mechanisms, instruments and actions which really achieve the anticipated objectives of educational policies?

The research work in the area of educational policies indicates that there have always been ways of checking the achievement of set objectives. However, the instruments for the evaluation of pedagogical work were often focused mostly on the micro level of the analysis, on simple

pedagogical practice, on the implementation of pedagogical strategies. The fundamental objective was to check the effectiveness and power of knowledge transfer onto students and pupils. Some authors call this investigating the power of the explanatory method.

Such analyses are certainly necessary and needed. The pedagogical process is centred on the transfer of knowledge based on which the teacher's success is measured. But from the viewpoint of educational policies and checking the exercise of the right to education, such an aspect is much too narrow. The educational policy has to be interested in the way individual actions, instruments, etc. influence the possibility of education according to gender, class and ethnic affiliation. It has to be interested in the way actions influence further employment opportunities, competences of the youth, the way education prepares the youth to enter the world of work, and which are the special competences the youth should acquire. All these are questions with a decisive influence on further opportunities of the youth in the world of work, in further education as well as in personal life. Especially in a society where knowledge represents the centre of development so that it is called knowledge-based society.

It is almost paradoxical that we only in the last decade are witnessing the development of the evaluation of national mechanisms, systems and actions. This is not only the case with Slovenian society and is also confirmed by the fact that within the European Commission one of key tasks is to develop the culture of data-based educational policies. Today, evaluation is one of those fashionable conceptions which are used all over. It is actually an important factor in forming educational policies and should not be abused but should rather become a natural, integral part of educational policies, indispensable phase of our work.

It is because of this that this monograph is of great value. First, it investigates the area which until now was often neglected or misused – i.e. evaluation. It crucially contributes to the development of evaluation culture as an inherent part of pedagogical practice. Moreover, it does not only intervene in the area which within educational policies still has to become a natural process but also engages in a more complex area of natural formation and implementation of the instruments of European educational policies. Therefore, such a monograph would seem a unique contribution to the development of both Slovene and European research culture in this field.

However, the greatest contribution of this book seems to be the con-

ceptualisation of the problem. This could have been a simple evaluation in terms of Orwell's *Animal Farm* (four legs are OK, two are not) – public opinion analyses. But the authors are not satisfied with this premise. This evaluation actually examines how with certain instruments – in this case programmes Leonardo da Vinci and Socrates – the right to education is exercised, what is the impact of these instruments on accessibility (according to gender, social class, etc.), on competences acquired by an individual according to the possibilities of employment.

The approach which is not content with the evaluation of the obvious but with impact assessment represents the added value of the monograph – not only in Slovenia but also in the international sphere.

The findings offer most challenging reflections on how to proceed. This is the essence of the evaluation . . . to encourage reflections on what to do in the future.

Andreja Barle Lakota





## Introduction

The majority of comprehensive research reports end on the internet and are browsed only by well learned readers, or in the archives until they are stored away and finally disposed of as wastepaper. It is true that researchers usually publish key results in broadly accessible articles; however, it is impossible to connect these results with ideas, critical thoughts and doubt. Therefore, we welcome the decision of CMEPIUS that the evaluation of selected funding programmes in education and training, *Socrates* and *Leonardo da Vinci* be published as a book which one can hold in one's hands, leaf through it, stop at amusing or disturbing statements, lay it down and return to it again and again searching for new challenges. In this aspect, the computer can never live up to the book.

The fundamental area of this work – effort to strengthen the entire education, broader erudition and exchange of noble cultural values – is part of everyday needs. We often reproach the European Union with bureaucratic inefficiency and at the same time expect that the EU with its programmes should work miracles – that it should implement the Lisbon declaration concerning Europe as most competitive, dynamic, socially just and knowledge-based society in the world directly from Brussels. This monograph tackles only two – although essential – funding programmes in education and training and only the part which we can realize in the spirit of these programmes alone in our countries. Nevertheless, it reaches wider and deeper – it treats Slovenia as a living distinctive system which stays true to itself and increasingly contributes to the strengthening and intertwining of national cultures in developing the European dimension.

In this process, mobility is a decisive factor. We have to learn how to appear on the European and world scene without fear. This fear often reflects in awkwardness, in suspicion, underestimation of others, overestimation of one's self and in refusal to understand diversity. All this threatens the rich opportunities of cooperation. Instead, we have to tear down the walls of non-education and prejudice resulting from it, especially with the aid of mobility. The fastest and most effective way to

achieve this is by including those who are or will be the carriers of knowledge – teachers. Mostly those enthusiastic Teachers with a capital letter – and they are the subject of this report.

Surprising is the extensive reach of these actions. More than ten thousand participating teachers, students and pupils, five hundred organisations – for the small Slovenia, this is an extremely powerful and promising potential worth systematic monitoring and orientation based on the evaluation of actions and achievements. It can also contribute to the growth of single actions into permanent activity, expanding with each day and gaining in quality. If the inertia of a great share of participants will gradually be reached in response to the surveys and other forms of cooperation with researchers, both will evermore benefit from this process.

Some of the evaluation findings are very welcome, e.g. the underrepresentation of men. This reflects the relation of the entire society to the teaching profession since feminisation is significant for underestimation and poor remuneration of activities. Of course, the evaluated funding programmes in education and training cannot solve this great problem alone, but it is very good that they point it out. Moreover, the entire society should be made aware that teachers should again become the carriers of knowledge and that they necessarily need to regain this ability with greatest possible national and European support, by regarding their work and including the best men and women in this profession. The old Slovenian saying goes ‘a smart farmer saves best seeds for the new sowing’.

Welcome, too, is also the warning that people from the social and economic average, those below it and people from peripheral regions should be systematically included. Not only social equality in opportunities, which is highly emphasised in the EU, is at stake. The entire society should equally include all sections of the population because talent – on which these programmes are based – is a natural gift and nature is not prone to discrimination. If people from peripheral regions are excluded, we are losing talents and cheating ourselves.

The finding that smaller organisations respond more than do larger organisations seems unexpected. If we think deeper, this does seem logical. Smaller organizations, in the majority, have to struggle to survive and are more oriented into searching for new possibilities. Nevertheless, there is no rule as to how the size of an organisation is related to participation. However, the second rule is pretty clear: Success is assured by dy-

dynamic and open-minded teachers eager for knowledge. We should concentrate on them, systematically search for them and individually support them since their special actions are often exposed to lack of interest and sometimes even oppositions from the environment. The famous French thinker Claude Lévi-Strauss said: 'Each true innovation has to be somewhat deaf to stable habits of the environment – to the extent of rejecting some and resisting them.'

The finding that the actions' impacts are mostly weak is not surprising. This is due to the 'disease' of our fundamental comprehensions. A researcher thinks that his/her task is to achieve a certain result – what (if at all) will others do with it is not in his/her interest. Teachers too often think that it is enough just 'to lecture away' – or report about his experiences – and if others do not wish or know how to use what he/she offers, the worse for them ... Unfortunately, this holds true for many professions. The infatuation and narrow faith in one's own small participation in the entire development process is a severe obstacle to the efficiency of development efforts. To realise this, we are going to have to learn a holistic approach and group work. In our actions, we are going to have to include entrepreneurship (which until recently has been almost an insult in educational institutions) and plan end-user oriented actions within funding programmes in education and training. The end-user, however, is not the teacher – teachers only transfer knowledge for creating goods and especially values. Within programme actions, it is necessary to determine the end-users and the way to reach them.

This thinking is only on its way from already good to better achievements of CMEPIUS. The 'diagnosis' this report offers can help in therapy as well as in precaution. We are obligated to it because Socrates and Leonardo da Vinci represent great messages of European culture. These two programmes support – more often even open – the possibilities for developing a knowledgeable personality by enriching it with several cultures of our old but very developed Europe which now, due to tough competition, requires new ideas and new dreams.

Aleksandra Kornhauser Frazer



# Executive Summary

## Evaluation Framework

This monograph presents the impact assessment evaluation of European education and training programmes, known as Socrates II and Leonardo da Vinci II, in Slovenia. These are core European funding programmes in education and training and, according to the number of participants the most important programmes with which Europe tries to stimulate transnational student and teacher mobility by networking and creating partnerships to advance the cooperation between players in education and training; it also wishes to influence the increase in innovation, especially by introducing new teaching methods, courses, programmes, tools and frameworks. An important aspect, which is part of European education and training programmes, is also achieving the Lisbon objectives and requirements.

The evaluation study, which was carried out in 2007 in Slovenia, evaluates only decentralised actions, i.e. actions within European education and training programmes which are directly controlled by Slovenia and not by the European Commission. Slovenia has the possibility to implement such actions in accordance with its education system and national priorities. To this end, Slovenia has used almost 23 million EUR granted by the European Commission. Decentralised actions received most of the funds, for almost half of all mobilities which included the majority of applicant institutions. Altogether, 3,600 teachers and mentors, approximately 4,000 students and 3,000 pupils participated in these actions in Slovenia, as well as more than 500 organisations which participated in the projects.

The evaluation study encompassed only the impact assessment of decentralised actions within the European programmes Socrates II and Leonardo da Vinci II. It is important to stress that certain decentralised actions were not included in evaluation, either due to a small number of participants, lack of participants' contact data, or else to low survey response rates. The evaluation included the following actions:

- within the Socrates II programme, these are: Arion, Comenius School Partnerships and Host Schools, Comenius In-Service Training for School Education Staff and Comenius Assistantships (hereinafter Comenius Individual Mobility) and Erasmus mobility of students and professors,
- within the Leonardo da Vinci programme, these are Leonardo da Vinci exchanges and
- CEDEFOP study visits.

When pondering over the evaluation approach, we found out that the quasi-experimental approach which would enable us to obtain an assessment of the best quality influences and impacts of the programmes and actions cannot be applied. That is why the approach of measuring the perceived influences of actions in the areas which are determined by programme objectives was chosen. Based on the influence assessments, we established the impacts of programmes or actions in the areas determined by the objectives which the European programme laid out in the instruments of incorporation of particular programmes in the field of education and training. The approach is actually based on the principle of measuring how much beneficiaries are satisfied with the services (Martin and Kettner, 1996). Before planning and carrying out the evaluation study, the following research goals were set, which included questionnaire development, carrying out impact assessment of evaluated actions in Slovenia and identifying the factors with which it would be possible to explain the established influences of evaluated actions. Despite the expectedly low response rate of final beneficiaries, the obtained sample of replies enabled a quality statistical analysis of data and valid results.

### Final Beneficiaries

To begin with, we present some general conclusions which in our opinion influence the implementation and performance of European education and training funding programmes and which can serve as the basis for considering possible improvements in implementing the evaluated actions in Slovenia.

Let us first address the extent of men and women participating in European education and training funding programmes. We find that male participants are strongly underrepresented. This especially holds for the Erasmus action, where male student participants considerably fall be-

hind compared to the share of male students in higher education in general. Perhaps it would be appropriate to pay more attention to this problem in the future and to make additional efforts in increasing the share of male participants.

Important are also the conclusions regarding the social status of programme participants. Since the substantial share of the Slovenian population, with regard to social or socio-economic status, belongs to the lower middle and middle social class, one can conclude that equity in access to Erasmus and Comenius individual mobility actions according to social status are not yet fully established in Slovenia. Participants in these actions mostly come from the middle and upper middle class, although one would expect a different result according to the stratification of the Slovene population.

From the viewpoint of the representation of organisations, we conclude that a wide range of organisations participate in programme actions. We find that organisations strongly differ from each other in the number of previous participations in evaluated programmes or actions. The data indicate that there is no connection between the size of an organisation and the frequency of participating in actions. Organisations participate in actions with similar frequency, regardless of whether they are large, medium or small. However, there are differences in the nature of organisations in terms of financing sources. A greater share of participating organisations is financed from public funds, only a good tenth of participating organisations raise funds predominantly on the market. Organisations raising funds predominantly on the market are relatively more present in the Leonardo da Vinci mobility action which, according to the programme, is to be expected. Interesting is the conclusion that small organisations with up to 10 employees predominantly participate in European education and training funding programmes.

Besides the issue of the size of organisations, there are also concerns about the weak participation of organisations from certain geographical areas in Slovenia. Most participating organisations come from the Central Region of Slovenia. This is understandable, since this region is the most populated and consequently has the largest number of educational institutions. However, it is a matter of concern that there is considerable underrepresentation of some other regions. Most surprising is the poor participation of organisations from Southeast Slovenia, including Novo Mesto and Črnomelj. However, this is an issue worth further research.

## Impacts of the Socrates II and Leonardo da Vinci Programmes in Slovenia

In this section, we deal with the influences of participating in actions of Socrates II and Leonardo da Vinci II programmes as perceived by the actions' final beneficiaries according to evaluated areas or programme objectives. Based on this, we establish the impacts of evaluated programmes in Slovenia, as well as the differences in individual perceived influences.

In the evaluation study, we conclude that the programme objectives laid out in the instruments of incorporation of programmes are the same for all actions within particular programmes. This means that programmes or actions usually do not differ according to the centre of influences and impacts. Since there was a predominant interest in the differences in achieving these objectives, the evaluation focused on the areas determined by programme objectives the impact of European education and training programmes with greatest impact and the areas or programme objectives falling behind.

The research results revealed that generally the impacts of actions for all objectives, respectively, in all evaluated areas are assessed at least as small. Impacts of Socrates II and Leonardo da Vinci II in Slovenia therefore do exist. The final beneficiaries, be it organisations or individuals, perceive positive influences of evaluated actions or programmes for all fundamental programme objectives. Therefore, one can surely confirm that a certain degree of success is noticeable in all evaluated actions and in both European education and training programmes.

The influence of actions and programmes, however, differs from objective to objective. According to the findings of the evaluation, the evaluated actions have two stronger lines of impact. The first, perhaps the strongest pronounced one, manifests itself in the impact on raising the level of competency of individuals. The first one mostly regards improving the knowledge of foreign languages, skills and competences of participants in the field of vocational education. A strong impact is noticeable in terms of vocational development of participants as well. The second line, somewhat less pronounced, is noticeable in the area of cooperation, mostly in the aspect of increasing the extent of international cooperation between educational organisations and other enterprises.

The participants of evaluated actions and programmes consider that the actions in which they participated have a positive impact on raising formal education and as a result on raising the social and, to a lesser ex-



tent, economic status of participants. This finding puts the impacts of programmes and actions within them into a very positive context, since it negates the stereotype that individual mobilities are ‘first intended for tourism and only then for obtaining knowledge, skills and information’. Participation in European education and training programmes, mostly in the Erasmus action, according to the assessments of groups of younger participants who place themselves in the lowest social class, also represents an important mechanism of vertical social mobility.

Of course, in the future it would be appropriate to pay more attention to the areas where the participants perceived a weak influence. When it comes to development, future orientations should be appraised both from the viewpoint of EU development as well as from that of national priorities. In the case of decentralised actions, the search and utilization of synergetic impacts of European programmes is allowed and is left to players on national levels. What should national players first focus on? A relatively weak impact of evaluated actions or programmes is noticeable in the areas of ensuring social equality, i.e. ensuring equal educational opportunities for men and women in the fight against various kinds of discrimination, in a more active promotion of equality and in the integration and reintegration of students with special educational needs. Somewhat weaker is the impact in the area of entrepreneurship and innovation. This involves orientation in terms of increasing competitiveness, encouraging entrepreneurship and innovation, and improving the employability of action participants. One should point out the less pronounced impact in the area of educational activities, mostly with regard to the quality of education and training, enabling simpler recognition of academic activities and increasing the transparency of study programmes and professional qualifications.

### **Comparing the Performance of the Socrates II and Leonardo da Vinci II Programmes and Their Actions**

The differences and comparisons in perceiving the influences of both evaluated programmes, Leonardo da Vinci II and Socrates II, in the areas determined by common programme objectives offer an additional view of the efficiency of European education and training programmes. We find that the participants do not perceive considerable differences between the influences of the programmes. Both of these are similarly successful and equally achieve the common programme objectives. The objectives refer to raising the European dimension enabling accessibil-

ity to education, raising quality in education and training, and ensuring equal opportunities and cooperation.

When comparing individual actions within programmes, it was found that the situation is different. Deviations are obvious mostly among actions in the Socrates II programme, in particular in the Erasmus action. It was found that Erasmus is not a particularly successful mechanism compared with the Arion actions, Comenius school partnerships, host schools of Comenius assistants and Comenius individual mobility. The identified influences are weaker in as many as five programme objectives. The participants consider the action to be relatively less successful in encouraging innovation and quality in education, in ensuring same opportunities in education, in encouraging intercultural awareness, and in the field of investigating common political interests. However, they demonstrate relative success in the field of learning European languages.

Within the Leonardo da Vinci II programme, there are no greater differences between mobility actions and CEDEFOP action, since both actions equally influence the achievement of programme objectives.

### **Comparing the Influence of Actions with Similar Content, Function or Target Groups**

By comparing the influences of similar actions, interesting results were obtained. These actions do not differ in their mechanisms or substantive emphases. Compared with Comenius individual mobility and Erasmus mobility, the findings from the previous section tend to be repeated. According to the assessment of participants, the influence of Erasmus mobility action is much weaker with regard to encouraging innovation and strengthening the quality in education. Compared with Comenius individual mobility, Erasmus mobility has a weaker impact on encouraging equal opportunities and investigating common political interests.

But, where should one set the limit between relative success and relative failure? The substantive focus of Comenius individual mobility actions, which is predominantly intended for the needs and interests of (future) pedagogical staff, lies on in-service training for school education staff and on professional development. The student population, which dominates among Erasmus mobility participants, also has no direct connection with innovation and quality on the level of higher education institutions. Thus we can conclude that Erasmus action does sufficiently follow the objectives of organisational innovation and increasing quality. In view of the objectives of the Lisbon strategy one should consider

that student mobility should be used to strengthen innovation and quality on the organisational level of higher education institutions.

### **The Influence of European Programmes from the Viewpoint of Various Sub-Groups of Final Beneficiaries**

When comparing the way in which either individuals or organisations perceive influences, organisations usually perceive a greater influence of evaluated programmes or actions. This especially holds for the objectives of ensuring the quality of education and equal opportunities. The impacts of programmes are more strongly pronounced on the organisational level. The issue of the centre of influence of a particular programme or action in the aspect of programme efficiency is extremely important, however, so far it was insufficiently researched and it deserves special attention in the future.

The size of an organisation does not influence the influence assessment regarding selected programme objectives, neither in terms of the number of employees, nor in terms of users of services or coordinators. There is no relation between the size of an organisation and the frequency of participating in European programmes. It is also interesting that the number of actions an organisation has participated in is not related with the perceived strength of action influences.

Individuals from various age groups assess differently the influence of evaluated programmes or actions. Differences in perception mostly occur in the case of the following objectives: encouraging innovation and quality in education, as well as strengthening the learning of European languages and perceiving the influence on raising the social and economic status of participants. Participants above 41 years of age tend to perceive a greater impact in the field of encouraging quality and innovation in education. As mentioned before, students do not consider quality and innovation to be really important or to have a great impact. In the Comenius individual mobility action, where participants are mostly older people and are expected to display quality pedagogical work and innovation of pedagogical approaches, the situation is different.

When assessing the influence in the field of learning foreign languages, where influence is assessed as higher by younger participants, the reason for this can obviously be found in the duration of mobility. A longer stay – which is usual for younger participants of the Erasmus mobility action – has a stronger impact on the knowledge of foreign languages: this action has the strongest impact on learning foreign languages.

Younger participants, who usually consider themselves as coming from lower social classes, are better able to assess the influence of actions on raising the social and economical status. The evaluation results show that the Erasmus action is an appropriate mechanism for improving the social and, to lesser extent, economic status of youth. In general, cooperation in the evaluated actions contributes more to raising the social status of participants, than to raising their economic status.

In this evaluation we find that the influence perceptions of the evaluated programmes or actions differ with regard to the participants' achieved level of formal education. Differences in perceiving the influence occur in the field of innovation and quality in education, learning of foreign languages, and raising understanding and solidarity among EU citizens. People with better education perceive a greater impact of actions on encouraging innovation in an organisation and increasing quality in education, while by contrast, individuals with lower education perceive a stronger influence of programmes on strengthening the learning of European languages and raising understanding and solidarity among EU citizens. This seems to be a result of the particularities of participants in the Erasmus and Comenius actions, and consequently a result of characteristics regarding the content of both actions.

Differences in perceiving the influence of actions also occur based on the formal vocational status of participants. The employed, self-employed, unemployed and students differently perceive the influence in the areas of programme objectives of learning foreign languages, understanding and solidarity among EU citizens. Compared to students, the self-employed on average perceive a lower impact of programmes when it comes to the objective of learning foreign languages; the employed, however, perceive a lower impact of programmes on understanding and solidarity among European citizens in comparison with students. Among the influencing factors, it is important to mention the duration and quality of staying abroad. It seems that, due to longer mobilities and more intensive integration into foreign environment, students develop a better understanding and acceptance of different views, opinions and feelings. Impact perception on the level of knowledge of foreign languages is a similar issue. The self-employed – often part-time students – do participate in shorter mobilities, unlike the students, however, the purpose of their participation is different. Perhaps that is why they perceive a lower influence of the evaluated actions.

## Recommendations

As mentioned at the beginning, a quasi-experimental evaluation approach to assess the impact of European education and training programmes would provide data of better quality and better insight into the influence and impacts of programmes. Of course, its implementation would first require a quality information system and monitoring of final beneficiaries from the initial contact to the period after the concluded action. At this point it seems that holistic use and upgrading of National agency's data bases are most important, as well as establishing permanent contact with the final beneficiaries of European education and training programmes. In the following step, indicators and criteria of quality and efficiency for permanent monitoring of the implementation of actions would have to be determined.

In order to carry this out, most factors need to be identified which influence the performance and effectiveness of European programmes in Slovenia. It would surely be reasonable to monitor the duration of actions, the educational level at the beginning of an action and in the survey, the position of participants on the labour market, etc. Factors would also need to be identified which would explain the differences in the influence on the level of an individual and organisation.

One of the development goals by all means needs to be an experiment with which it would be possible to compare the existing scale for measuring the influence with an alternative one. The existing scale, namely, is 'only' one-dimensional, and as such has a 'pro-European' orientation.



# 1

## Research Background

Erasmus, Comenius, Socrates, Leonardo da Vinci have been present in the Slovene education system since 1999. During 2000 and 2006, more than 3,600 teachers, mentors, 4,000 students, 3,000 pupils and 500 organisations participated in the concerning actions of funding programmes in education and training. For these purposes, the European Commission granted Slovenia 22,754 million EUR (Mihelič Debeljak, Pajnič in Taštanoska 2006; CMEPIUS 2007b). What for? Were the funds well used? This evaluation tries to answer the question of what is the impact of the above mentioned programmes in Slovenia. More precisely, it presents the impact assessment of European Communities within the framework of education and training, Socrates II and Leonardo da Vinci II, in Slovenia two basic and, according to the number of participants, most important programmes.

The text is organised as follows: the next section is dedicated to the presentation of funding programmes in education and training. The emphasis lies on the description of their function and purpose. Next, roles are presented that these programmes have in European Communities in the field of education and training nationwide, and afterwards the institutional actors and functions they have at the institutional level. An explanation of the difference between centralised and decentralised actions will be also given. In the conclusion, this section will provide the overview of the background and the framework of the present evaluation. The third section deals with the analysis of gathered data (influence perception) and with the impact assessment of evaluated funding programmes in education and training. We present the differences in perceived influence among particular groups of final beneficiaries detected by observing in which areas the differences tend to appear and what their extent is. The fourth section presents the methodological framework of the evaluation. It includes a thorough presentation of the research framework, method for measuring the perceived influence, development of the survey questionnaire and the procedure of gathering and analysing data. The final, concluding chapter summarises the research findings, gives a

critical view of the presented evaluation and the presentation of what the future holds.

Let us first explain the terminology, used in this text. By term *final beneficiaries* we refer to the beneficiaries of decentralised actions of the European Communities' programmes, which are managed by the Centre of the Republic of Slovenia for Mobility and European Educational and Training Programmes. These are divided into two groups: *organisations* and *individuals*. Individuals can also be referred to as *participants*. The term *evaluated actions* designates decentralised actions within Socrates II and Leonardo da Vinci II programmes, which were evaluated. In the case of Socrates II, these are: Arion, Comenius school partnerships and host schools for Comenius assistants, Comenius in-service training for school education staff and assistants – future foreign language teachers, Erasmus student mobility and Grundtvig. Actions Comenius in-service training for school education staff and assistants – future foreign language teachers will, for the sake of easier discussion, be referred to as Comenius individual mobility actions. Within Leonardo da Vinci II, the evaluation also encompassed the mobility action. The independent action CEDEFOP study visits which supported the achievement of programme objectives of the Leonardo da Vinci programme was included in the evaluation as well. When referring to *actions* in general, actions are meant as independent units, uniform sub-programmes of Socrates II, Leonardo da Vinci II or other comparable programmes. *Programme* refers to evaluated funding programmes in education and training, Socrates II and Leonardo da Vinci II. The programmes follow programme objectives, defined by various instruments of incorporation which represent the legal basis for their implementation. Hereinafter, programme objectives are referred to by *objectives*. *National agency* stands short for the contracting authority of the evaluation: Centre of the Republic of Slovenia for Mobility and European Educational and Training Programmes. According to its purpose of establishment, the Centre performs tasks for implementing the European Communities' programmes on all levels of general education (from kindergartens to universities) and of vocational and professional education and training. It also mediates and carries out study exchanges of students (scholars) and teachers in higher education technically and professionally, thus contributing to the creation of a common European educational environment.



# 2

## Subject of Evaluation

### 2.1 European Communities' Funding Programmes in Education and Training

In order to present a broader evaluation framework, we present a historical overview of European programmes supporting the development of common policies and activities in the field of education and training. A brief summary of selected chapters of *The history of European cooperation in education and training* (European Commission 2006) highlights the reasons for the establishment and orientation of these programmes, and the developmental role they played. In doing so, we present the broader context and the grounds for assessing the impact of funding programmes in education and training in Slovenia.

#### DEVELOPMENT OF FUNDING PROGRAMMES IN EDUCATION AND TRAINING

After the Second World War, the hope for a united Europe was high. At that time, it was important to gradually re-establish European Communities in the areas where it was believed that it is possible to bring former adversaries together; e.g. economy. Since Member States then did not wish that the European Community should interfere in the areas under national sovereignty, education represented a taboo for the Community. Things changed in the sixties with the expansion of democratisation in the field of education across Europe; higher education was reformed and, besides economy and agriculture, the European Community wished to tackle other issues as well. In October 1969, the European Parliament strived to make universities more European – it strived for greater openness of universities – in order to lay the foundations for the European cultural community. The common political will of Member States for cooperation was first realised in 1976. By accepting the resolution and according to a joint agreement, foundations were laid for cooperation of Communities in the field of education and training in six areas.<sup>1</sup>

1. These areas are: Education of migrant workers' children, better connection between

First ten years of implementing actions in the field of education (1976–1984) were an important historical period of cooperation despite the modest resources available. Complications were caused mostly by countries fearing interference with their national education system. During this period, an original form of cooperation came about within the Communities which corresponded with the principle of subsidiarity even before it was defined. In this manner, a path to integration, cooperation and respect appeared in the areas which varied greatly among Member States. An important milestone was reached in the second half of the eighties when programmes from the field of education and training were implemented. Comett was the first such programme, followed by Erasmus, PETRA, Youth for Europe, Lingua, Eurotecnet and FORCE. These programmes changed the criteria of cooperation and potential accession of different Member States. Actions developed constantly outside the frameworks of programmes as well, mostly in the field of school education with emphasis on the promotion of the European dimension in education systems and of equal opportunities. With the development of a common market, cooperation focused on the recognition of diplomas for professional purposes. Gradually a shift occurred from emphasising harmonisation to emphasising mutual trust and comparison above all in the field of vocational education and training and tertiary education.

Since 1992, joint programmes in the field of education and training have been designed in a such way that Member States completely take responsibility for the content of education, system organisation, cultural and linguistic differences. After 1993, the first year of the common EU market, the cooperation in the field of education and training entered a new phase facing new challenges. Among the first was preparation for the enlargement of the Community. The second challenge represented globalisation and the development of information society. In the nineties (1990) the concepts of knowledge-based society and lifelong learning became ever more recognisable. Since 2000 they have become the pillar of further development of the European Union. Lifelong learning should be set up as a principle which accompanies all changes and which the EU would wish for the individuals to develop. The overview of six lifelong learning<sup>2</sup> priorities shows that these reflect in different European pro-

education systems and Europe, gathering documentation and statistics, higher education, learning foreign languages, equal opportunities.

2. We distinguish among 6 priorities in implementing lifelong learning: academic

grammes, among others the Socrates programme (especially Grundtvig action) and Leonardo da Vinci programme.

In March 2000, the European Union adopted a new economical, social and environmental strategy till 2010 (Lisbon Strategy) which placed education and training in front of labour, in order to build the Europe of knowledge. The Lisbon Strategy anticipated Europe as the most competitive knowledge-based economy till 2010. With the Lisbon Strategy, the leading politicians attached great importance mostly to the education and training system. Several indicators were developed which help to evaluate the success of a particular country in attaining EU objectives till 2010. The indicators cover the areas of key competences (most importantly learning to learn), effectiveness of investing (graduate's costs); ICT; mobility; adult education; vocational education and training; foreign languages; teacher training; social inclusion and active citizenship. In 2002, the European Parliament stressed that the content of education systems should not be determined exclusively by references towards economy and the labour market, indeed, it should rather develop awareness of one's citizenship, communication capability, intercultural awareness and social skills. Education is not only an employment instrument; it also concerns the growth of personally developed and active citizens. In 2002, a ministerial declaration on European cooperation in the field of vocational training (Copenhagen Process) was signed in Copenhagen. It integrated the objectives set for 2010. The Bologna process, as well, regarded the Lisbon objectives.

These changes positively influenced education and training which was becoming a key element in uniting Europe and people in it. All these events contributed to the beginning of introduction of a common qualification framework in 2005/2006 which is an important instrument for supporting mobility and the free European labour market. With this process of education and training till 2010, cooperation in the field of education and training gained a major role in developing, deepening and

recognition (identification, evaluation and acknowledgment of non-formal and informal education, transfer and mutual acknowledgment of formal qualifications), information, guiding and counselling (to develop high-quality counselling services), investing (public and private) more time and resources in learning, integrating pupils and learning possibilities (support for learning communities, cities, regions and companies in order for them to become 'learning organisations'), development of basic skills required for participation in lifelong learning of all, on all levels, and development of teaching and learning methods.

achieving important European objectives. To sum up, there are several purposes as to why European programmes came about and developed:

- uniting the European area (due to strong tendencies after the war, due to lack of good relations),
- improving the labour market mobility,
- introducing various novelties into education systems,
- improving competitiveness in comparison with other continents,
- enabling interconnection, comprehension and understanding.

All these developmental dynamics of European policies in the field of education and training are reflected in the programme objectives of evaluated programmes. The substantive development of programmes and actions can also be observed in the way these programmes work.

The Socrates II programme serves to support lifelong learning or formal and non-formal education. Its purpose is to raise the quality and transparency in the field of education, to encourage and contribute to creating and gaining new knowledge, skills and competences. Within Socrates II, the Comenius action is intended for exchanges in the field of school education. Comenius school partnerships encompass multilateral project cooperation among schools or other organisations in the field of developing common pedagogical material, exchanging good practice and including students and teachers in project activities. Projects last one year and have the possibility of double extension. The action Host schools for Comenius assistants includes mobility for future foreign language teachers in order for them to acquire direct practical experiences in other Member States. The pedagogical practice lasts at least three and at most 9 months. The in-service training, comprising linguistic and general training, is aimed at active training and upgrading of knowledge and qualifications of pedagogical staff. The participation of teachers and school-leaders in language and methodology or didactics courses lasts from one to three weeks at most. The purpose of individual mobility actions is to encourage the participants to improve their knowledge and skills in order to better acquaint themselves with the situation and the education processes in Europe and to deepen their knowledge of the European dimension. We can briefly describe the Erasmus action as the study mobility of youth and academic staff. The student mobility lasts from at least three months to maximally one year. Teacher mobility, which lasts from at least 4 days to 5 weeks at most, has the purpose of strengthening academic cooperation. The Erasmus action, Intensive language courses, helps the Erasmus students to better acquaint themselves with the culture

and language of the country they are visiting within the study exchange. The Grundtvig action is focused on educating adults in the broadest terms, i.e. those wishing for new, shorter and additional education, or those in need of socialisation activities, acquaintance with civil freedoms and rights, tolerance and democratic processes. The action encourages the cooperation of various providers of educational services for adults on the European level with scholarships for in-service training for school education staff, who are engaged in adult education, and with learning partnership projects. Individual mobilities of the Grundtvig action last from one to maximally three weeks. Learning partnership projects, however, last one year and have the possibility of double extension. The Arion action is intended for study visits with the aim of exchanging information, experience and good practice among decision-makers and professionals in the field of general education and training in countries participating in Socrates II. The study visits, which last one week at most, help to study the area of improving the quality and transparency of education systems and to encourage innovation.

Leonardo da Vinci II programme supports cooperation in the field of vocational and professional education and training. Via the sub-action of pilot projects, the educational organisations, enterprises, societies, etc. in cooperation with social partners who, contrary to the case of Socrates II, represent equal stakeholders, have developed and updated new education and training software, teaching methods and approaches, didactics, professional discourse and the equipment for supporting individuals and their qualification. The sub-action mobility supports various types of mobility. These are: Placements of students, future young workers, students, participants in vocational education (apprentices), teachers, mentors, human resource managers and foreign language teachers. In terms of content, CEDEFOP study visits have a fairly similar mechanism compared to Arion with a difference being that here the focus lies on studying national systems in the field of vocational education and training (Mihelič Debeljak, Pajnič in Taštanoska 2006).

#### FUNDING PROGRAMMES IN EDUCATION AND TRAINING AT THE NATIONAL LEVEL

European Communities' programmes represent a financial mechanism supporting the participating countries to implement commonly agreed contents and mechanisms. When the first education and training programmes were being implemented, two forms of programme management existed:

- decentralised management for actions where national structures got to play their role – special agencies (for example decentralised management of allowances for Erasmus mobility students);
- other programmes or actions managed in a centralised manner by the European Commission, usually with the aid of different support offices or agencies.

The network of national agencies proved to be essential because of the range and administrative complexity of programme management, mostly in the case of programmes including mobility. Decentralised management also extended beneficiaries' access to the programmes. In practice, each participating country established a body or an institution to which the Commission delegated the management of decentralised parts of a programme within the set framework (refers mostly to the purpose and transparency of fund use, etc.). Decentralised forms of cooperation changed with time, perhaps not so much with regard to content but in a technical and administrative way in accordance with changes in European programmes.

One of the reasons for decentralisation was that the European Commission and Council did not wish to harmonise Europe but rather tried to establish mutual trust and identification of national systems. That is why certain actions remained in the domain of a particular country which has the possibility to implement an action in accordance with the needs of its education system because the European Commission plans and sets such actions only in certain basic aspects (common priorities, use of funds, etc.).

In the new programming period (2007–2013), activities are also divided into decentralised and centralised activities, the difference being that the implementation of decentralised activities (mobility, partnerships, projects for transfer of innovation and study visits) is carried out by National agencies (CMEPIUS in Slovenia), whereas the executing agency in Brussels implements the centralised activities. Contrary to the past periods, as much as 80 percent of programme resources are earmarked for decentralised activities.

## 2.2 Evaluation: Why and How?

The evaluation was procured by the National agency. As in the case of various evaluations abroad, this one is also shaped by the interests of the contracting authority (National Agency) – mainly by the accountability

principle. The principle of accountability is integrated in the decisions of implementing the Socrates II and Leonardo da Vinci II programme, where there is a request to prepare a report on the implementation and impacts of a particular programme in a Member State.<sup>3</sup> Besides, the contracting authority is bound by the obligations laid out in the Guide for National Agencies which are responsible for the implementation of the Lifelong Learning Programme (CMEPIUS 2007a). Additionally, the National agency was driven by long-term care for service quality and by the long term goal for establishing a management information system which would enable constant monitoring and therefore improvement in actions' impact.

The stated requirements 'obviously call' for a research which according to basic classifications of research approaches (Babbie 2007; Monette et al. 1998) is an evaluation (Rossi, Freeman, and Lipsey 2004). A greater research challenge lay hidden within the evaluation approach itself. Measuring the impact of programmes and policies calls for experimental or quasi-experimental research approaches, which presents a major challenge in the ex-post evaluation context, mostly if the evaluator does not have the opportunity to monitor or manipulate the amount and quality of obtained programme intervention.

This is one of the main reasons for tight cooperation with primary stakeholders whose interests are directly or indirectly vested in evaluation or its results in all of its phases. Besides, in order for the evaluation results to be actually used in the spirit of applicative research, we regarded the principles of the user oriented evaluation approach (Patton 1997). This cooperation was most intensive in forming and adjusting the evaluation approach to the evaluated programmes<sup>4</sup>

To this end, the National agency established a working group consisting of seven members of the contracting authority and four representatives of the contractor. Based on the proposal of the evaluator, the working group formed an evaluation plan which was then presented to the project committee. For substantive orientation, monitoring and control of evaluation implementation, the National agency appointed a project committee composed of: three representatives of the contracting author-

3. Paragraph 14 of the decision on implementing the Socrates programme (European Parliament and the Council 2000) and paragraph 13 of the decision on implementing the Leonardo da Vinci programme (Council of the European Union 1999)

4. This is usually referred to by the term 'evaluation focusing' (Patton 1997; Rossi, Freeman, and Lipsey 1999)

ity, two representatives of the Ministry of Education and Sport, a representative of interested parties from the field of education and a responsible holder of the contractor. Primary stakeholders were also actively included in the phase of developing and testing the survey questionnaire and in the phase of result analysis. The project work and associated communication and distribution of interim results took place in a virtual office in a Moodle software environment which was set up at the Faculty of Management Koper, University of Primorska.

In cooperation with the working group, fundamental premises were formed on which the present evaluation is based. As agreed with the National agency, the impact assessment includes the following decentralised actions. Within the Socrates II programme, these are: Comenius school partnerships and host schools for Comenius assistants, Comenius in-service training for school education staff and assistants – future foreign language teachers, Erasmus student and teacher mobility, Grundtvig learning partnerships, Grundtvig individual mobility and Arion (study visits). Actions Comenius in-service training for school education staff and assistants – future foreign language teachers will, for the sake of easier discussion, be referred to as Comenius individual mobility actions. In addition, the mobility action for training within Leonardo da Vinci II was included, as well as the independent action CEDEFOP study visits which supported the achievement of programme objectives of the Leonardo da Vinci programme. As agreed with the contracting authority, pilot projects were excluded, as well as Leonard da Vinci thematic actions and projects concerning linguistic knowledge and skills. Unfortunately the evaluation did not include individuals who participated in Leonardo da Vinci exchanges and placements since no contact data of beneficiaries were available for the entire period 2000–2006. A work plan was set for the evaluation as well as expectations regarding anticipated evaluation output. According to the data availability on final beneficiaries of evaluated actions and according to the timescale, it was concluded that quasi-experimental approaches are neither realistic nor feasible. For this reason, an alternative approach was chosen. Conclusions on the impacts of evaluated actions were drawn, based on the measured perception of influence of evaluated actions in the areas which are characterised by programme objectives of particular actions. The mentioned approach is based on the principle of measuring beneficiaries' satisfaction with services (Martin and Kettner 1996).

Based on the above described fundamental premises, we formed the



objectives of the evaluation. Thereby, some additional factors were taken into account. First, similar foreign empirical studies insufficiently explain the effects of various contextual factors on the influences and impacts of funding programmes in education and training at the personal, organisational and national level. So far, the mechanisms of influence of similar policies in Slovenia remain uninvestigated. In this aspect, the present evaluation by all means represents a novelty. The second factor which led us when forming research objectives is the effort of the National agency to improve the impact of funding programmes in education and training on end-users. This presupposes a long-term development orientation, preparation of firm theoretical bases, formation and establishment of a permanent monitoring system i.e. management information system. The third limiting factor represents the evaluation approach. Although it does not enable the measuring of 'pure effect' or estimating the factors which would contribute to greater programme efficiency, differences between final beneficiaries of actions can be exploited in order to conclude about the factors that might affect the perception of the influence of Socrates II and Leonardo da Vinci II actions on final beneficiaries. In this context, the following objectives were adopted:

- to prepare a survey which would enable one to measure the influence of programmes Leonardo da Vinci II and Socrates II as perceived by final beneficiaries of decentralised actions,
- to assess the impact of the evaluated actions in Slovenia, and
- to identify and explore the factors which could explain the perceived influences of evaluated actions in Slovenia.

The research was carried out in 2007. It covered final beneficiaries of evaluated actions from 2000 till 2006, both individuals and organizations. For evaluation purposes, a web survey was developed and carried out. All final beneficiaries of evaluated actions during the mentioned period were targeted and invited to participate in the survey. Their e-mails were drawn from the records of the National agency. The basic evaluation unit was decentralised action.

Impact assessment was carried out both at the personal and the organisational level, depending on who was the final beneficiary of a particular action. In Comenius individual mobility, these were individuals, and in Comenius school partnerships, these were organisations. Impact was assessed based on measured perceptions of programme influence. Final beneficiaries assessed the influence of their participation in an action ac-

according to the areas laid out in fundamental programming documents (European Parliament and the Council 2000; Council of the European Union 1999), also defined as objectives to which evaluated actions should contribute. To illustrate: We were also interested in the perceptions of individuals participating in Comenius in-service training for school education staff within Socrates II. How strong, in their opinion, was the influence of in-service training on the increase in the quality of educational paths? If the final beneficiaries on average identified a (great) influence of actions, it was concluded that the evaluated actions in Slovenia have important impacts and are therefore successful in pursuing programme objectives. Based on the initiative of the contracting authority, the evaluation also included the assessment of actions' influence on raising formal education, social and economic status of participants.

Lacking a clear hierarchy of programme objectives of evaluated actions and predefined judgement criteria, the evaluation of obtained programme influences was carried out along the formulation of assessment criteria. To this end, a one-day workshop with employees of the National agency and a representative of the Statistical Office of the Republic of Slovenia was organised. The purpose of this workshop was to form appropriate interpretations and assessment criteria according to which the obtained results were evaluated. Attention was also paid to the identification of secondary data sources (national statistics for the field of education, other evaluation studies, project reports and individual mobility) which can serve for impact assessment criteria and data triangulation.

At this point it is important to emphasise again that the objectives defined with the decision on setting-up a programme represent the evaluation's point of departure. The decisions used, i.e. fundamental programming documents (European Parliament and the Council 2000; Council of the European Union 1999), do not differentiate programme objectives with regard to their importance. They also do not determine the level (individual, organisation, national level) at which the influences and impacts of particular actions are focused. The actions can also be assessed from the viewpoint that programme effects and consequentially their impact are primarily determined by the action as a specific mechanism which can be used similarly within different programmes. This means that actions are specific mechanisms (but not programmes) and that actions within a programme do not realize all common programme objectives or at least not to the same extent. According to the latter presumption, it is most reasonable to compare the perceived influences of

TABLE 2.1 Leonardo da Vinci II: Actions, end-users, and programme objectives

Action	Practical education and training	CEDEFOP
End-user	Organisations	Organisations
Programme objectives	<ul style="list-style-type: none"> <li>• European dimension: Raising the European dimension of Slovenian education system regardless of the educational level</li> <li>• Innovation 1: Raising innovation in forming educational paths in an organisation</li> <li>• Accessibility: Improving access to educational paths or possibilities for training on national level</li> <li>• Quality: Raising the quality of education and/or training in an organisation</li> <li>• Cooperation: Benefits for all programme participants as a result of cooperation</li> </ul>	<hr/> <ul style="list-style-type: none"> <li>• <i>Integration and reintegration: Improving vocational integration or reintegration</i></li> <li>• <i>Employability: Raising participants' employability</i></li> <li>• <i>Adaptability: Better adaptability of participants</i></li> <li>• <i>Competitiveness: Increasing competitiveness</i></li> <li>• <i>Entrepreneurship: Promoting entrepreneurship</i></li> <li>• <i>Skills and competences: Improving skills and competences of participants in the field of vocational education</i></li> <li>• <i>Accessibility to education: Better accessibility of groups with worse position on the labour market to various forms of training</i></li> <li>• <i>Discrimination: Combat against discrimination</i></li> <li>• <i>Equality: A more active promotion of equality</i></li> </ul>

NOTES Common objectives are in roman font, *concept – organisations in italics.*

actions of the Erasmus mobility and Leonardo da Vinci exchanges and placements, instead of comparing the Erasmus action with other actions of the Socrates programme (Arion, Comenius school partnerships, etc.) even though the latter almost have identical programme objectives. According to the wish of the National agency, this second criterion of assessment was regarded when interpreting results and assessing the impact of actions.

Due to the large number of evaluated actions and due to the structural complexity of programme objectives, tables 2.1, 2.2, and 2.3 are presented in which evaluated actions are linked into a uniform structure. For better transparency, we use shorter notes of programme objectives instead of entire descriptions of target areas of programmes. The following section presents the evaluation results, section 5, however, is dedicated to the thorough description of methodological background of the evaluation.

TABLE 2.2 Socrates II: Actions, end-users, and programme objectives 1

Action	Comenius school partnerships/host schools	Arion	Erasmus mobility of students and professors
End-user	Organisations	Organisations	Organisations
Programme objectives	<ul style="list-style-type: none"> <li>• European dimension: Raising the European dimension of Slovenian education system regardless of the educational level</li> <li>• Innovation 2: Raising innovation in an organisation</li> <li>• Accessibility: Improving access to educational paths or possibilities for training on national level</li> <li>• Quality: Raising the quality of education and/or training in an organisation</li> <li>• Intercultural awareness: Educators more intensively promote intercultural awareness among individuals</li> <li>• Equal opportunities: Intensive implementation of actions for ensuring the equal opportunities for women and men in the field of education</li> <li>• Cooperation: Benefits for all programme participants as a result of cooperation</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <i>Learning languages: Improving participant's knowledge of European languages</i></li> <li>• <i>Understanding and solidarity: Improving participant's understanding of viewpoints, opinions and feelings of other individuals within the EU</i></li> <li>• <i>Investigating common political interests: Aspiration for searching common policy interests on the European level</i></li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <i>Integration and reintegration: Improving the integration or reintegration of students with special educational needs in the predominant or most frequent form of education/training</i></li> <li>• <i>Vocational development: Influence on the vocational development of participants</i></li> </ul>		
		<ul style="list-style-type: none"> <li>• Dissemination: Better dissemination of educational material, innovative teaching methods or experiences in an organisation</li> <li>• Debate on educational policies: Greater tendency of an organisation to research and analyse the issues of common educational policy on the European level</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Transparency: Greater transparency of study programmes and professional qualifications</li> </ul>	<ul style="list-style-type: none"> <li>• Acknowledgement: Simpler acknowledgement of academic activities</li> </ul>

NOTES Common objectives are in roman font, *concept – organisations in italics.*

TABLE 2.3 Socrates II: Actions, end-users, and programme objectives 2

Action	Comenius and Comenius assistantships	Erasmus mobility of students and professors
End-user	Individuals	Individuals
Programme objectives	<ul style="list-style-type: none"> <li>• European dimension: Raising the European dimension of Slovenian education system regardless of the educational level</li> <li>• Innovation 2: Raising innovation in an organisation</li> <li>• Accessibility: Improving access to educational paths or possibilities for training on national level</li> <li>• Quality; Raising the quality of education and/or training in an organisation</li> <li>• Intercultural awareness: Educators more intensively promote intercultural awareness among individuals</li> <li>• Equal opportunities: Intensive implementation of actions for ensuring the equal opportunities for women and men in the field of education</li> <li>• Cooperation: Benefits for all programme participants as a result of cooperation</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <i>Learning languages: Improving participant's knowledge of European languages</i></li> <li>• <i>Understanding and solidarity: Improving participant's understanding of viewpoints, opinions and feelings of other individuals within the EU</i></li> <li>• <i>Investigating common political interests: Aspiration for searching common policy interests on the European level</i></li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Debate on educational policies: Greater tendency of an organisation to research and analyse the issues of common educational policy on the European level</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• <i>Integration and reintegration: Improving the integration or reintegration of students with special educational needs in the predominant or most frequent form of education/training</i></li> <li>• <i>Vocational development: Influence on the vocational development of participants</i></li> </ul>	<ul style="list-style-type: none"> <li>• Transparency: Greater transparency of study programmes and professional qualifications</li> <li>• Acknowledgement: Simpler acknowledgement of academic activities</li> </ul>

NOTES Common objectives are in roman font, *concept – individuals in italics.*



# 3

## Impact of Funding Programmes in Education and Training in Slovenia

In this section, we present the data analysis and impact assessment of evaluated funding programmes in education and training in Slovenia. First, we present the characteristics of end-users, followed by the presentation of averaged perceived influences of evaluated actions according to programme objectives and the impact assessment of the evaluated programmes in Slovenia. In the third section, we present the differences in the perceived influences between particular groups of final beneficiaries detected by observing in which area the differences tend to appear and how big they are.

### **3.1 End-Users of Funding Programmes in Education and Training in Slovenia**

To begin with, it is important to stress that the research results refer to the population of individuals and organisations who/which participated in evaluated actions in the programming period from 2000 till 2006. Altogether, 3,902 survey invitations were sent, 541 survey questionnaires were filled out, 110 of which were submitted by organisations and 431 by individuals (table 4.3). Due to the high non-response rate in the case of Grundtvig action, both by organisations and by individuals, and in the case of Erasmus action by organisations, the actions of Grundtvig and Erasmus organisations were excluded from subsequent analysis. As mentioned in section 2.2, the mobility projects and pilot projects of the Leonardo da Vinci programme were not evaluated.

A closer look at the characteristics of all participants of the evaluated actions soon reveals that Erasmus participants form the majority of respondents (85.5 percent of all participants). Erasmus is followed by Comenius individual mobility (13.3 percent) and Grundtvig (1.2 percent). Evidently more women participated in these actions (73 percent) than men (27 percent). With regard to:

1. previous experiences of the contracting authority (Mihelič Debeljak, Pajnič in Taštanoska 2006);
2. the dominant share of Erasmus action participants among respon-

### 3 | Impact of Funding Programmes

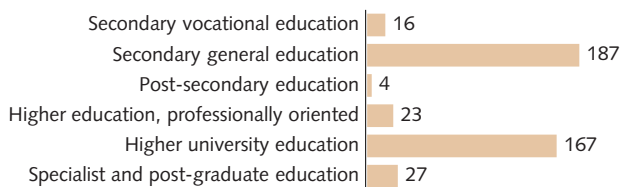


FIGURE 3.1 Survey participants' education level

dents, which reflects the greater share of women in the field of higher education,<sup>1</sup>

3. the feminisation of professions in the field of pre-university education,<sup>2</sup>
4. the findings that in Slovenia, there are more male internet users than there are female users<sup>3</sup> (Use of internet in Slovenia (RIS 2006) and with regard to the finding that gender has no influence on the degree of answers in web surveys (Pealer et al. 2001),

we conclude that within funding programmes in education and training men are underrepresented. This especially holds for the Erasmus action where the share of male participations (29 percent) evidently falls behind the share of men in higher education (42 percent). The weak representation of male participants could perhaps be explained by weak representation of educational organisations from the field of technology. The majority of respondents (88 percent) have only once participated in funding programmes in education and training, and only 1.4 percent have done so more than twice. The age structure of individuals shows a prevailing presence of young people: 50 percent of participants fall into the age group 20–25, and 40 percent into the age group of 26–31 years, while 10 percent of participants alone are above the age of 31. According to the current labour market status, secondary school pupils or students (62 percent) dominate, followed by workers/employed with 29 percent. The

1. During 2000 and 2006, the share of women among those first enrolled in programmes of higher education study was around 58 percent (our calculation is based on data of the Statistical Office of the Republic of Slovenia, see [www.stat.si](http://www.stat.si)).

2. Among the employees in primary schools, there were only 13 percent men in 2005–2006 (our calculation is based on data of the Statistical office of the Republic of Slovenia, see [www.stat.si](http://www.stat.si)).

3. Among men, there are 62 percent of internet users and 38 percent of internet non-users, and among women there are more internet non-users (53 percent) compared to internet users (47 percent).



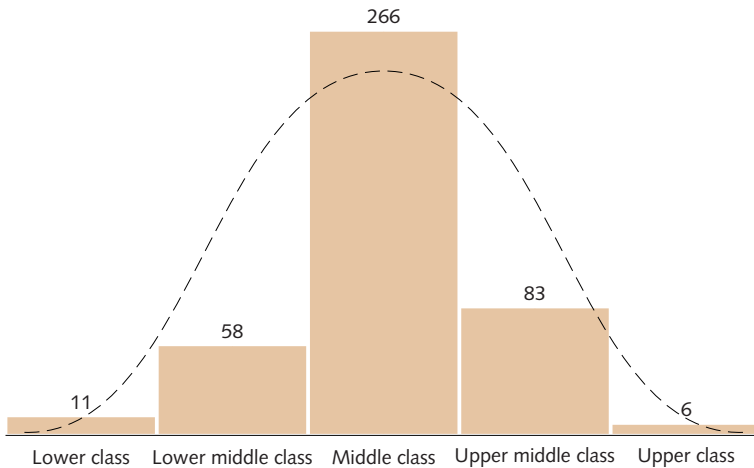


FIGURE 3.2 Survey participants' social position (dashed line represents normal distribution)

remainder consists of unemployed (2.6 percent), employed on service contract (2.8 percent) and self-employed (2 percent).

The educational structure of participants is shown in figure 3.1. According to the attained educational level (valid classifications in 2006<sup>4</sup>), secondary general education (level 6) and higher university education (level 8) prevail. Similarly as in the age structure, the educational structure is primarily determined by a target population of Erasmus or Comenius individual mobility action: 89 percent of individuals who participated in Comenius individual mobility action have higher professional, university or post-secondary education. The educational structure of Erasmus action participants is less dispersed, however, university education (34 percent) and general secondary education (50 percent) stand out.

The participants of evaluated actions come from all social strata, although more than half of them come from the middle class. Figure 3.2 shows that the social status distribution of participants is almost normal. In order to determine the social status, a subjective social status perception measurement was employed using the categorical ordinal scale of social strata (Hoffmeyer-Zlotnik and Krebs 2000) which is also used in Slovene public opinion surveys (Toš 2004).

4. The scale of achieved education was applied, which was also applied in the Survey on Labour Force during 2005 and 2006.

### 3 | Impact of Funding Programmes



FIGURE 3.3 Social classes in Slovenia (shares by social classes; own calculations based on data published in Toš 2004)

Based on the findings that the majority of the Slovene population can be classified in the lower middle or middle social class (by social or socio-economic status), we can conclude that the inclusion in Erasmus mobility participants (predominantly) and Comenius individual mobility is socially un-equitable,<sup>5</sup> because the majority of participants come from the middle class and upper middle class. The social inequality in access can be demonstrated by comparison with the socioeconomic status distribution calculated as the median of 4 Slovene public opinion<sup>6</sup> surveys in the same time period (Toš 2004), which refer to citizens with permanent residence in the Republic of Slovenia who are older than 18 years. Contrary to the distribution in figure 3.2, this one shows asymmetry to the left. This means a greater share in lower middle class and a smaller share in the middle and upper middle class (figure 3.3). Similar results were produced by comparison with the socio-economic stratification of the Slovenian population (Javornik 2006) which observes socio-economic stratification by dividing the population into income classes. In the lower middle class of socio-economic distribution there are approximately twice as many people as in the upper middle class. The lower and lower middle class together represent approximately two thirds of all persons, upper middle and upper class, however, represent one third (figure 3.4). We can conclude that the equity in access to Erasmus and Comenius individual mobility actions according to social status has not yet been fully established in Slovenia. Of course, one must consider that actions are accessed via individual mobility through educational institutions in which broader social relations of (in-)equality are reproduced.

Regardless of the stated, it is possible to partially confirm one of the working evaluation hypotheses that Erasmus and Comenius individual

5. The criterion of equity is closely related to legal and social rationality and refers to the distribution of effects and effort among different groups in society (Dunn 2004, 227).

6. The research on health and health care and iv. research on defence and security, National and international security (Toš 2004).

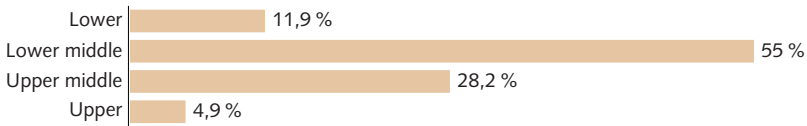


FIGURE 3.4 Income classes in Slovenia (own calculations, based on data published in Javornik 2006)

mobility have more participants from middle and upper middle social classes. It should be noted that an important group of participants was not included in the evaluation – participants of the Leonardo da Vinci exchanges and placements,<sup>7</sup> focused on in the field of vocational education and training. The inclusion of these participants would probably alter the presented situation because the attained educational level is related to the income position of individuals or household heads (Javornik 2006).

Age structure, educational structure and – to lesser extent – the labour market position of participants on the labour market reflect typical characteristics of target populations in evaluated actions. Young students without a university degree (with general secondary education qualifications) dominate the Erasmus action. Comenius individual mobility action is mostly dominated by employees above 31 years of age with at least higher education.<sup>8</sup> The distribution of individuals according to social status does not differ between the Erasmus and Comenius individual mobility actions.

The overview of characteristics of organisations participating in funding programmes in education and training points to diversity at least with regard to their size. The size of an organisation was observed by the number of employees, number of service users and the number of employees being responsible for the cooperation in EU programmes. Organisations strongly differ from each other, also with regard to the number of times they have so far participated in funding programmes in education and training (from 1 and up to 23), so that there is no apparent relation between the size of an organisation and the frequency of partic-

7. A more thorough presentation of the reasons is given in section 2.2.

8. Bivariate variance analysis points to a statistically significant correlation between the participation in an action, age and attained educational level. The differences according to the position on the labour market were not statistically significant, however, the expected frequencies in the contingent table imply the predominant representation of particular groups on the labour market in particular actions.

ipation in EU programmes.<sup>9</sup> Most organisations (87 percent) participating in evaluated programmes are financed predominantly from public funds. Only 13 percent of organisations mostly raise funds on the market. This is not surprising, because the Slovene school system is being financed from national budget funds and the majority of organisations are financed by public funds. These results, however, do refer to the specifics of particular actions. In the Socrates II programme, organisations with public financing dominate. Organisations raising funds predominantly on the market are more present in the Leonardo da Vinci exchanges. As regards the size, the latter have up to 10 employees. When dividing the participating organisations according to the region which they come from, the majority of organisations come from the Central region of Slovenia (27.8 percent). The second region, Podravska, falls 10 percent behind and is followed by Savinjska (11.1 percent), Gorenjska (10.2 percent), Goriška (9.3 percent), Obalno-kraška (6.5 percent), Koroška (4.6 percent), Zasavska (3.7 percent), Pomurska (2.8 percent), Southeast Slovenia (2.8 percent), Spodnjeposavska (1.9 percent) and Notranjsko-kraška (1.9 percent). The results confirm the findings of the National agency (CMEPIUS 2007b). Under-representation of institutions from particular regions, is evident. This can be partially attributed to populations of certain regions which results in a smaller number of educational institutions and therefore in a lower number of organisations participating in funding programmes in education and training (in 2005, for instance, in Zasavska region there was 1.6 percent, in Notranjsko-kraška 1.9 percent, in Spodnjeposavska 2.8 percent and in Koroška 2.9 percent of Slovene population). The second reason, which relates to the first one, is the presence of developed school and/or university centres. It was expected that Podravska region would be in the second place because it has the second largest university in its centre. It is surprising, however, that some regions with relatively strong school centres are underrepresented, for instance Southeast Slovenia with Novo mesto and Črnomelj. The reasons for this may require a more thorough investigation in the future.

### 3.2 Impacts of Funding Programmes in Education and Training in Slovenia

This section presents the results of influence analysis of the majority of decentralised actions of funding programmes in education and train-

9. All correlation coefficients between the frequency of participation and the variables describing the size of organisations were statistically insignificant and low.

ing in Slovenia. During 2000–2006, the evaluated actions received most of the programme resources (about 65 percent), they encompassed just under half of all mobilities (45 percent) and the majority of applicant organisations (72 percent) (Mihelič Debeljak, Pajnič in Taštanoska 2006; CMEPIUS 2007b). Hereinafter, we present the perceptions of influence averaged within the areas defined by programme objectives, and give the overall impact assessment of European funding programmes in education and training in Slovenia. In our endeavour to identify the factors which would enable long-term improvement of effectiveness and efficiency of funding programmes in education and training, we later on present the differences in influence perceptions among both evaluated programmes, among particular actions and particular end-user subgroups. As an example, we present a few evaluation questions that were addressed:

- Are there differences in influence perceptions on raising the quality of education in general and in raising the quality of educational paths and systems between Socrates II and Leonardo da Vinci II?
- Does Comenius in-service training for school education staff contribute more or less to learning foreign languages, such as Erasmus mobility?
- Are there differences in the perceived influence of evaluated programmes on ensuring equal opportunities in the field of education between particular social strata?

#### PERFORMANCE OF SOCRATES II AND LEONARDO DA VINCI II PROGRAMMES IN SLOVENIA

In this section, we answer the question about the impacts of funding programmes in education and training in Slovenia. Have Socrates II and Leonardo da Vinci II programmes been successful in Slovenia? For this purpose we present the perceived programme influences by end-users of evaluated programmes in all accompanying areas – i.e. programme objectives – and provide the impact assessment of funding programmes in education and training. The averages combine both the assessments of individuals as well as the grades of organisations,<sup>10</sup> various actions and programmes. Let us first elaborate on the assumption with which we not only try to answer the question but also try to evaluate the re-

10. At this point we regard the assumption that self-reporting does not differ from proxy-reporting. A more thorough elaboration of this hypothesis is given in the methodology section.

sults. In order to answer the presented evaluation question, we joined actions or programme interventions intended for various target groups with different substantive emphases, action mechanisms and impact focus. This was done by regarding the already presented first assumption of evaluation based on two fundamental programming documents: Programme objectives are the same for all actions and do not differ among actions with regard to importance and impact focus. In this manner, it is possible to evaluate in which areas defined by programme objectives the impact of funding programmes in education and training is the greatest and which are the areas falling behind.

Let us illustrate with an example of a programme objective of promoting the European dimension. Here, we measured the perception of influence in ten areas which, according to theoretical findings, should represent ten interconnected aspects of the term or concept European dimension. These are:

1. developing the feeling of European identity,
2. being aware of the values of European civilisation which represent the foundation of future development (democracy, social justice and respect for human rights),
3. being aware of the advantages which the EU offers,
4. being aware of the challenges which the EU has,
5. knowing cultural aspects of the EU and Member States,
6. knowing social aspects of the EU and Member States,
7. participating in economical development of the Union and
8. participating in social development of the Union.

In order to check the understanding of the term European dimension, we separately and directly asked the end-users about the influence which the participation in funding programmes in education and training had on raising the European dimension of Slovene education system regardless of the educational level.

Figure 3.5 shows average values of the perceived influence of evaluated actions or programmes. The influences are presented for each programme objective separately. Programme objectives were sorted in a descending order according to the power of perceived influence. Let us explain that the number of final beneficiaries ( $n$ ), which is written in each column, differs for particular objectives. Particular actions differ with regard to the number of participating organisations or individuals. Dif-



FIGURE 3.5 Average perceived influence according to programme objectives (1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big)

ferences also occur due to the structure of programme objectives (see tables 2.1, 2.2, and 2.3 on pages 41–43). Some objectives are common to both evaluated programmes, some are common to particular actions and others are specific for particular actions.

Generally, influence perceptions of actions for all objectives are graded at least as small. This means that evaluated actions, such as Comenius school partnerships, Comenius individual mobility, and Arion, did have an impact in Slovenia. The evaluated actions have a strong influence on the improvement of participants' knowledge of European languages and cultures, improvement of skills and competences in the field of vocational education, on professional development and on the increase of transnational cooperation between educational organisations (and companies). Relatively small is the influence of actions in the areas of more intensive implementation of actions for ensuring the equality of opportunities for women and men in the field of education, improvement of integration or reintegration of students with special educational needs into most common forms of education or training, increasing competitiveness, raising the quality of education and training in an organisation,<sup>11</sup> simpler recognition of academic activities, combating discrimination, increasing the transparency of study programmes and professional qualifications, more active promotion of equality, raising innovation in organisations, encouraging entrepreneurship and improving the employability of participants.

We can conclude that final beneficiaries perceive influences of evaluated actions or programmes for all fundamental programme objectives. In other words, actions or programmes have an impact in all areas defined by programme objectives. In this aspect, the evaluated actions and programmes are successful in achieving the set objectives. It is important to add that the impacts differ with regard to particular objectives. According to this, the programming documents do not anticipate hierarchy (or priority differences) among programme objectives. At least we can conclude that there are areas in which programme intervention would be more or less efficient. In future implementation of actions it would be appropriate to pay more attention to the areas where the influence was perceived as small.

11. We do not exclude the possibility that in the case of the mentioned objectives, the values would be greater if the evaluation would include individuals participating in mobility of the Leonardo da Vinci programme.



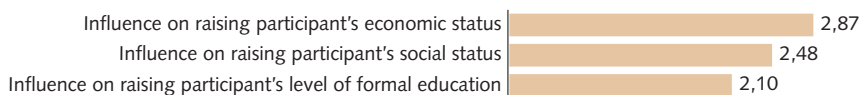


FIGURE 3.6 Perceived influence of actions on socioeconomic status and individual's education (average influence; 1 – very small, 2 – small, 3 – big, 4 – very big)

Here, we also point out the conclusions about the influence on the areas which, because they were interesting, were additionally exposed by the National agency: Influence on raising formal education, social status and economical status of participants (figure 3.6). Participants in these areas also identify at least a small influence, where as the influence in raising formal education stands out by being averagely graded as big. This conclusion is mostly important because of periodical presence of the stereotype that individual mobilities are *'first tourism and only then obtaining knowledge, skills and information'*.

This points to an important role which funding programmes in education and training play in a knowledge-based society. It is important to stress the difference between the influence on raising economical status on the one hand and social status on the other. However, we cannot neglect the conclusion that the evaluated programmes in this period served as a channel for vertical social mobility. As we will explain more thoroughly at the end of the section 'Differences in Influence Perception among Various Groups of Final Beneficiaries' (page 64), such assessments mostly come from groups of younger participants from the lowest social classes.

#### CAN DIFFERENCES IN THE INFLUENCE OF PARTICULAR ACTIONS BE EXPLAINED BY DIFFERENCES BETWEEN ACTIONS OR GROUPS OF END-USERS?

In this section we disclose whether differences appear among various groups of end-users when it comes to influence perception. For instance, we compare the beneficiaries of Socrates II and Leonardo da Vinci II programmes, participants of Erasmus and Comenius individual mobility actions, participants of different ages, with different education . . . . If differences do occur, how great are they and which objectives do they occur in connection with? This enables the identification of weaknesses of particular actions and those key factors which influence the power of influence of evaluated programmes and their impacts in Slovenia. Their

management would enable a more successful implementation of funding programmes in education and training.

#### *Comparison of Programmes Leonardo da Vinci II and Socrates II*

First, we were interested whether such differences occur among the end-users of Leonardo da Vinci II and Socrates II programmes. The differences were observed in target groups of both mentioned programmes:

- raising the European dimension of the Slovene education system,
- improving access to educational paths or possibilities for training at the national level,
- raising the quality of education and/or training in an organisation,
- a more intensive implementation of actions for ensuring the equality of opportunities for women and men in the field of education,
- benefits for all programme participants as a result of cooperation.

We found that there are no statistically significant differences in common objectives with regard to perceived influence among end-users of Leonardo da Vinci II and Socrates II programmes. We can say that when tracking objectives of the European dimension, regarding accessibility to education, raising quality, ensuring equal opportunities and cooperation, there are no considerable differences between the impact of Leonardo da Vinci II programme and Socrates II programme.

#### *Common Programme Objectives, Substantively Different Actions, Different Influences?*

In this section, we try to establish whether there are statistically significant differences in contributing to achieving programme objectives. The analysis deals with the objectives common to all actions within a particular programme. In the case of Leonardo da Vinci II, these are: the European dimension, innovation of educational pathways, accessibility, quality, equal opportunities, integration and reintegration, employability, adaptability, competitiveness, entrepreneurship, skills and competences, accessibility for marginalised social groups, discrimination and equality. Influences of the Socrates II programme were compared for the following objectives: European dimension, innovation in an organisation, accessibility, quality, learning European languages, intercultural awareness, equal opportunities, understanding and solidarity, cooperation, investigating common political interests.

As we have already mentioned in section 2.2, interpretation and evaluation can proceed from two basic premises: uniformity of programme objectives and/or specific characteristics of actions. Therefore, this section includes two groups of comparisons. It is possible to compare actions within their ‘parent’ programme or to compare substantively similar actions of different programmes. For instance, Erasmus and Comenius individual mobility actions can be compared within the Socrates II programme, or actions CEDEFOP study visits and Arion (Socrates II programme). When comparing actions within a programme, we appraise which actions are more successful in achieving the objectives of their ‘parent’ programme. In the second case of comparing and evaluating, we tackle the question of why similar actions – or similar programme interventions according to their fundamental purpose, orientation with regard to content, target group or focus – have different influence or impacts. This enables us to appraise the performance of an action since differences in impact can be related to differences in otherwise similar actions. Based on this it is possible to conclude what could be improved in an action with a weaker influence.

Here, we first present the comparisons of actions within the Leonardo da Vinci II programme. These are followed by the comparison of Socrates II actions. From here on, we evaluate programme objectives according to the basic premises of uniformity. Then, we present the comparison of similar actions. We conclude the section by presenting the differences among various end-users.

**COMPARING ACTIONS WITHIN A PROGRAMME** The influence analysis of the actions of the Leonardo da Vinci II programme and CEDEFOP study visits showed that mobilities do not differ in any of common objectives from CEDEFOP action. In other words, the impacts of mobility actions and CEDEFOP study visits in the areas of Leonardo da Vinci II programme objectives are similar.

The comparison of particular actions according to programme objectives of the Socrates II programme showed differences in the following objectives: European dimension, innovation in an organisation, quality, learning European languages, intercultural awareness, equal opportunities and investigating common political interests<sup>12</sup> (figure 3.7). The dia-

12. European dimension:  $F(3.491) = 3.46$ ,  $p < 0.017$ ; innovation:  $F(3.485) = 16.97$ ;  $p < 0.001$ ; quality:  $F(3.484) = 10.93$ ;  $p < 0.001$ ; learning European languages:  $F(3.494) = 6.69$ ;  $p < 0.001$ ; intercultural awareness:  $F(3.486) = 12.36$ ;  $p < 0.001$ ; equal opportunities:

grams only show values of those averages between which the differences in the perceived influence are significantly different. We exactly define the actions among which statistically significant differences occur.

Between actions of the Socrates II programme, differences in influence occur in various areas:

1. Compared with the Erasmus action, Arion action in average has 0.56 greater influence on a 5 level scale<sup>13</sup> with regard to the objective of the European dimension.
2. In the case of the programme objective Innovation in an organisation, significant differences occur only between the Erasmus action and other evaluated actions of the Socrates II programme. These differences range from 1.00 level with regard to action Arion, to 0.72 level with regard to Comenius school partnerships and 0.55 level with regard to Comenius individual mobility.
3. A significantly lower influence of the Erasmus action also appears in the objective Quality in education. Compared with Comenius individual mobility actions, the average difference is  $-0.44$  of a level, and compared with Comenius school partnerships, the average difference is  $-0.56$ .
4. The influence of the Erasmus action significantly differs in the objective Learning European languages as well. Compared with Comenius school partnerships action, the average influence is 0.4 level greater.
5. Significant differences in assessing influence in the area of the programme objective Ensuring equal opportunities are also interesting. Average assessment of Comenius school partnerships action is 0.51 level lower from the average Erasmus action assessment, the difference in comparison with Comenius individual mobility actions, however, is 0.72 level.
6. Significant differences between the Erasmus action on the one hand and Comenius individual mobility actions and Comenius school partnerships on the other hand also occur in assessing influences in the area of encouraging intercultural awareness. In the case of

$F(3.449) = 5.00; p < 0.003$  and investigation of common political interests:  $F(3.484) = 3.05; p < 0.029$ .

13. Since we do not state otherwise, the difference in the impact refers to a 5 level scale. The design of the scale and methodological implications are more thoroughly presented in section 4.

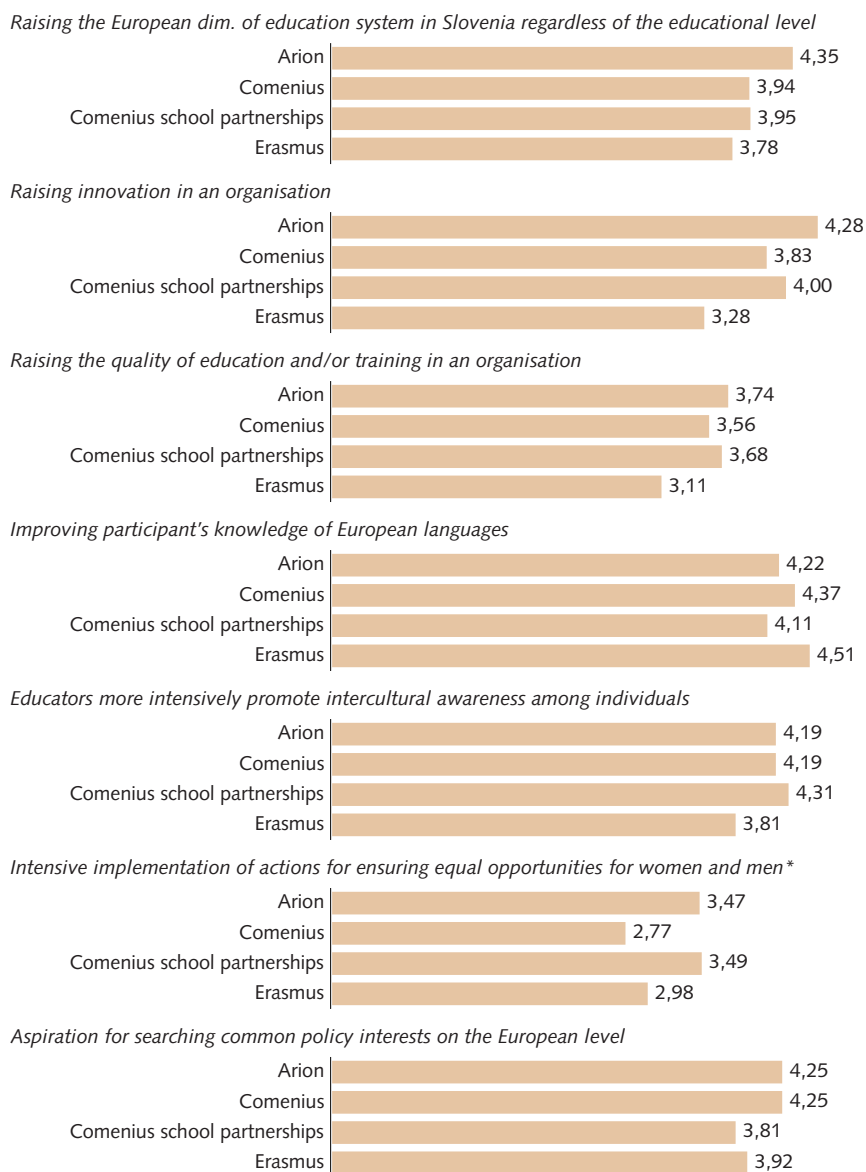


FIGURE 3.7 Influence differences of particular actions of Socrates II (average influence; 1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big; \* in the field of education)

Erasmus action, the average assessment is 0.39 level lower than for Comenius individual mobility actions, and 0.5 level lower than Comenius school partnerships action.

7. Small differences between Comenius individual mobility actions and Erasmus and Comenius school partnership actions also occur in the case of the influence on investigating common political interests. Here, the average assessment of Comenius individual mobility actions is 0.33 level higher than the average assessment of Erasmus action, and 0.44 level higher than Comenius school partnerships action.

By regarding the basic premises of the uniformity of programme objectives, all described actions can be understood and evaluated in a sense that particular actions more or less successfully follow particular programme objectives which, on the programme level, are equally important. In this perspective, it is important to emphasise frequent deviations of Erasmus action. Compared with Arion, Comenius school partnerships and Comenius individual mobility actions, Erasmus action is not as successful a mechanism in achieving a part of common objectives of the Socrates II programme because it has significantly lower influence in as many as five objectives. This is also a clear signal that actions out of the set of all objectives achieve those objectives which are closer to the actions' character. The reasons why these differences occur are explained in the following sections.

**COMPARISON OF SIMILAR ACTIONS** Comparing influences of similar actions is based on differences which have already been presented. Particular explanations and evaluations follow the order of differences documented in the previous section. However, the comparison of actions calls for extreme caution. A direct comparison of actions reveals the difference in influence as a result of a great number of factors which, otherwise, have to a certain extent already been statistically controlled, however not entirely (i.e. specifics of a particular action with regard to the content). Due to missing statistical or experimental control we cannot exactly estimate, in what measure the identified differences are caused by the perception of individuals or organisations and to what extent they are a result of specifics of actions. Nevertheless, it is possible to conclude with certain credibility about the factors which could cause differences in the perceived influence by searching for hypothetical reasons of measured differences in the influence only for factors which differ among actions: action's mechanism (mobility, project), action's focus (individual, organisation) and action's substantive emphases, etc. .

Here, we present the comparison of the actions of the Socrates II pro-

gramme, followed by the comparison of Comenius actions. The section concludes with a comparison of similar actions of different programmes.

1. The difference Arion – Erasmus in the case of the objective European dimension is hard to explain and is hardly useful for the needs of evaluation or improving the success of actions because these actions are very different with regard to content. Longer study mobility, primarily intended for the student population, can hardly be compared with shorter professional visits of educators and experts in the field of general education.<sup>14</sup> The difference in the primary focus of influences of both actions is obvious as well; Erasmus is focused on individuals and Arion on organisations. The explanation for the difference may be hiding exactly here. We are going to show that organisations in most of the programme objectives identify a greater influence than do individuals which, also holds for the objective of European dimension.
2. In the case of the objective Innovation in an organisation, it is reasonable to interpret a pair of Erasmus – Comenius individual mobility actions with similar content where there are mobilities primarily intended for professional development of individuals. The participants of Erasmus action rate the impact 0.55 level lower than the participants of Comenius individual mobility actions. The difference is understandable and expected. We must, however, consider only the substantive focus of Comenius individual mobility action, i.e. in-service teacher training and the fact that the student population – dominating group among Erasmus mobility participants – is not directly related to innovation on the level of higher education institutions. Despite the presented difference in content between both actions, Erasmus action satisfactorily pursues the objective innovation in an organisation. In view of the Lisbon strategy, one should consider that students represent the unused innovation generator and catalyst at organisational level of higher education institutions. We cannot explain the great difference between Erasmus – Arion and Erasmus – Comenius school partnership actions because we would compare actions which substantively differ. By all means it would be appropriate to pay additional attention to these differences and research them.

14. The interpretation considers the fact that students dominate among respondents and that the share of higher education teaching staff is relatively small.

3. Similar conclusions as in the case of previous comparison of Erasmus and Comenius individual mobility actions with regard to innovation in an organisation can be drawn by comparing the mentioned actions with regard to the objective Quality in education.
4. Erasmus and Comenius school partnership actions cannot be directly compared because study abroad which lasts several months in the aspect of how intensely the foreign language is used is different than a short visit abroad where teachers (in the linguistic aspect) still have a lot of 'work' with their own pupils or students. Despite the inappropriateness of comparing Erasmus and Comenius school partnership actions based on Agency's experience, we estimate that the smaller influence in school partnerships is understandable and that we can hardly talk about the poor success of Comenius school partnerships action. The influence in the linguistic field would probably be greater if all teachers would more intensively and directly participate in organisational activities.
5. When explaining the differences in the area of Ensuring equal opportunities in education according to gender, it is reasonable to compare influences of Comenius individual mobility actions and Comenius school partnerships. The actions are substantively related, however, it is important to consider the fact that the influence is in one case focused on the individual and in other case on the organisational level. Comenius individual mobility action has 0.72 level weaker average influence than Comenius school partnerships action. We can look for the explanation in the conclusion of the National agency that individual mobilities substantively never focus on the field of ensuring equal opportunities according to gender. Additionally, the established condition could be a result of the fact that issues of equal opportunities according to gender are actually not dealt with as often as in the field of business or politics because of feminisation of the teaching profession. Substantive comparisons of Comenius school partnerships and Erasmus actions are not reasonable for reasons which have already been mentioned.
6. A similar comparison of actions, as made in the previous point (equal opportunities), is also possible in the area of Encouraging intercultural awareness. It is reasonable to compare the Erasmus action with Comenius individual mobility actions, the first of which



has a 0.38 level weaker average influence. The difference could be attributed to the maturity of participants according to the fact that both students and teachers participate in linguistic-cultural preparations for mobility to the same extent. In this context, it is hard to pass evaluation judgement as a reasonable recommendation for future development of Erasmus action. Substantive comparisons of Comenius school partnerships and Erasmus actions are not sensible.

7. The last is the objective of investigating common political interests. The 0.33 higher influence in Comenius individual mobility actions compared with Erasmus action is explained by differences regarding the content of the action and the characteristics of participants. Students with the primary intention of studying abroad are less interested in common political interests than teachers who have for several years at least been participating in policies concerning education. The difference in content or in substantive focus of the action explains the 0.44 level weaker average influence of Comenius school partnerships action compared with Comenius individual mobility. Since we consider the noticed differences to be small and to belong to the 'essence' of compared actions, we think that additional measures are not necessary.

We can also compare Comenius actions with each other since they have partially similar substantive focuses which can be determined as exchange of educational (curricular) practice. Comenius actions share some of the programme objectives which have not been observed so far. According to school partnerships, Comenius individual mobility on average has a greater influence when it comes to the objective of encouraging vocational development of participants (0.38 level). On the other hand, the influences of school partnerships are perceived by final beneficiaries as stronger in the case of integration and reintegration of students with special needs (0.63 level). The explanation can be drawn from differences in the fundamental substantive emphasis of both actions. Individual mobility predominantly reflects the interests of a particular teacher which are at least to a certain extent related to vocational development. At the same time, vocational development is one of the main purposes of the individual mobility of Comenius action. Contrariwise, the question of integrating students with special needs has more to do with school policies rather than individual's interests. It is true, though, that real in-

tegration of students with special needs cannot be achieved without the active, willing participation of individual teachers.

According to the analogy of comparing substantively similar actions, it is also possible to compare actions of different programmes as long as the actions to be compared have similar objectives. To this end we have compared Arion and CEDEFOP study visits actions. Unfortunately, the comparison was impossible because the assumption of homogeneity of variances was not realized due to low frequencies.

*Differences in Influence Perception among Various Groups of Final Beneficiaries*

In this section, we discuss whether the perception of influences of actions with regard to programme objectives differs among various groups of final users. Thereby, we are interested in the areas defined by programme objectives, in which the differences occur. In our explanations and evaluation, we proceed from the logic which we already presented, namely, that it is possible to explain the differences between various groups of end-users only within similar actions. In that manner alone and in the absence of (statistical and experimental) control, we can credibly assess to what extent the identified differences are a result of differences among end-users and to what extent they are a result of specifics of actions: fundamental mechanism of an action (mobility, projects), substantive emphases, target groups, etc. The comparison of influences perceived by various groups of final beneficiaries enables the appraisal of how particular actions respond. When appraising the response, we establish whether the programme intervention successfully focuses on the needs of a target group of an action or a programme, and lay appropriate foundations for further development of programmes or actions.

In this section, we first observe the differences in the ways in which organisations and individuals perceive the impacts. Then we try to find differences among organisations with regard to the region the organisations come from, their main source of funds, number of all regular employees, number of employees engaged in (international) project work and the number of actions in which an organisation has so far participated. Differences are observed according to the objectives common to actions in which organisations participated: European dimension, accessibility, quality, equal opportunities and cooperation. Among individuals, we can observe: the differences between men and women, various age groups, time passed from last participation in an action,

number of actions which were participated in, various degrees of educational achievement, formal status on the labour market and various socioeconomic groups of individuals. Programme objectives common to actions in which individuals participated are: European dimension, innovation in an organisation, accessibility, quality, learning European languages, intercultural awareness, ensuring equal opportunities, understanding and solidarity, and cooperation. Here, we also deal with the differences which arise in the programme's influence on raising the educational and socioeconomic status.

When we started analysing the influence of evaluated European programmes, we assumed that the self-reporting survey responses do not differ from proxy-reporting survey responses (see section 'Performance of Socrates II and Leonardo da Vinci II programmes in Slovenia' on page 51). In order to check this assumption we had to compare average influence assessments as identified by organisations and average influence assessments as identified by individuals. Of course, such comparison can be made by regarding the first premise of evaluation: programme objectives are equal according to their meaning, and the centre of influence of an action does not differ between the organisational, individual and the national level (more about this in section 2.2).

In this manner, we can observe the differences only according to programme objectives which are common to both groups of final beneficiaries, regardless of which action or programme they participated in:

- The European dimension or influence on raising the European dimension of the Slovenian education system regardless of the educational level,
- accessibility, or influence on improving access to educational paths or possibilities for training at the national level,
- quality, or influence on raising the quality of education and/or training in an organisation,
- equal opportunities, or influence on a more intensive implementation of actions for ensuring the equality of opportunities for women and men in the field of education,
- cooperation, or influence on the benefits for all programme participants as a result of cooperation.

Organisations in all analysed actions averagely identify a significantly greater influence of programmes compared to individuals: European dimension, accessibility, quality, ensuring equal opportunities and coop-

### 3 | Impact of Funding Programmes

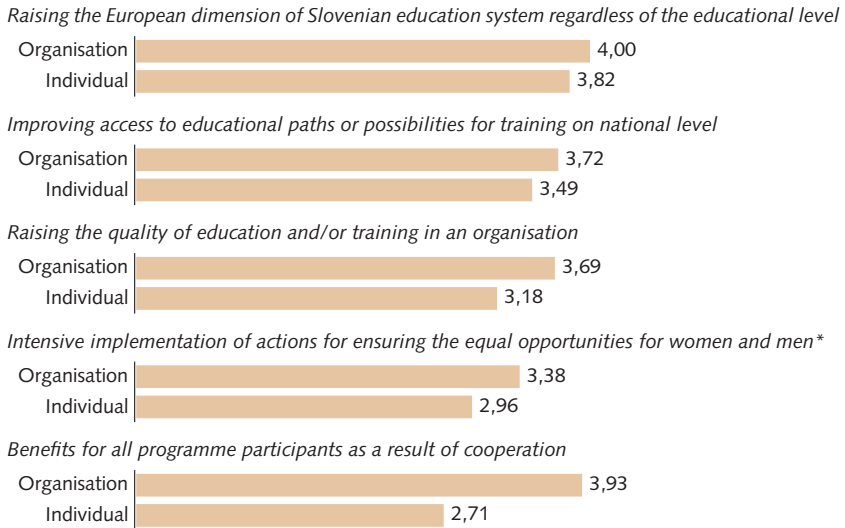


FIGURE 3.8 Influence assessments comparison between individuals and organisations (average influence; 1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big; \* in the field of education)

eration.<sup>15</sup> Differences in the perceived influence between organisations and individuals are shown in figure 3.8. The differences between average values are relatively small in the case of the European dimension, encouraging the impacts of participation and improving accessibility; approximately 0.2 level on a 5 level scale. The difference grows in the case of the following objectives: ensuring equal opportunities (0.4 level) and quality (0.6 level). According to the previously presented assumption of evaluation, the explanation of established differences is difficult or practically impossible. In their comparison, actions differing in mechanism (mobility, projects), substantive emphases, target groups, etc. are equalised. In the absence of (statistical or experimental) control, we cannot estimate to what extent the identified differences are caused by the perception of individuals or organisations, and to what extent they are a result of specifics of actions. If we return to the evaluation premise, we can nevertheless conclude that the influences, and consequentially impacts of actions or programmes, are strongly manifested on the organisational level, rather than on the level of individuals. The issue of the influence

15. European dimension  $F(1,523) = 6.15$ ;  $p < 0.013$ , accessibility  $F(1,512) = 5.26$ ;  $p < 0.023$ , quality  $F(1,516) = 27.09$ ;  $p < 0.001$ , ensuring equal opportunities  $F(1,476) = 11.65$ ;  $p < 0.002$  and cooperation  $F(1,516) = 5.90$ ;  $p < 0.016$ .



FIGURE 3.9 Organisations' main source of financing and the influence in the field of raising equal opportunities (average influence; 1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big)

and impact focus of a particular action from the viewpoint of successes and efficiency of programmes is of great importance and deserves special attention in the future.

According to the number of fully employed,<sup>16</sup> there are no important differences among organisations with regard to influence assessments for selected programme objectives. The same holds for the differences regarding the coordinators in EU projects and the number of organisation's service users. Surprising is the conclusion that the number of actions, which an organisation has so far participated in, does not play an important role in how strong an influence the organisations identify. We have anticipated that the organisations which more often participate in funding programmes in education and training will be more focused on taking advantage of the impacts of European education programmes. The only difference can appear between the organisations raising funds predominantly on the market and the organisations which are predominantly financed by public funds. The latter perceive a greater influence of EU programmes on raising equal opportunities compared to the organisations raising funds predominantly on the market.<sup>17</sup> The difference in the increased influence assessment is almost 0.5 level on a 5 level scale (figure 3.9), while the influence of the action was statistically excluded. Despite several attempts, the mentioned differences could not be explained and were therefore not evaluated. However, we have discovered a new area which will require extensive attention in future research.

Among individuals, we could observe the differences according to their demographic background. Of course, when interpreting differences, we limit ourselves to the substantive context of the actions in which respondents participated: Erasmus and Comenius individual mobility actions. In doing so, we supplement and confirm the already noted findings of compared evaluated actions. Before analysing the age differences among individuals and their perception of the influence of programmes on programme objectives, the individuals were arranged in the

16. According to the definition of the Statistical Office of the Republic of Slovenia.

17.  $F(1.93) = 3,821$ ;  $p < 0.034$ .

### 3 | Impact of Funding Programmes

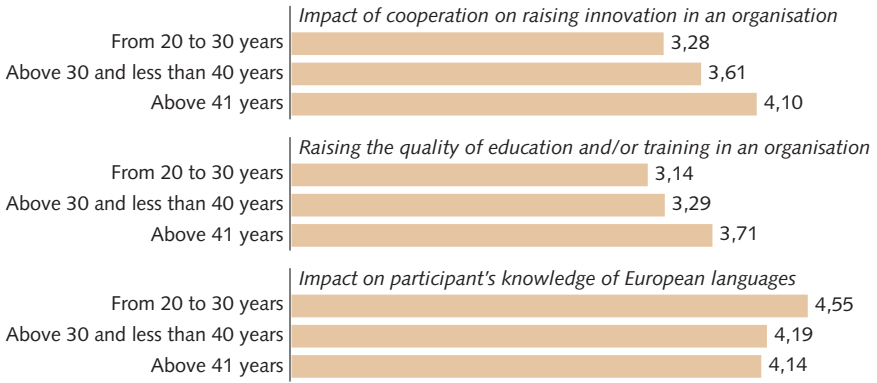


FIGURE 3.10 Participants' age and differences in the identified influence 1 (average influence; 1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big)

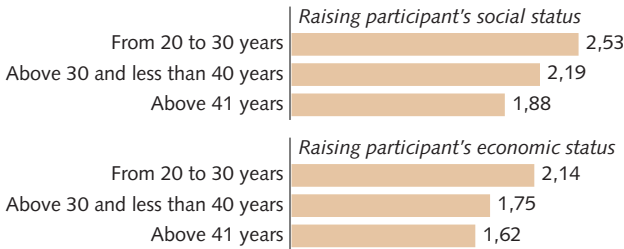


FIGURE 3.11 Participants' age and differences in the identified influence 2 (average influence; 1 – very small, 2 – small, 3 – big, 4 – very big)

following age classes: 'from 20 to 30 years', 'more than 30 and less than 40 years' and 'above 40 years of age'. Let us note that the youngest respondents were 20 years old. The analysis showed that the assessments among the stated age classes significantly differ with regard to the following programme objectives: Innovation in an organisation, quality in education, learning European languages, raising the social status of participants and raising the economic status of participants<sup>18</sup> (figure 3.10 and figure 3.11).

Significant differences occur among the following age groups: Individuals between 20 and 30 years of age averagely assess the influence of programmes on raising quality in education to be 0.57 level lower compared to participants above 41 years of age. In comparison with participants

18. Innovation in developing educational practice:  $F(2.413) = 6.53$ ;  $p < 0.003$ ), quality in education:  $F(2.410) = 3.49$ ;  $p < 0.032$ ); learning European languages:  $F(2.420) = 6.02$ ;  $p < 0.004$ ), raising the social status of participants:  $F(2.397) = 4.97$ ;  $p < 0.007$  and raising the economic status of participants:  $F(2.393) = 4.22$ ;  $p < 0.016$ .

above 41 years of age, the participants between 20 and 30 years of age averagely assess the influence of programmes on raising innovation in an organisation to be 0.8 level lower. Small but significant differences also appear in assessments of influence on the objective of learning European languages. The youngest group averagely identifies a 0.35 level greater influence in comparison with participants in the middle age class (31–41 years old). Statistically significant is also the difference in perceiving the influence of programmes on raising the social status of participants. The age group with youngest participants averagely assesses the influence to be 0.65 level greater compared with the oldest age group. The influence on raising the economic status of participants demonstrates a similar difference. Here, the influence assessment of the youngest age group is averagely 0.53 level greater compared with the assessment of the oldest age group.

We estimate that the observed differences among age classes for the influence on raising quality, innovation and knowledge of European languages are mostly a reflection of the specifics of participants of Erasmus and Comenius actions and consequently of particularities regarding the content of both actions. In the Erasmus action, students dominate who finish a part of their study abroad, only a smaller share is represented by the participants employed in higher education institutions. The Comenius individual mobility actions primarily serve the teaching staff, future teaching staff for their professional growth. Regarding its influence and impact, Erasmus primarily focuses on the level of the individual, contrary to Comenius individual mobility actions, the influences and impacts of which mostly focus on individuals and are tightly related to the primary function and activities in a school (organisation), i.e. pedagogical work. Quality and innovation do not play a significant role for the students whose primary occupation is study, in contrast to the participants of Comenius individual mobility actions who are mainly employed in an environment requiring quality pedagogical work and innovative pedagogical approaches, for which these actions are primarily intended. This explains the greater influence which participants above 41 years of age identify in the field of encouraging quality and in the field of encouraging innovation in an organisation.

A smaller difference regarding perceived influence in the field of learning European languages could be explained by the fact that the participants of the Erasmus action are mainly young students whose mobility lasts at least three months. Participants of Comenius individual mobil-

### 3 | Impact of Funding Programmes

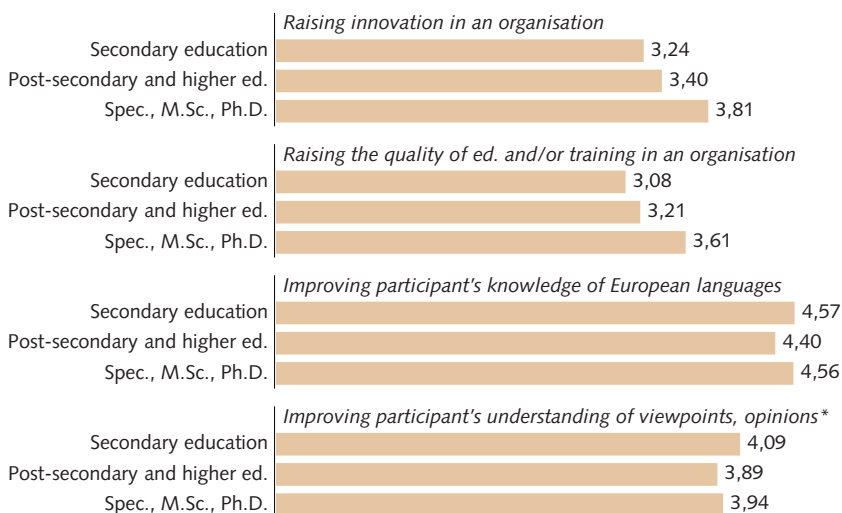


FIGURE 3.12 Participant's education and differences in identified influence (average influence; 1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big; \* and feelings of other individuals within the EU)

ity actions are above 41 years of age, where mobility does not last more than 6 weeks. A longer stay abroad undoubtedly strongly contributes to the knowledge of foreign languages. When evaluating the suitability of compared actions, we can conclude that Comenius individual mobility appropriately addresses the needs of teaching staff in the field of quality and innovation in schools. When assuming that programme objectives are equally important regardless of the action, it is possible to expound the problems of the Erasmus action or its programme objectives regarding the appropriateness of quality and innovation.

A greater influence on young participants in raising their social and economic status can be explained as a prevailing reflection of what students participating in the Erasmus action identified. Young students, compared to participants above 41 years of age, are still establishing their social and economic status and therefore better understand and use the Erasmus action for vertical social mobility. From this point of view, Erasmus seems to be an appropriate mechanism for promoting the social status of youth. This holds to a lesser extent also for economic status. Because of its importance, we dedicate a separate section to this issue.

When observing the differences among participants with different educational levels, a 9-level scale of achieved education (applied in the



Survey on Labour Force during 2005 and 2006) was transformed into the following classes: ‘secondary or lower education’, ‘post-secondary and higher education’ and ‘spec. M.Sc., PhD’. These educational groups significantly differ in the following objectives: innovation in an organisation, learning European languages and understanding and solidarity among EU citizens<sup>19</sup> (figure 3.12). Differences appear between the following educational groups: Individuals with secondary or lower education averagely perceive a 0.58 level weaker influence of evaluated actions on encouraging innovation in an organisation compared to the individuals with specialisation or post-secondary education. Similarly, individuals with secondary or lower education averagely perceive a 0.53 level weaker influence of programmes on quality in education than do the individuals with specialisation or post-secondary education. A significant but less obvious difference occurs in the case of the objective learning of European languages between individuals with secondary or lower education and individuals with post-secondary or higher education. The latter identify a 0.17 level weaker influence of programmes on learning European languages compared to the group with lower educational levels, and a 0.2 level weaker influence on raising understanding and solidarity among EU citizens. The presented differences in raising innovation and quality in an organisation and raising the knowledge of European languages can be understood – similarly as in the previous section – as a reflection of the specifics of Erasmus and Comenius participants and consequently particularities regarding the content of both actions.

It is harder to explain the significantly weaker average influence which individuals with post-secondary and higher education perceive in comparison with individuals with secondary education qualifications. Since we estimate that this difference is a result of factors which were not included in this research, we leave the interpretation and evaluation of this difference to future evaluation studies. It is also true that this difference is so small that it could simply be neglected.

When comparing the groups of participants according to their formal vocational status, we observed the following groups: employed, self-employed, unemployed and students. Significant differences occur among the mentioned groups in the case of the following programme

19. Developing educational practice  $F(2.413) = 4.67; p < 0.011$ , quality in education:  $F(2.410) = 3.88; p < 0.022$ , learning European languages:  $F(2.420) = 3.35; p < 0.037$  and understanding and solidarity among EU citizens:  $F(2.416) = 3.32; p < 0.038$ .

### 3 | Impact of Funding Programmes

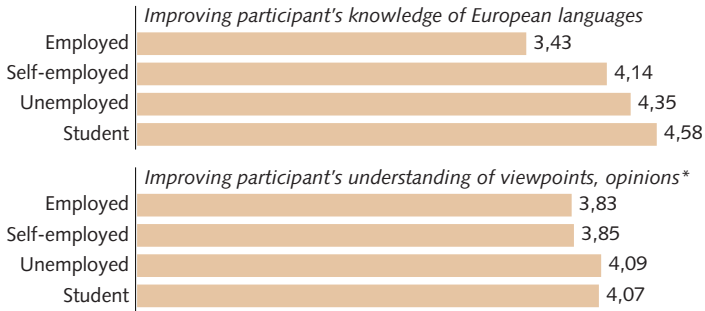


FIGURE 3.13 Labour market status and differences in the identified influence (average influence; 1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big; \* and feelings of other individuals within the EU)

objectives: learning European languages, understanding and solidarity among EU citizens<sup>20</sup> (figure 3.13). Compared with students, the self-employed averagely identify a 0.44 level weaker influence of programmes on learning European languages. Compared with students, the employed averagely identify a 0.24 level weaker influence of programmes on understanding and solidarity among EU citizens.

A small difference in identifying the influence on understanding and solidarity among EU citizens can be searched for in the differences among target groups of actions. The participants of Erasmus action are both students and individuals employed in higher education institutions. It turned out that the average assessment of individuals employed in higher education institutions is very similar to the assessment of individuals employed in schools – participants of Comenius individual mobility actions. Due to longer mobilities and more intensive integration into the foreign environment, the students succeed in developing a better understanding and acceptance of different views, opinions and feelings. According to the experiences of the National agency, the difference of the influence in the linguistic area would be confirmed by comparably shorter mobilities and a different purpose of participation of self-employed in comparison with students. Part-time students who hardly find the time for a longer mobility, namely, belong to the group of self-employed.

The observation of differences in perceived influences of actions among social groups of participants points to the differences in the fol-

20. Learning European languages:  $F(3,417) = 3.92$ ;  $p < 0.010$  and understanding and solidarity among EU citizens:  $F(3,413) = 2.79$ ;  $p < 0.041$ .

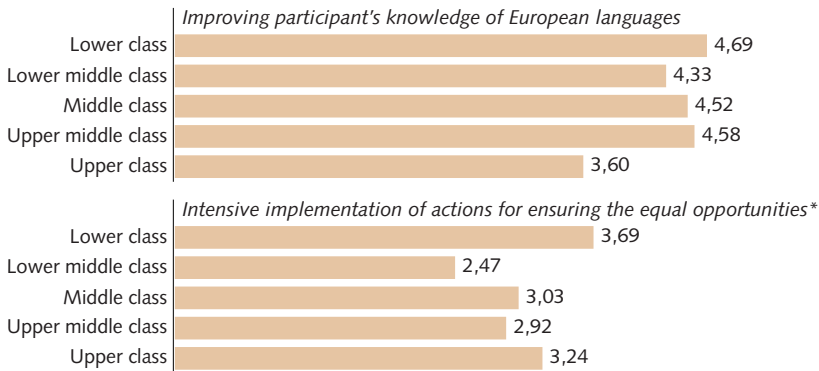


FIGURE 3.14 Social classes and differences in the identified impact 1 (average influence; 1 – no influence, 2 – very small, 3 – small, 4 – big, 5 – very big; \* for women and men in the field of education)

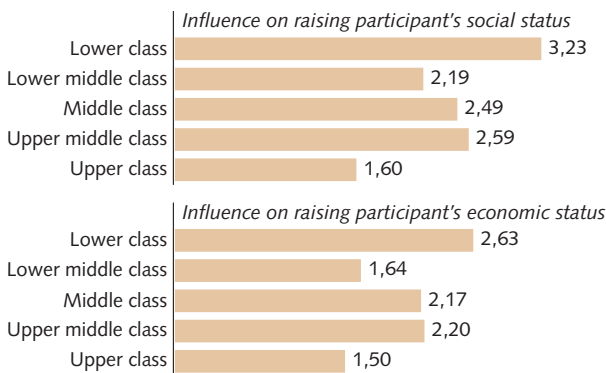


FIGURE 3.15 Social classes and differences in the identified impact 2 (average influence; 1 – very small, 2 – small, 3 – big, 4 – very big)

lowing programme objectives: knowledge of European languages and equal opportunities for men and women in the field of education (figure 3.14). Differences in the identified influence on raising the social status of participants and on raising the economic status of participants<sup>21</sup> (figure 3.15) surfaced as well.

Individuals who consider themselves to come from a higher social class averagely perceive a 0.83 level weaker influence of actions on the knowledge of European languages when compared with individuals from

21. Knowledge of European languages:  $F(4,418) = 3.19; p < 0.015$ ; equal opportunities:  $F(4,378) = 3.64; p < 0.007$ , raising the social status of participants:  $F(4,395) = 4.08; p < 0.004$ , raising the socio-economic status of participants:  $F(4,391) = 4.70; p < 0.002$ .

upper middle class. Those from a lower social class perceive a 1.22 level stronger influence on ensuring equal opportunities in education according to gender when compared with individuals from the lower middle class. A similar but less distinctive difference occurs between individuals from middle class and lower middle class – the latter averagely identify a 0.56 level stronger influence.

Differences regarding the objective of improving the knowledge of European languages can be explained based on the results of additional statistical analysis.<sup>22</sup> Upper middle class is represented by the teaching staff participating in Comenius individual mobility actions<sup>23</sup> and students from wealthier families. The upper class consists of students participating in the Erasmus action and two teachers participating in the Comenius individual mobility action. The mentioned differences occur due to the very low influence which both teachers of the Comenius individual mobility actions identified. This means that any evaluation of this difference would have little sense or meaning.

A similar mysterious difference occurs in the case of ensuring equal opportunities in education according to gender. The analysis showed that even the inclusion of additional variables (gender, status on the labour market, action, age) cannot explain this difference. The difference in perceiving the influence on ensuring equal opportunities so far has not offered a satisfactory explanation and should be paid additional attention in the future.

When compared with lower middle class, the lower class averagely identifies a 1.04 level greater influence of evaluated actions on raising the social status of participants. In the case of the influence on raising the economic status of participants, significant differences occur between the participants from lower middle class on the one hand and the participants from middle and upper middle class on the other hand. Individuals from lower middle class averagely identify a 0.53 level weaker influence compared to those from middle class. Regarding upper middle class, the difference is 0.56 level.

When attempting to explain the influence of evaluated actions on raising the socioeconomic status, it is important first to expose the low assessments of participants from lower middle class. In the case of the influence on social status, these are significantly lower than the assessments

22. Use of multidimensional contingency tables and bivariate variance analysis.

23. Based on the anticipated frequencies in the contingency table Status – action or based on the bivariate variance analysis.

of participants from lower class. In the case of the influence on economic status, however, they are lower than the perceptions of participants from upper middle class.

A thorough analysis<sup>24</sup> showed that the employed participants of the Erasmus action, teachers of the Comenius individual mobility action and two unemployed participants of the Erasmus action contribute to the lower assessment of lower middle social class. Let us also point out the differences in the assessments of various age groups which in the lower middle class are lower among the participants under 31 years of age. The observed difference in the influence on raising the social status of participants is therefore not related to the specifics of an action regarding the content, and also characteristics of the target group of an action. Almost identical observations also explain the lower assessments of participants from lower middle class in comparison with participants from middle and upper middle class.

We suppose that in both cases, these are mostly young individuals who got employed after their mobility. Their high expectations probably turned to disappointment in their first occupation with normally a low salary, simple and unchallenging work with little or no prestige. These results can undermine the hypothetical conception that the lower the individual's social class is, the more he/she can contribute to raising his/her socioeconomic status and, of course, vice versa. The difference in the average assessment of social and economic status, which clearly indicates that participation in actions contributes to raising the social status of individuals more than to raising their economic status, should be brought to attention.

We estimate that the evaluated actions – mostly Erasmus – importantly contribute to raising the socioeconomic status. This especially holds for the youngest group of participants mainly from the lower social classes who 'dominate' in the Erasmus action. In our attempt to evaluate the adequacy of evaluated mobility actions, we can note that the action serves to raise students self-confidence and perhaps to establish their social position among their contemporaries. In this aspect, mobility actions represent an appropriate mechanism, which unfortunately cannot more importantly influence the conditions on the labour market, meaning that within Erasmus, the principle and the programme objectives of pursuing equality and establishing conditions for equal opportunities of all participants are well implemented.

24. Use of multidimensional contingency tables and bivariate variance analysis.



# 4

## Research Framework of the Evaluation and the Applied Research Approach

In this section, we present the research framework and methods utilized in evaluation. We also present a critical view of the applied methodology by mainly questioning the validity of the results obtained.

The research framework and the evaluation process build on the evaluation approach which the evaluation literature (Rossi, Freeman, and Lipsey 2004; Patton 1997; Fitzpatrick, Sanders, and Worthen 2004) designates as '*programme evaluations*'. When planning and carrying out the evaluation, we considered the general principles and procedures of the social research process (Bachman and Shutt 2007; Babbie 2007; Toš 1988). Let us emphasise again that according to the approach of *utilisation focused evaluation* (Patton 1997), we devoted special attention to incorporating various primary stakeholder groups in all phases of the evaluation process because from the outset we have wished for the evaluation results to be valid and, of course, used. To this end, a project group was established, as well as a virtual office and project committee. Besides, the evaluation team was obligated to publish the results of the evaluation.

From the very beginning, the primary objective of the evaluation – i.e. impact assessment of the Socrates II and Leonardo da Vinci II programmes – represented a great research challenge. Valid influence and consequentially impact assessment of programmes usually requires at least a quasi-experimental or experimental research approach (Rossi, Freeman, and Lipsey 2004) which in the given situation was not possible. The evaluation was carried out retrospectively i.e. in ex post context, without the possibility of either monitoring or manipulating the amount of actual programme intervention, of which the programme end – users were part. The available data on programme end – users also did not allow for establishing a control group which did not receive programme intervention although their application has been approved. It was also impossible to measure the opinions and attitudes regarding the areas determined by programme objectives before and after the final beneficiaries participated in an action. An additional problem derived from the fact that many different actions were evaluated within one programme

which actually pursued common programme objectives but had different substantive emphases and different end user/target groups. Measuring influences in areas determined by programme objectives and/or trying to establish impacts in the same areas would in this case include measuring the presence or absence of numerous programme intervention effects. This would practically render impossible the attempt to quantitatively assess programme impacts at the national level.

These limitations forced us to consider using the evaluation approach of monitoring results or direct impacts of programme intervention which the literature characterises as ‘*outcome monitoring*’ (Rossi, Freeman in Lipsey 2004), or ‘*programme outcome performance measurement*’ (Martin and Kettner 1996). We additionally limited ourselves to using and adjusting the principle of measuring the end users’ satisfaction with (programme) services. The adjustment was focused on measuring the perception of influence which an evaluated action had on an end user in the areas defined by programme objectives. The impacts of evaluated actions were then assessed and evaluated based on the measured perceptions of influence. As an example, we were interested in how the final beneficiaries assess the impact of cooperation in evaluated actions on the areas of personal or organisational life which are laid out in the programme objectives of evaluated actions.

The principle of measuring programme outcome performance with direct numeric counts was not used. Due to the large number of evaluated actions which actually pursue numerous common programme objectives but are implemented in different contexts, we have decided that the identification of direct numeric counts which would directly indicate the actual impact and, partially, influence of a programme intervention is not reasonable.

The presented research framework is limited by the quality of perceived programme/action influence measurement. An additional problem is posed by the absence of clear performance criteria or evaluation standards according to which the established influences and impacts could be assessed. For this purpose, we use the quality criteria of the national agency shaped by everyday practice and actual broader policy orientations at the European level during 2000–2006 (Lisbon Strategy, Memorandum of Lifelong Learning, Five Benchmarks for education and Training, Education & Training 2010, Common Quality Assurance Framework (CQAF), Resolution binding the Member States to prepare a mobility action plan on national and European level, Report on the



mobility of students, trainees, volunteers, teachers and trainers/mentors within the European Community, National Programme of Higher Education in the Republic of Slovenia; Resolution on the Adult Education Master Plan in the Republic of Slovenia, and the National Development Plan of the Republic of Slovenia for 2001–2006). The third limitation of the evaluation lies in wilful focusing on programme objectives of evaluated actions. The presented evaluation framework thus offers a ‘tunnel view’, ignoring the impacts of evaluated actions which are not part of the programme objectives. We are well aware of all the enumerated limitations. Our evaluation – mostly its evaluation approach – after all represents the initial attempt at measuring the impacts of funding programmes in education and training in Slovenia, and can be compared with the few European countries where this has already been done. In the concluding part of this section we give a more thorough presentation of improvements which would greatly remove the stated deficits in the process of further development and refinement of evaluation framework.

The following section presents the development of the instrument, applied for measuring impacts.

#### 4.1 Evaluation Framework and Methodology

The perceptions of the influence of evaluated programmes on individuals and organisations were measured with an online survey questionnaire. The decision was based on the nature of the already described research problem. Besides, the contracting authority regularly communicated with end users and partner organisations via e-mail and thus ensured access to e-mail addresses of relevant end users and partner organisations. Here, we present the process of how the survey questionnaire was developed, how data were obtained and analysed. In doing so, we point out the assumptions and limitations of the selected approach.

In the first step, we concentrated on forming the structure of programme objectives. General programme objectives of the Leonardo da Vinci II programme are laid out in Council Decision 1999/382/EC, and in Council Decision no. 253/2000/EC for the Socrates II programme. As regards the structure of programme objectives, particular actions within a programme entirely incorporate the general objectives of their parent programme, whereas each action also has a few specific objectives. There is a possibility that in decentralised actions, Member States themselves search for and use synergetic impacts of funding programmes in edu-

cation and training. Since there were no such additional orientations in Slovenia, we formed a hierarchy of objectives based on the stated Council Decisions ranging from evaluated programmes to the corresponding actions. Due to the hierarchical structure of programme mechanisms, we chose the programme action to be the basic unit of evaluation which enabled us to observe differences both among actions as well as between the evaluated programmes. Afterwards, we focused on the conceptualisation of generally determined and abstract objectives laid out in the fundamental programming documents. In doing so, we consulted the available literature (Saris and Galhoffer 2004; Bachman and Schutt 2007; Babbie 2007; Neuman 2003) in order to identify the appropriate concept dimensions which represent the core and essence of programme objectives in accordance with the content of EU decisions. Experts from the field of higher education and national coordinators of European programmes were also consulted to check the selected dimensions of programme objectives for face validity. Results on the phase of conceptualisation are partially shown in table 4.1.

In the following phase of operationalisation, we composed the survey questionnaire based on the decision on the way of assessing impacts and on the determination of areas where the impact will be assessed. The impact of Socrates II and Leonardo da Vinci II programmes or actions was operationalised as a perceived influence which the participation in an action had in the field determined by a programme objective. The dependent variables – perceived influence of evaluated actions according to particular dimensions of a programme objective – were measured with a 5-level, one-dimensional, progressive Likert scale (see also DeVellis 2003).

We are aware that impact can be positive or negative. In other words, an evaluated action can stimulate or hinder changes in particular areas and result in greater or smaller influences in the environment. Due to the simplification of the survey and better measurement accuracy, the specification of impact direction was incorporated in each survey question. When creating survey questions, we considered the fundamental instructions for creating survey questions (Babbie 2007; Groves et al. 2004). Operationalisation phase outputs are partially presented in table 4.2.

In the absence of research studies or evaluations systematically analysing factors or determinants explaining the influence or impact of funding programmes in education and training in national environments on

TABLE 4.1 Conceptualisation of the objective Innovation in an organisation within the actions of Socrates 7 programme

Procedure ----->			
Programme objectives in the structure of programme objectives (reference)	Fundamental concept and programme context	Evaluation level	Conceptualisation – concepts dimensions
Socrates II: Socrates (Art. 2, sect. c)* Socrates (Art. 2, sect. d)* Grundtvig (Annex)** Comenius (Art. 2, sect. d)**	Concept: Innovation 1 Context: '... of other educational pathways' (Grundtvig) '... in the development of educational practices and materials including, where appropriate, the use of new technologies' (Socrates)	Individual, organisation	Innovation – definition: act or process of implementing an idea, resource, service, practice which is characterised by: (a) <i>being new (or improving the existent) and (commercially) applicable</i> , (b) increasing the capability of using technology, (c) representing the use of <i>technology in new contexts, spreading the capacity of technology</i> , improving product capacity

NOTES \* Fundamental programme objectives. \*\* Action-specific objectives. The concept dimensions in italics are appropriate according to the context of the programme objective. Adapted from European Parliament and the Council 2000.

the end-user<sup>1</sup> level, independent variables were selected in cooperation with the contracting authority. When identifying independent factors which would explain the differences among final beneficiaries, we leaned on practical, everyday experiences of the contracting authority. First, separate surveys for organisations and individuals were developed. In the case of individuals, we were interested in possible differences with regard to gender, age, number of previous participations in EU programmes, time passed from last participation in EU programmes, educational level

1. It is necessary to consider that the methodological framework of the evaluation was developed at the beginning of 2007, when the results of the final evaluation of Socrates II, Leonardo da Vinci II and eLearning had not yet been published. Possible reports of National agencies on the accomplished evaluations were not found when reviewing professional, scientific and other publicly accessible databases.

TABLE 4.2 Cooperation objective operationalisation for the actions of Socrates II programme

Procedure	Evaluation level	Conceptualisation – concepts dimensions	Operationalised dependent variable
<p>Fundamental concept and programme context</p> <p>Programme: Socrates II</p> <p>Concept: Cooperation 2</p> <p>Context: ‘This programme shall contribute to . . . by (a) developing a European area of cooperation in the field of education and vocational training and (b) encouraging transnational cooperation between schools, universities . . .’</p>	Individual, organisation	<p>Cooperation – definition: ‘working in common, commonly agreed upon goals and possibly methods’</p> <p>Dimensions: (a) synchrony – the relation that exists when things occur at the same time [a useless dimension, since this occurs with all programmes], (b) symbiosis – both receive an advantage from the association [quest. no. 2], (c) group selection – selection for traits that would be beneficial to a population at the expense of the individual possessing the trait [a useless dimension, since this occurs with all programmes], (d) catalysis – the increase in reaction rate as a result of the addition of a catalyst [quest. no. 3], (e) commons – resources we all have to use to survive, but which we do not have to pay for, resources subject to common use [quest. no. 4], (f) collective action – actions taken by a group or collective, collective action is concerned with the provision of public goods [quest. no. 5], (g) collective intelligence – that which overcomes ‘groupthink’ [people think alike and new ideas are not tolerated] and individual cognitive bias in order to allow a relatively large number of people to cooperate in one process, very rigorous consensus decision making [quest. no. 6, 7]</p>	<p>Assess the influence which cooperation within Socrates programme has had on [no influence at all – very small – small – big – very big influence]: (1) increase in transnational cooperation between educational organisations, (2) benefits for all programme participants as a result of cooperation, (3) faster development or achievement of positive impacts compared with educational organisations which do not participate in funding programmes in education and training, (4) formation of common impacts or sources which all organisations or individuals participating in a project can use without limitations, (5) ensuring public assets as a result of transnational cooperation between educational organisations, (6) exceeding the tendencies towards ‘thorough thinking’ or ‘rigorous consensual decision-making’ within your organisation, (7) exceeding the ‘resistance to new ideas’ within your organisation</p>

and social status attained. As regards the organisations, we observed the number of previous participations in EU actions, size of an organisation (expressed in the number of employees and in the number of service users), main source of financing: on the market or by public funds, statistical region in which an organisation is located, and the number of employees responsible for the participation in EU programmes.

The survey questionnaire was divided into the general part (figure 4.1) and special part (figure 4.2). Such a design of survey questionnaire corresponds with questionnaires of similar evaluations in Europe (MODE 2006; Association for Empirical Studies [...] 2007).

#### SAMPLE OR POPULATION?

Sampling was not part of the evaluation framework. Evaluation targeted all individuals and organisations who/which during 2000 and 2006 participated in the evaluated actions and whose e-mail addresses were stored in the data bases of the contracting authority. Before activating the web survey, the addresses were grammatically corrected and sorted out according to participation in particular actions. The addresses of organisations were systematically updated. An e-mail with a survey invitation with a link to the appropriate questionnaire was then sent to the gathered e-mail addresses. In line with the basic unit of evaluation, being a particular evaluated action, we determined the population (census) in the statistical analysis. This also enables the evaluation to be carried out on the programme level, and the population to be considered in broader terms encompassing final beneficiaries of all evaluated actions of a particular programme. Table 4.3 presents the populations according to particular actions. In addition, response rates are shown as well.

In the web survey, a total response of less than 20 percent was expected. In comparison with other types of surveys, the response rates of web surveys are usually lower (Lozar Manfreda et al. 2007). The presented numbers of end users according to evaluated actions clearly indicate that we are dealing with the analysis of small populations. Although the survey was addressed to the entire population (census), the influence was estimated based on less than 20 percent of returned questionnaires. For this reason, respondents were treated as a sample.

The greatest challenge in analysing small populations is to ensure a sufficiently large percentage of population responding. There are two reasons for this: improving parameter estimates and lowering non-response bias. The question is whether this is enough for the validity

## Arion - splošni podatki

**Navodilo:** Prosim izberite en odgovor, ki najbolje ustreza vaši instituciji in ga označite s klikom miške.

Kjer to ni predvideno, vnesite zahtevano število. Kjer ni navedeno drugače, označite le en odgovor v vsaki vrsti.

Pomikanje med posameznimi stranmi ankete zahteva, da so na trenutni strani pravilno izpolnjeni vsi podatki. V nasprotnem primeru vas bo računalnik ob poskusu prehoda na novo stran zadržal na obstoječi strani in napačno izpolnjena oz. neizpolnjena vprašanja označil z opozorilnim znakom in ustreznim navodilom.

Navedite skupno število akcij EU programov Socrates in Leonardo da Vinci (Comenius, Erasmus, Gruntvig, Arion, Leonardo da Vinci – mobilnost, Leonardo da Vinci projekti, CEDEFOP), v katere ste bili do sedaj kot institucija udeleženi:

Trenutno število redno zaposlenih v vaši instituciji:

Trenutno število ljudi, ki tvorijo stalno jedro, ki skrbi za sodelovanje v EU programih:

Trenutno skupno število uporabnikov storitev vaše institucije (dijaki, učenci, odrasli...):

**Vaša institucija si zagotavlja svoje vire pretežno:**

- iz javnih sredstev (več kot 50%)  
 na trgu

**V kateri regiji se nahaja sedež vaše institucije:**

- 1 Pomurska  
 2 Podravska  
 3 Koroška  
 4 Osrednjeslovenska  
 5 Gorenjska  
 6 Savinjska  
 7 Zasavska  
 8 Spodnjeposavska  
 9 Jugovzhodna Slovenija  
 10 Notranjsko-kraška  
 11 Goriška  
 12 Obalno-kraška

FIGURE 4.1 The general part of the survey questionnaire

Navedeni so različni vidiki, na katere bi lahko akcija v okviru programa Socrates, ki ste se jo udeležili, imela vpliv. Za vsak posamezen vidik s pomočjo dane lestvice ocenite, v kakšni meri je akcija, ki ste se jo udeležili, vplivala na:

	sploh ne	zelo malo	malo	precej	zelo	ne vem, b.o.
a) izboljšanje vašega razumevanja stališč, mnenj in občutkov drugih posameznikov znotraj EU	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	9 <input type="radio"/>
b) lažje prilagajanje razlikam med različnimi narodi in etničnimi skupinami znotraj EU	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	9 <input type="radio"/>
c) na solidarnost z državljani članic EU	1 <input type="radio"/>	2 <input type="radio"/>	3 <input type="radio"/>	4 <input type="radio"/>	5 <input type="radio"/>	9 <input type="radio"/>

FIGURE 4.2 The special part of the survey questionnaire

TABLE 4.3 Action populations and response rates

	Institutions				Individuals			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Arion	46	9	2	20,45				
Cedefop	43	4	5	10,53				
L. da Vinci	213	26	51	16,05				
Comenius	248	66	38	31,43	242	57	33	27,27
Grundtvig	30	3	2	10,71	46	5	5	12,20
Erasmus	8	0	0	0,00	3026	369	550	14,90
Sum	588	108	98	22,04	3314	431	588	15,81
Overall	3902	539	820*	17,49				

NOTES Column headings are as follows: (1) invited, (2) responded, (3) unknown address, (4) response rate (%). \* Including 134 unknown return mail notifications.

of evaluation results? In the analysis of small populations, the accuracy of statistical estimates depends on:

- actual size of the entire population,
- share of the population which responded to the survey,
- desired accuracy of statistical estimation, and
- segmentation and degree of response variance in the target population which cannot be assessed prior to carrying out the analysis (Van Bennekom 2002).

Based on this, we concluded that the estimations of both organisations and individuals participating in the Grundtvig action and of organisations in the Erasmus action were inaccurate and were therefore excluded from further analysis.

The effects of non-response can be ignored if we assume that these do not affect the quality of survey results (Fox and Tracy 1986). Thereby, we assume that the reasons for non-replies are not related to key statistics or evaluation parameters. In our case, we assume that – according to the finding that all frequency distributions of dependent variables were asymmetrical to the right (shifted towards higher influence assessments) – the participants who perceived a low influence of funding programmes in education and training responded as frequently as the participants who perceived a strong influence. The fair share of non-replies (20 per cent) can be explained by the specifics of the evaluation situation, although in self administered surveys we cannot distinguish between rejection and non-contact (Groves et al. 2004). System rejected e-mail (re-

jection by e-mail server) undoubtedly represents non-contact. One must consider that in the time span which the evaluation refers to, some e-mail addresses were more than 6 years old. Due to the dynamics of everyday life, e-mail addresses change quickly. One of the reasons can also be found in changing internet service providers, simple creation of e-mail addresses, possibility of creating numerous internet identities and changing occupations which usually result in the termination of official e-mail addresses. Anticipating high non – response rates, we tried to compensate for the above mentioned deficiency by monitoring and correcting automatically bounced e-mail. According to this, the rejected e-mails were subsequently checked and invitations were resent. The possibility of selecting inappropriate units as a source of error for non-replies is estimated to be negligible since the target population was entirely known and directly addressed. Thus, we can assume that the remaining share of non-replies represents the refusal to respond.

What about other sources of error in our survey? The quality of surveyors' work and data processing can be excluded as a source of error because these phases occurred automatically. The situation is similar with the sample frame error since the entire population of final beneficiaries of a particular evaluated action, whose addresses were stored in data bases of the National agency, was included. Measurement errors resulting from respondents, forms of survey questions and measuring instrument (reliability, validity and sensitivity) are discussed separately later on.

The fundamental source of error dwells in the deviation from probability sampling. In these cases, any conclusions at the population level are based on the knowledge of outside statistics (Gerstman 2007), therefore, together with the National agency we made an overview of basic characteristics of responding individuals and organisations in the phase of preliminary data analysis. Together with the contracting authority, we share the opinion that despite the low response rates, the basic respondent characteristics of both organisations and individuals correspond with the characteristics of the entire end user population, and that non-response is not related to lower influence assessments of funding programmes in education and training.

#### SURVEYING PROCESS

The questionnaire development was followed by a test survey. The survey was first tested and reviewed by national coordinators of particular actions at the National agency, and afterwards by end-users in two sample



organisations, whereas the surveys both for individuals and for organisations were tested. We also checked the clarity of the survey invitation text. Special attention was paid to the open ended question responses placed at the end of the test survey, where respondents were asked to report on questionnaire clarity and possible technical difficulties which they encountered in the survey. Interviews were also conducted with national coordinators of particular actions and with individuals who participated in the organisational survey. On the basis of the obtained data, we corrected some survey questions and survey data input controls. We also replaced the question about the individual's social status. Instead of MacArthur's scale of subjective social status (Goldman, Cornman, and Ming-Cheng 2006; Adler and Stewart 2007), we applied the categorical ordinal scale of social strata (Hoffmeyer-Zlotnik and Krebs 2000) used also in the Slovene public opinion survey.

In order to achieve good response rates, end – users were informed about the research in two stages. First, the contracting authority mailed the the organisations official invitations with explanations about the purpose of the research and asked them to participate. Organisations were asked to notify the participants of concerning actions about the forthcoming survey. Afterwards, survey invitations were e-mailed including the link to the appropriate web survey. E-mails were sent automatically in preset time intervals in order to avoid automatic SPAM filters.

Respondents were able to fill out the survey only once, since this process was monitored by a cookie. The process of filling out the survey was supported by data entry monitoring. It was impossible to jump to the next page of the survey until all fields were filled out. In the case of wrong or incomplete entry, respondents were automatically warned about the missing or false data. Respondents had the possibility to contact the survey administrator whose e-mail address was included in the survey invitation and in the acknowledgment at the end of the survey. The course of surveying was also monitored through the number of filled out questionnaires according to particular actions, the rejected invitations and messages sent to the survey administrator. In this way, we at once successfully managed to solve the technical problems of accessing the questionnaire. Some beneficiaries also applied to participate in the survey based on regular mail notification because they had not received the e-mail invitation due to invalid e-mail addresses. Due to 100 percent non-response of organisations in the Erasmus action, the contracting authority once again called for their participation in the survey which again resulted in a poor

response. As regards the survey time limit, a deadline was set for the participants to fill out the questionnaires.

#### ANALYSIS

In the first step of data analysis, we first examined the obtained data and their coding for the needs of statistical analysis with SPSS software. Afterwards, a preliminary data analysis was carried out by following the established procedures (Morgan et al. 2004; Field 2005): checking the size of particular groups, examining data distribution and missing values. In order to check the respondent made errors, we also examined the structure of answers, which led to the subsequent exclusion of two respondents. Afterwards, the univariate analysis of final beneficiaries' characteristics was carried out, followed by factor analysis with which we checked the validity of the survey questionnaire. The analysis was concluded by comparing the perception of influences among particular groups. After the concluded statistical analysis and preliminary interpretation of results, the contracting authority was again included in the phase of results interpretation. Below, we continue with the description of applied multivariate statistical methods.

The questionnaire validity was first ensured with the consistent conceptualisation and operationalisation procedure. Moreover, validity was also checked by estimating the inner consistency (construct validity) and non-dimensionality of concepts with the aid of factor analysis. We were mostly interested in the confirmation of theoretical derivations of dimensions of particular observed concepts. In other words, we were examining whether the selected dimensions, e.g. quality, really correspond with the concept of quality. With the aid of factor analysis, we observed scale item correlations within each scale, *scree* diagram, criterion of eigenvalues above 1, 'boundary role' of the second factor i.e. share of explained variance by the second factor, and the change in factor weights after factor rotation. The values of  $\kappa_{MO}$  statistics ranged between 0.75 and 0.89, Bartlett's test was in all cases below 0.05. The lowest communality was 0.45, whereas majority communalities were usually around 0.70. All analysed concepts according to the eigenvalue criterion above 1 and according to the *scree* diagram implied that the scales have only one factor i.e. common concept. The factor structures were stable and indicated that the first factor is general with high factor weights. At this point, we should mention the exception in the case of the concept of learning European languages, where it turned out that we have to distinguish be-

tween the influence on the auditory understanding, oral understanding and the reading ability on the one hand, and the influence on the interest in learning foreign languages.

Factor analysis thus showed that the scale average represents the appropriate influence measure in a particular programme objective area. The scale average also included the general item, since factor analysis showed that in most cases the general indicator of the concept would not appropriately reflect the remaining scale items. Answers like ‘I do not know’, or ‘No answer’ were coded as missing values. The average value on the scale was calculated using pairwise missing value deletion. This means that the average influence for a particular objective was not calculated only if the values of all items were missing.

With the analysis of variance method, we compared the averages among individual groups within the sample. We were interested whether the perceived influence of evaluated actions on particular programme objectives differs with regard to the differences in general or demographic characteristics of analysed units. In this manner we tried to identify the key factors according to which individual groups within the sample (or population) significantly differ. We tried to establish whether one or several independent variables which determine the groups in the sample (e.g. age) affect the independent random variable (influence in the case of learning European languages).

Observing the influence differences in the objectives common to evaluated actions and not differing with regard to evaluation level (individual/organisation), action mechanism or action content enables us to identify the possible reasons for the observed differences among actions. In other words, we can observe if in some target areas the actions differ in the influence which they exert on end-users. However, the comparison of actions calls for extreme caution. The established difference resulting from a direct comparison of actions can be caused by numerous factors which, otherwise, have to a certain extent already been statistically controlled, although not entirely (content specifics of a particular action). Due to missing statistical or experimental control, we cannot exactly estimate to what extent the identified differences are caused by the perception of individuals or organisations and to what extent are they a result of actions’ specifics. However, it is possible to credibly conclude to a certain extent which factors could cause the differences in the perceived influence. This can be done by identifying the hypothetical causes for measured differences in influence for those factors which differ among

actions: action's mechanism (mobility, project), action's focus (individual, organisation), action's substantive emphases, etc. . Thus, we are trying to establish whether and among which actions statistically significant differences exist in the influence which they have on achieving common programme objectives. When analysing the impacts on end-users, we can identify differences which occur between individuals and organisations according to their perceptions of influence with regard to the cooperation in funding programmes in education and training. Moreover, when it comes to individuals, we can observe differences according to gender, age group, time passed from last participation in an action, number of actions which were participated in, education, formal status on the labour market and socioeconomic status. In the case of organisations, differences can be observed according to the region which organisations are located in, source of funds, number of staff engaged in EU programmes, number of all regularly employed, and number of actions in which they have so far participated. Thus, we can conclude about which are the end – user characteristics that lead to a stronger action/programme impact.

The analysis primarily relies on the use of a simple analysis of variance model with one single factor i.e. One-Way ANOVA. If there is suspicion of two or more correlated factors affecting the dependent variable, the *f* multi-factor analysis of variance (Two-Way or factorial ANOVA)<sup>2</sup> is utilised.

The analysis of variance method is limited by the number of assumptions,<sup>3</sup> which refer to the general question of the measurement and statistical procedures validity, as well as to the distribution of variables. Analysis of variance is a relatively robust method when it comes to meeting the assumptions, whereas SPSS always checks key assumptions. Next, we are going to devote ourselves to the following key assumptions as stated by Gerstman (2007):

- the assumption of random sampling; samples are random and not interdependent,
- the assumption of multivariant normality: the dependent variable distributes normally, and

2. If there are correlations between dependent variables or if these are conceptually connected, it is reasonable to apply the multiple variance analysis (MANOVA). Multiple variance analysis within the framework of this analysis was not carried out.

3. Refer to Garson (2007) for an extensive overview of analysis assumptions.

- the assumption of variance homogeneity: variances of samples are approximately equal.

Analysis of variance is relatively robust towards deviation from normal distribution of the dependent variable as long as the distribution is symmetrical (SPSS 2005; Garson 2007; Page, Braver, and MacKinnon 2003). In the absence of distinctive outliers and in the presence of distribution symmetry due to the influence of the central limit axiom, analysis of variance is relatively robust towards the assumption of the normality of distribution. In this manner, analysis of variance is applicable on samples of at least 4 or 5 units in size for a particular group (Garson 2007). Strong deviation from the assumption of normality of dependent variable distribution is reflected in the homogeneity of variance test. Considering what we stated, and the fact that in our analysis we are dealing with a great number of independent variables, we left out the systematic and in-depth checking of multivariate normality of distributions. In cases where there was suspicion of distinctive deviation from normal distribution, histograms were checked with an additional curve of hypothetical normal distribution, as well as the QQ diagram, PP diagram and Kolmogorov-Smirnov test of the normality of distribution.

The assumption of variance equality is systematically tested during the course of analysis of variance, as mentioned before, and is indirectly evaluated for each variable. It was performed with the Levene test of variance equality which, compared with the Bartlett test, is less sensitive to the assumption of multivariate normality of distribution. In so far as it was established that a particular variable does not meet the assumption of variance equality, the Welch and Brown-Forsythe tests were considered in addition, which are intended for the cases where the sizes of groups strongly differ or where the distributions are strongly asymmetrical (Garson 2007; Field 2005). With regard to meeting or not meeting the assumption of variance equality for the needs of identifying statistically significant differences among a greater number of groups, following tests were used. If the condition for variance equality was met, we used the Hochberg  $G_{T2}$  test. This test was selected because of the anticipation that differences in the size of groups will often be present – a case for which this test is most suited (Field 2005; Garson 2007; Page, Braver, and MacKinnon 2003). If the condition for variance equality was not met, we applied the Games-Howell  $G_H$  test (Page, Braver, and MacKinnon 2003; Gupta 1999). If the analysis of variance showed significant differ-

ences and at the same time differences among variances and the equality of averages were established, possible differences among individual groups were also researched with the aid of non-parametric the Kruskal-Wallis test.

# 5

## Conclusions and Proposals

The concluding section includes the summary of research findings, a critical view of the accomplished evaluation and the presentation of what the future holds. Conclusions and proposals are presented separately for the substantive – policy field and for the technical – research field of future development of mechanisms for monitoring and evaluating funding programmes in education and training in Slovenia.

### 5.1 Substantive Findings and Recommendations

This chapter includes the presentation of findings and conclusions regarding the impact assessment evaluation of funding programmes in education and training in Slovenia. The findings refer to the Socrates II and Leonardo da Vinci II programmes in the programme period 2000–2006 respectively to the following actions: Arion, Comenius school partnerships and host schools for Comenius assistants, Comenius individual mobility, Erasmus student and teacher mobility, practical education and training in the Leonardo da Vinci II programme and CEDEFOP study visits.

Impact evaluation of funding programmes in education and training, Socrates II and Leonardo da Vinci II, showed that both individuals and organisations perceive an important influence in their participation in these programmes. This means that generally, the impacts of actions for all objectives or evaluated areas are assessed at least as being small. It is possible to confirm that all evaluated actions within both evaluated programmes were successful to certain extent.

Actions also have an influence on raising formal education. This conclusion is important mostly because it has become obvious that participants understand individual mobility primarily as an education process and not as ‘academic tourism’. This, however, points to a certain level of maturity of individual mobility actions, despite the fact that Slovenia is part of the first generation of the programme. The role of funding programmes in education and training in raising formal education is more than obvious in the present knowledge-based society.

When discussing the characteristics of end-users in Slovenia, it is important to point out that in funding programmes in education and training, men are under – represented. This especially holds for the Erasmus action. A relatively great share of participants from middle and upper middle class participated in the evaluated actions. Regarding the organisations, some regions with relatively strong school centres are underrepresented, for instance Southeast Slovenia with Novo mesto and Črnomelj. The remaining characteristics of final beneficiaries correspond with the nature of target groups of particular actions.

Another important finding of this evaluation is that the evaluation of the Socrates II and Leonardo da Vinci II programmes does not result in significant differences among common objectives. However, these do occur among the actions of the Socrates II programme. Differences also occur among final beneficiaries. The analysis and evaluation of differences indicated that from the viewpoint of quality and further development the following areas are undoubtedly relevant for the national agency, Ministry and end-users.

In the field of quality and innovation, Erasmus participants represent the unused generator and catalyst of innovation and quality at the organisational level of higher education institutions.

An important multiplication factor of the linguistic influence, is certainly the duration of an action which can be replaced by a more intensive preparation for the action or inclusion in the organisational aspects of the implementation of an action. We anticipate that the influence in the linguistic field would probably be stronger for the Comenius school partnership action, if teachers would more intensively and directly participate in all concerning organisational activities. We should note that the stated point of view is supported and recommended also by the European Mobility Charter (European Parliament and the Council 2006).

In the field of ensuring equal opportunities according to gender, we conclude that this aspect was somewhat overlooked. Individual mobilities never focused on this aspect as regards the content. Additionally, the established condition could be a result of the fact that issues of equal opportunities according to gender are actually not dealt with as often as in other fields because of feminisation of the teaching profession. As an example, we state the frequent presence of questions addressing the representation of women in senior positions in business and in politics.

Organisations averagely estimate the influence of actions or pro-



grammes to be stronger than do individuals, which from the viewpoint of impacts is a favourable trend at the system level.

During 2000 and 2006, the participation in Erasmus mobility actions (predominantly students) and the participation of teachers in Comenius individual mobility occurred to a lesser extent in a socially unjust manner, since proportionally more individuals from middle and upper middle class participated in these actions. Of course, one must consider that actions are accessed via individual mobility through educational institutions in which broader social relations of (in-)equality are reproduced. Otherwise, there is the encouraging conclusion that the evaluated actions importantly contribute to raising social status. This especially holds for the youngest group of participants mainly from lower social classes which 'dominates' in the Erasmus action. Young students, compared to participants above 41 years of age, are still establishing their social and economic status and therefore better understand and use the Erasmus action for vertical social mobility. From this point of view, Erasmus seems to be an appropriate mechanism for promoting the social status of youth. This holds to a lesser extent also for economic status.

Interesting are also the findings obtained from the comparison of influences of evaluated actions on raising the socioeconomic position of participants from different social classes. It turned out that the lower the individual's socioeconomic class is, the more he/she can contribute to raising the socioeconomic status and, of course, vice versa. This general logic of influence is undermined by young individuals who got employed in educational institutions after their mobility. Their high expectations probably turned to disappointment in their first occupation with normally a low salary, simple and unchallenging work with little or less prestige. From this point of view, mobility actions represent an appropriate mechanism of vertical social mobility which arrives at its boundaries when encountering the current conditions on the labour market.

The findings that the influences of some objectives are weaker are undoubtedly related to the question of the quality of programme intervention. We are aware that we evaluated the first generation of funding programmes in education and training in Slovenia, and thereby the period of Slovenia's acquaintance with these programmes which occurred simultaneously with the process of its approaching the European Union. It is understandable that during this period there was greater emphasis on the quantity rather than on the qualitative aspects of actions, which in all the numerous programme objectives were also hard to assure. Ac-

According to the experience of the national agency, the conditions started to change considerably with Slovenia's accession to the EU and when certain recommendations were adopted (mobility, qualification frame). A considerable shift in the quality of projects and mobility is also noticeable, mostly in the aspect of achieving the content of programme objectives.

Regardless of what we stated, it was possible to identify the target areas to which the national agency and final beneficiaries should pay more attention in the future. The developmental guidelines can already be found in the European Mobility Charter (European Parliament and the Council 2006) which emphasises the importance of preparations – both linguistic and general – and acquaintance with the responsibilities, duties, objectives and results of mobility. We are aware that this also determined the key areas which require permanent monitoring with a system of programme monitoring.

Because of the established influences and impacts which funding programmes in education and training have, one will soon have to consider a tighter integration of the mentioned mechanisms into national policies in the field of education and training. This seems reasonable also because, in the case of decentralised actions, the players at the national level can search for and use synergetic impacts of funding programmes in education and training. Here, we should point out the question of priority orientations or objectives and anticipated quality standards. This will also reduce the difficulties in evaluating, which we confronted in this evaluation and were a result of the lack of clear criteria and standards in defining key programme objectives. However, progress is already noticeable in this field, since for the needs of assessing impacts of the Lifelong Learning Programme we have already identified some important programming documents and fundamental objectives with regard to content. According to the long-term objectives of the national agency, we should point out:

- Concern to ensure that the available programme funds of funding programmes in education and training will be maximally spent on activities promoting national development and according to the regulations.
- Concern for synergy and complementarity with developmental priorities and activities determined in the national strategic reference framework for the financial perspective 2007–2013.

At the national level, narrower national interests related to decentralised actions are for now only determined in the field of mobility

(Leonardo da Vinci operational plan for mobility for 2005–2006) and are reasonably used for the Lifelong Learning Programme for 2007–2013:

- less spread occupations,
- economically less developed regions,
- transition from the educational sphere to the labour sphere,
- marginal groups,
- alliances and cooperation of social partners.

### **5.2 Guidelines for Developing the Mechanisms of Impact Monitoring and Evaluation**

The overview first points to the need for 2 to 3 years of development of measuring instruments and systems for monitoring final beneficiaries of funding programmes in education and training in Slovenia. Further development requires the more active and efficient participation of primary stakeholders: national agencies, Ministry of Education and Sport, Ministry of Higher Education, Science and Technology, final beneficiaries and research groups.

The limitations of the applied approach were mentioned on several occasions throughout the text. Now, it is time to answer the question of what could – in the aspect of the applied research method – be improved in the future. This evaluation represents an introduction and the basis for long-term development of evaluations of funding programmes in education and training in Slovenia. Based on theory, the future development will take two courses. As already mentioned several times, the established assessment of programme impacts anticipates at least the use of quasi-experimental approaches. Those, however, require certain preconditions which can only be met by an information system which enables monitoring of final beneficiaries from the time a contact has been established with the national agency, throughout participation in an action and the late period after the action was concluded. According to the existing information support of the national agency, the development will first be focused on using and upgrading the existing data bases with a system of regular periodical contact with final beneficiaries. The second phase anticipates the development of indicators which would enable monitoring of key functions necessary for a particular action to achieve the desired influences or impacts. In this manner, the second important objective of development will be realized: Development of a permanent and simultaneous monitoring of the quality in implementing actions.

Both courses of development anticipate the identification of additional factors which either essentially influence or explain the influence and, consequentially, the success and efficiency of the actions of funding programmes in education and training in Slovenia. It would be reasonable to monitor the duration of an action, the education at the start of an action, and educational level at the time of survey. Similar holds for the status of participants on the labour market. Particular attention should be paid to the factors which could explain the difference in the influence on individuals or organisations. One of the development goals would surely have to be an experiment in which the existing scale for measuring the influence would be compared with an alternative one. The existing scale, namely, is 'only' one-dimensional and as such has a 'pro-European' orientation.

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