ABSTRACT: This article’s aim is to describe some of the sources of the European debate over the third cycle studies in teacher education in Europe. Then it will introduce the international Project EDiTE as one of the collaborative initiatives concerning the European scientific proposal of the teachers’ lifelong learning development. Next, some good practices of promoting the doctoral research based teacher education on national levels will be presented. Finally, in the article, there will be revealed selected findings of the EDiTE team that are focused on the current needs in teacher education that have been pointed by different stakeholders of five European countries represented by the project consortium, while interviewing them in 2013. The main goal of this article is to involve the stakeholders in a thought provoking debate for future roles of teachers in Europe, but not through looking for a ‘standardized teacher model’ or to create a ‘European super teacher’, but to see the dilemmas that should be shared while questioning ‘What makes a teacher European?’, as Michael Schratz underlines, in a diversity of national identities and in the face of challenges of 21st century.

KEYWORDS: doctorate in teacher education, researched-based teacher education, teachers’ professional development.
INTRODUCTION

In 2009, the European Network of Teacher Education Policies (ENTEP) published some results of the survey conducted in 31 European Countries (Gassner, Kerger & Schratz, 2009), which focused on the teacher education third cycle studies. This research has revealed that the doctoral programmes in teacher education are not developed in a pro-active manner. There are obstacles to enter existing PhD programmes in Educational Science, as the career paths of teacher education rarely includes the possibility of the third cycle of Bologna involving post graduate research activities (Iucu, 2009, p. 67). That was a challenge for the European national boards to establish a collaborative scientific body which, as a kind of action research, could develop an innovative curriculum in teacher education. This is the shortest version of the commencement of the EDiTE Project.

The European Doctorate in Teacher Education (EDiTE) can be seen as one of many international LLP Erasmus Projects that are financed by EU, however I propose to look at the value of the EDiTE as a collaborative, international forum of the networks of five European Universities2 that creates the space for critical and challenging discourses focused on innovative approaches to teacher education and their professional development concerning the third cycle studying (Gassner, 2009, p. 13–42).

One of the most inspiring questions that has been posted by Michael Schratz is, “What constitutes the ‘Europeanness’ in the teaching profession?” (Schratz, 2009, p. 99). From the author’s point of view, it might be the crucial point in future discussions and can become the tip for policy makers and leadership pipelines.

‘Europeanness’ has become the key-concept which is accomplished with the key-notions such as European: identity, knowledge, multiculturalism, language competence, professionalism, citizenship and quality measures. Apart from analyzing the concept of European Teacher described by Schratz, in the ENTEP’s (Schratz, 2009, p. 97), survey a parallel discourse is focused on the need of shifting from the practice based teacher education (with the strong instrumental competences achievements) into research based teacher education (focusing on dealing with everyday practice and methodological approaches). The problem is that the current “European Teacher generally still favours competence-oriented teaching styles as a means to achieve his/her aims as objectives” (Schratz, 2009, p. 101) but not the updated holistic concepts of
knowledge construction which support the lifelong learning self-development. That critical point of view about the current teacher profile inspires to enable teachers and their students to become more societal in their skills with the conscious thinking of mobility that is not only the need for their future but for the present state of living in a dynamic, multicultural milieu. The author sees the three levels of the possibility of taking actions: European, national and institutional one (Schratz, 2009).

The analysis elaborated from the European survey conducted by ENTEP (Gassner et al., 2009) shows that for European teachers’ professional development the most important goal at the very moment is the coherence and reflection over the national levels of educational programs, promoted competences and their meanings, ways and aims of evaluation, ways of initial and continuing professional development that the teachers’ follows in European countries. Despite the fact the ‘European teacher’ has been presented in a quite detailed way through the key-notions (above), there is still need to ask the next questions about the conditions that allow to achieve teachers’ professionalism in the context of developing knowledge, social changes and hybridization in the Europe and outside this continent (Gassner et al., 2009).

EDITE EUROPEAN DOCTORATE
IN TEACHER EDUCATION PROJECT OBJECTIVES

Thinking about the EDiTE Project in a way that it can create an international space inspiring the debates over the quality of teacher education makes the project more an academic attempt of not only recognizing the differences among teacher education institutions in Europe (Gassner et al., 2009), but also aspiring to compare and share the European universities’ practices that have been enabling to cross the ‘institutional walls’ and reach the wider milieu outside the universities. The main objective of the EDiTE project is to develop, through consultation with European experts, an innovative curriculum that will, lead to a pioneering interdisciplinary doctoral programme in teacher education. The highly innovative doctoral programme intends to promote lifelong learning in the sector. This collaborative development will add a European dimension to current provision in this area, but will also allow for the development of joint systems and practices in teacher education, which are equally relevant for local stakeholders and end users³. The final EDiTE goal is to create the multilateral joint degree doctoral program that at its background is the mobility as a sine qua non condition of self and professional development (Schratz, 2009).

THE SENSE OF MOBILITY IN TEACHER EDUCATION

According to the data (Schratz, 2009, p. 97), ‘easy mobility’ has become the fact in European Union and it encompasses studying abroad and learning languages as well as getting acquainted with other EU countries’ cultures (Schratz, 2009, p. 101). By employment in other countries, exchange programmes, the mobility becomes the contribution towards the creation of a Europe of different languages and cultures,
nurtures cultural diversity as a vision for living together in the future (Schratz, 2009). Those different kinds of exchanges among students and their teachers enriches the process of mutual learning and growing toward a new understanding of European citizenship in the context of redefining the notion of multiculturalism (Vertovec & Wessendorf, 2010). There is also one more dimension, the virtual mobility in finding and disseminating information that is seen as a vital prerequisite for physical mobility and is also very effective in transnational communication (Schratz, 2009, p. 101).

The joint degree international programme, including mobility, can become a way of enabling opening the new educational spaces for the research based scientific projects within Europe. Summarizing the general idea of the eDiTE Project it is to be said that eDiTE is a community consisted of academics that are engaged in promoting innovative ways of teacher education and development by comparing the national heritages in the ‘art of teaching’ and are looking now for the ways of transforming a former model of practice based teacher education into the art of research in teacher education.4 This State of the art of research in TE has become a title of the international seminar held at Lisbon University on 5th September 2013 by eDiTE Consortium.5 The seminar’s discourse has become the international platform to analyze the current meanings of what constitutes the art of research in teacher education and its continuing professional development. The results of this debate as well as the outputs of the international process of consultation of the eDiTE Project within the each partners’ country stakeholders are presented in the following parts of this article.

THE EDITE LISBON SEMINAR CONTRIBUTION

The consortium of eDiTE Project apart from the regular projects meetings enriches the international discussion forum through the scientific seminar meetings. The first one was held on 5th of September 2013, at the University of Lisbon and the second one, which is going to be the international final conference of the eDiTE project, is going to be held at Eötvös Loránd University in Budapest in July 2014.

Considering that the Lisbon seminar has been organized after one year of the eDiTE Project duration, the debate on current transformations and needs of teacher education in Europe have been accomplished with the national consultation processes conducted in each partner’s country from June to August 2013.

So, the representatives of the five European universities (University of Innsbruck, University of Lisbon, University of Bucharest, Eötvös Loránd University in Budapest and University of Lower Silesia) that constitute the eDiTE consortium contributed to the Lisbon Seminar in two ways.

Firstly, through the participation in the seminar debate, they have provoked questions, dilemmas and shared the national achievements and research results. There, the deep socio-cultural background according to current discourses on teacher education in each country was introduced. In that way, the seminar presenters have become a board that contributed to the range of innovative thinking of teacher education on the European level. They also have tried to define the meaning of professionalism by
explaining their national initiatives of transforming the ways of teaching teachers. The other issue was formed by describing teachers’ current ‘set of competences’ as if they were continuing abilities to be developed. The debate in a company of edite partners was spread by the key-note speaker professor Kari Smith, University of Bergen. Some selected ideas of the debate are explained below but full debate is available at the seminar films at http://www.edite.eu/knowledge_portal/State_of_the_art.

The second input for the international project meeting in Lisbon was the presentation of the edite project national consultation processes.

WHAT CONSTITUTES A GOOD TEACHER DEVELOPMENT?
– A SEMINAR DEBATE

There are the differences in some interpretations of what constitute a good teacher development but at least two aspects have been found in common. The first covers the ways of ‘educating the teachers of teachers’ in the context of world globalization versus localization processes, and the second is looking at the teacher professional development through the researched based milieu and the development of research competences in the view of lifelong learning program. What made the discussion fruitful is the fact that the seminar speakers were the representatives of some brand new national bodies established as a result of the internal evaluation processes that had revealed the needs of changes in teacher education policies and practice within the countries. Below there is a short presentation of some good practices elaborated nationally that are focused on research based teacher education and development.

SOME EUROPEAN INITIATIVES TO TRANSFORM TEACHER EDUCATION

One of the initiatives is the Austrian expert group, AG EPIK (Entwicklung von Professionalität im internationalen Kontext), lead by Michael Schratz. Since the year 2005, the group has been working on a concept for professionalism in teaching profession. The result of the work of representatives from universities, university colleges of teacher education and school inspectors in Austria developed five domains of teacher professionalism:

» **Reflection and discourse**: Sharing knowledge and skills;
» **Professional awareness**: The self as expert;
» **Cooperation and collegiality**: The productivity of cooperation;
» **Ability to differentiate**: Dealing with differences large and small;
» **Personal mastery**: The power of individual prowess;

The five domains are proposed to be described as a classification of competence areas for the teaching profession that are theoretically independent of subject matters or school type. However, in practice, the relation to school types, subjects and specific didactics is prevalent, and within the epiK concept termed as the sixth discipline (http://epik.schule.at/images/stories/dateien/epik-folder_engl.pdf). One of the illustrations of practicing such competences and finally reaching the state of being
able to juggle them according to the needs can be an example of a Vignette Research of Learning as Experience, that M. Schratz presented at the Lisbon Seminar. The vignette research seem to be one of the new ways of approaching the research in TE and can create many alternative pathways for discovering and exploring the essence of learning experiences beyond the reach of teaching (Iucu, 2013).

Kari Smith, the Head of the Steering Board of Norway’s National Doctoral Research School in Teacher Education introduces, not only the current project on teacher education in Norway, but also underlined the issue of School in Teacher Education: Educating the teachers of teachers. In Norway, there has been established a national body for educating the teacher—researchers. The Norwegian national graduate school for teacher education research (NAFOL) started in 2010 and is going to be conducted and evaluated till 2016. It has been the reply for the need of developing an innovative concept for a national graduate school for teachers education (2012–2016) that can be able to create a research based knowledge teachers’ community and to improve the quality of educational research in Norway (Østern, Smith, Ryghaug, Krüger & Postholm, 2013). The authors present the process leading up to the establishment of a Norwegian national graduate school in teacher education (NAFOL) (Østern et al., 2013, p. 20). Among the aims of the NAFOL it has been taking up the deconstruction of a ‘common’ but still ‘blurred’ concept of ‘research based teacher education’ (Østern et al., 2013, p. 20), to give the meaning to the concept of ‘A Researched Based Teacher Education’ and then to put the concept into the practice.

Behind this NAFOL project there was also the desire to promote a sense of professional identity within teacher education research (Østern et al., 2013, p. 20). The NAFOL project is a part of a wider Norwegian program called “PRAKUT” (Practice-based Educational Research). But both of them are embedded in a national program called “Education 2020”. What is underlined in the concept of both educating the teachers and educating the teachers of teachers in Norway’s concepts is building identity for becoming teacher educators, with a strong practice based research profile (Østern et al., 2013, p. 24). Among different conclusions there are some that show the options of Norwegian PhD in becoming qualified researcher: The first one “could be designed with a strong focus on practice based research,” the second one “the arts PhD program could be included as an artistic path with a PhD as the final aim”, and the third one “the existing PhD can stay in place” (Østern et al., 2013, p. 25). In conclusion of the presented paper the strong stress is put on the teaching practice as rich sources of teaching dilemmas and controversies. Research in teacher education should be varied, however, with a strong focus on practice oriented research (Østern et al., 2013).

The summary of the Lisbon Seminar R. Iucu (2013) concluded that “Launching the new philosophy of building the teacher education system from knowledge transmitters to knowledge creators will create new reflective perspective on structuring the new PhD program applied to teacher education” (Iucu, 2013). From the perspective of implementing the philosophy of creation in teacher education, it is important to research the collection of teachers’ beliefs because they highlight and strongly influence the process of designing the teacher competencies.
and professional development. Orsolya Kálmán from the Eötvös Loránd University from Budapest focused on research on student teachers’ and teachers’ beliefs and the influences of this research field. She has underlined that in the past two decades the research on teacher education beliefs has been one of the major topics in Hungary. The importance of such study is highlighted because, the beliefs are interpreted as a deeper level of psychological characteristic that is harder to be changed but which effects the quality of teachers’ competences, behaviour and practice.10

The presenters of the next EDiTE partner, the University of Lower Silesia, has underlined that in Poland teacher’s personal and professional standards are far from being explicitly defined. There is an open debate over the diversity of definitions of professional standards in teaching teachers. The theoretical, empirical and practical discourses offer a variety of (sometimes conflicting) accounts and concepts. This multiplicity attests to a revival of thinking about the social practice of teaching in categories of role models, which proposes sets of ideal personal attributes inductively inferred from analyses and evaluations of the cultural context with its “prevailing” values. At the same time, the notions are rooted in the experienced reality (with an empirical model replacing the postulatory model) and are conceptually and interpretively informed by contemporary developments in humanities. The technical-rational model is accompanied by reflectional one that builds on the post-positivist paradigm of knowledge, on cultural and humanist psychology as well as on critical theory (Gołębniak, Ligus & Sekułowicz, 2013). At University of Lower Silesia, the reflexive school of teaching teachers and developing the research based professionalism of teachers’ educators has been developed for the last decade. The contributors to the concept of research based teacher education in Poland are among different M. Czerepaniak-Walczak, B. D. Gołębniak R. Kwaśnica, H. Kwiatkowska, Z. Kwiecinski, R. Ligus, M. Nowak-Dziemianowicz, J. Rutkowiak, B. Zamorska. However, since the year 2010, a network of interdisciplinary researchers has formed, coordinated by the pedeutologist Bogusława Dorota Gołębniak and the anthropologist Hana Červinkova, both from the University of Lower Silesia (Červinkova & Gołębniak, 2010). The main aim of this team is to promote the participation in a cross–disciplinary research projects in teacher education where academics conduct the research together with the teachers-practitioners or/and candidates for teachers. This participatory action research projects together with the renewed didactic of higher education at doctoral level proposed by the network of B. D. Gołębniak11 is theoretically rooted in Kurt Lewin’s concept (1946/2009) and then modified by British tradition of the teachers’ professional development in seventies (Elliot, 1991, 2004) that has been being again reconceptualizing since the 1990s (Carr, 2010; Reason & Torbert, 2010). Apart from the reflexive pedagogy one of important issue that was discussed during the Lisbon Seminar was the problem of the danger of teachers’ professional burnout. Małgorzata Sekulowicz presented the results of the research focused on professional burnout.12

The Portuguese representative of the EDiTE consortium, João Pedro da Ponte Institute of Education of the University of Lisbon,13 elaborated the paper Researching
with/as practitioners in doctoral programs and explained about the University of Lisbon case of research studies at doctoral level in mathematics, which has a tradition of more than 20 years of education dealing with teachers and teaching (Ponte, 2013). Luis Tinoca\(^1\) presented a review of research in Teacher Education developed at University of Lisbon between the years of 2000-2011 (a total of students) in which he explores the area of research in teacher education that was developed during that time. In conclusion, the author uses the words of Avalos (2011), who comments on the Bologna policies and points out that those regulations “is not a minor issue, as these policies have travelled the world and penetrated more strongly in precisely those contexts where teachers, working under difficult conditions, have limited opportunity to renew imaginatively their teaching through collaborative work amongst themselves” (Avalos, 2011, p. 18). In the quest for more ‘accountability’ and higher examination scores, many policies have been enacted, with pervasive and complex effects that have greatly hindered the success of teacher education (Tinoca, Ponte, Galvão & Curado, 2013).

Anca Nedelcu and Romita Iucu (University of Bucharest, Romania)\(^1\) launched the topic ‘Teacher education – from knowledge transmitters to knowledge creators’ as a perspective on European teacher education systems and philosophy, that was discussed for the first time in the spring of 2012, during the conference organized in partnership with European Network on Teacher Education Policies (ENTEP) and University of Lower Silesia, Wroclaw, Poland. This approach is focused on reflexive perspectives about teaching career that can be transferred to the progress of teachers' career and take up the doctoral programme as one of the professional developments.

EDITE CONSULTATION PROCESS AND SOME SELECTED RESULTS

The Place, Time and the Interlocutors

The consultation process over the idea and expectations toward the new and innovative EDiTE doctoral program was held since June to August 2013 in five countries that constitute the EDiTE consortium: Austria (7 people), Hungary (8 people), Poland (8 people), Portugal (9 people), Romania (6 people). Among the interviewees were representations of Ministry of Educations, International Bodies/Councils, Committees, university boards, school teachers, doctoral students. There were 38 people altogether including one interview conducted with a representative from the European Union. The individual interviews were held personally with the interlocutors. 7 replies out of 38 were sent by e-mails.

The Methodology

The qualitative strategy and the interpretive paradigm have been applied to the research study that was a consultation process. In the first part of the research, the semi structured interviews were conducted in each country by the EDiTE team members.
The collection of empirical materials have been analysed at two stages: a national one and then international one. The international comparative study has been focused on looking for differences and similarities in meanings that the interlocutors have applied to their descriptions, replies, suggestions in each of the five countries. Then, there has been the stage of mapping the collected meanings and their interpretations to reveal the most important key-notions. The structure of the interview was evaluated and accepted by all the EDiTE team. Each interview consisted of fourteen questions. In this article I am going to present the results only of one of the questions proposed in the national consultation process. It was one of the main questions directed to the interlocutors: How to organize the innovative teacher education in the time of globalized/localized world and in the context of such a diversity of existing concepts and educational philosophies in teacher education? As a reply in all five countries there was promoted the idea of ‘research based teacher education and development’ as a basement of any teacher education programmes. The results were shared in September EDiTE meeting in Lisbon (2013). And it was very much compatible with the Lisbon Seminar discussion in which have participated different stakeholders than in national consultation process. The analysis and interpretation that has crossed all 38 interviews has revealed the European challenges that are focused around the broad topics as:

» Multiculturalism
» Exclusion/inclusion
» The ability to adapt in a changeable social world
» Differences in TE
» The differences in the content of programs

The collection of international interviews has also allowed to elicit four key-dimensions around which the programme thesis can be concerned. The key-dimensions are the result of the interpretation of mapping the collection of national meanings done by Rozalia Ligus. The four dimensions are focused on:

» European & global-local dimension
» Researched based knowledge & development dimension
» Teachers’ competences dimension
» Management & leadership dimension

Each of the dimensions has some details that can be treated as a description of the field.
### Table 1
**Elaboration based on internal sources of edITE Consortium**

<table>
<thead>
<tr>
<th><strong>European &amp; global versus local dimension</strong></th>
<th><strong>Research based knowledge &amp; development</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• The ability two paralleled vision and imagination that allow to see things very locally and at the same time globally;</td>
<td>• Cross disciplinary knowledge;</td>
</tr>
<tr>
<td>• Harmony and balance in TE all over Europe;</td>
<td>• The research based programme - during the academic studies and after in educational practice;</td>
</tr>
<tr>
<td>• Teaching teachers for Europe but not only for the home country;</td>
<td>• Learning by permanent development of intellectual skills, consultations, publishing, debates and professional support;</td>
</tr>
<tr>
<td>• Language competences especially in the context of bilingual and/or multilingual teaching that allow children to move from one school to another including the foreign countries;</td>
<td>• Knowledge of contemporary achievements in social and humanistic disciplines that can be transmitted into practice;</td>
</tr>
<tr>
<td>• Foreign (English) language high level</td>
<td>• Leading, mentoring, managing international projects of educational research;</td>
</tr>
<tr>
<td>• Mobility as a way of caring for permanent development - conducting the research and sharing the results within and outside the country;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Teachers’ competences</strong></th>
<th><strong>Management &amp; leadership dimensions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• The competences of permanent analysis, comparing and looking into future of educational universal needs and values;</td>
<td>• Changes in school management, crossing the traditional schemes of thinking;</td>
</tr>
<tr>
<td>• Practicing the special kind of contemporary competences: research, ethics, organizational, intellectual, communication, social;</td>
<td>• Attention toward children with different kind of disabilities and special educational needs;</td>
</tr>
<tr>
<td>• Cross disciplinary knowledge with the stress on practicing social/ intercultural competences;</td>
<td>• The challenge of multicultural education, new ways of teaching and new ways of student’s assessment;</td>
</tr>
<tr>
<td>• Openness, self-criticism, self-reflection, acceptance of change, future imagination;</td>
<td>• Working in international teams and networking;</td>
</tr>
<tr>
<td></td>
<td>• Dealing with uncertainty, inclusion, exclusion, multiculturalism as parts of socio-cultural contexts in Europe.</td>
</tr>
</tbody>
</table>

*Note.* The content of the table shows more specifically the expectations toward the innovative doctoral programme in the field. Elaborated by Rozalia Ligus.

**INSTEAD OF CONCLUSION**

The edITE Project is going to be developed till September 2014 and then the pilotage is going to be conducted. Because of the on-working project some of the results are confidential at this stage of sharing the knowledge of the project’s contributions. The aim of the presentation of preliminary results of the edITE consultation process that have been explained in the last part of this text is to put some light on the current expectations toward the European teacher education programmes and career development in the light of dynamic world changes. Despite the fact that each coun-
try has got its own niches in teacher education that should be developed nationally, according to the collected data, there has been a strong need to make the European ‘teaching philosophy’ more understandable and compatible cross countries. The stress on teaching through research based practise and mobility generates the precise competences as foreign language development but also intercultural competences, as for instance the ability to work in international teams and dealing with multiculturalism. It is good to repeat what Romita Iucu (2013) stressed that international openness, cooperation, partnership and diversity should become a permanent features of the new research paradigms launched during doctoral teacher education.

**BIBLIOGRAPHY**


Europejskie inicjatywy doskonalenia kompetencji badawczych nauczycieli. Doświadczenie z realizacji projektu EDITE

ABSTRAKT: Celem niniejszego artykułu jest przedstawienie wybranych stanowisk reprezentowanych przez pięć europejskich uniwersytetów, które poszukują najlepszych rozwiązań dla powołania studiów doktoranckich dla nauczycieli. Debata nad potrzebą rozwiązań adekwatnych do obecnego stanu wiedzy jak i potrzeb „formowania” specyficznych dla profesji nauczycielskiej umiejętności (kompetencji), które wpisują się w program lifelong learning w świecie dynamicznych zmian społecznych i coraz to nowych osiągnięć w obszarze nauki, zachęca do stawiania pytań o jakość i istotę edukacji nauczycieli. Artykuł nawiązuje również do źródeł powołania międzynarodowowego projektu EDITE (European Doctorate in Teacher Education), którego celem jest wypracowanie programu studiów doktoranckich dla nauczycieli promującego w znacznej mierze kompetencje badawcze (research-based teacher education). W świetle tych działań wskazane zostaną przykłady realizowane na uniwersytetach europejskich. W ostatniej części tekstu opisane będą wybrane wyniki badań z przeprowadzonego 2013 r. procesu konsultacji na temat potrzeb w kształceniu nauczycieli w Europie. Jednym z ważniejszych celów nie jest wypracowanie „standardu nauczyciela uniwersalnego”, ale raczej odpowiedź na pytanie, co w świecie dynamicznych zmian czyni nauczyciela Europejczykiem?

SŁOWA KLUCZOWE: kompetencje badawcze nauczycieli, nauczycielskie studia doktoranckie, profesjonalny rozwój nauczycieli.

2. University of Innsbruck the leader project, University of Bucharest, University of Lisbon, University of Lower Silesia, Eötvös Loránd University in Budapest, for more see http://www.edite.eu/edite_consortium

3. For more information see the website http://www.edite.eu

4. *State of the art of research in teacher education: the international edite Project Seminar, 5th of September, 2013 at the University of Lisbon.* http://www.edite.eu/knowledge_portal/State_of_the_art

5. For more info see http://www.edite.eu/edite_consortium

6. **edite** Project meetings were held in Innsbruck October 2012, Bucharest April 2013, Lisbon September 2013. During the second year of Project duration the meetings are going to be held in Wrocław 20–21st March 2014 and in Budapest, July 2014.


9. The full presentation *Beyond the Reach of Teaching and contribute to the research based teacher learning* is available at http://www.youtube.com/watch?v=A_WoGPUkkGE


11. The author of program the Didactic of higher education at doctoral school in ULS are prof. dr. hab. B.D. Gołębiak and the co-authors are dr. Beata Zamorska, dr. Rozalia Ligus, dr. Slawomir Krzychała.

12. M. Sekułowicz, a vice director of Special Pedagogy Institute, ULS. See the presentation at http://www.youtube.com/watch?v=dvonH3jiuyU


14. Luis Tinoca, a professor at the Institute of Education (University of Lisbon) and coordinator of the teacher education master program and of the physics and chemistry teaching master program. http://www.edite.eu/edite_consortium/uniw_lisbona

15. Romita Iucu, professor of University of Bucharest, the president of ENTEP. Anca Nedelcu professor of University of Bucharest. For more information http://www.edite.eu/edite_consortium/uniw_bukareszt.

16. Rozalia Ligus – a researcher and academic teacher. In the **edite** project a person responsible for collecting the preliminary results and prepare the overview of all of them.