

# Feasibility of a social **network** in **Tourism Higher Education**

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**Abstract** | The following article analyses the organization network of Higher Education Institutions in the area of Tourism in Portugal and the interest in creating a social network in this field, which contributes to the cohesion and communication of this scientific community. As a result, the project "National Observatory of Tourism Education" is introduced, intending to build a technologic work platform, for this particular academic community, with the purpose of building an efficient and organized network, allowing the sharing of knowledge and relevant experiences at a national and regional level, generating added value that allows us to show the major role that education plays in Tourism. We also studied how we could use the social networks in behalf of the educational science, taking advantage of their particularities, in an effort to show how they are changing the face of modern Tourism, in order to justify the possible need to create a social network on Tourism in the Central Region.

**Keywords** | Network, Tourism, Higher Education, Central Region.

**Resumo** | O seguinte artigo analisa a organização da rede de instituições do ensino superior do Turismo em Portugal e o interesse em criar uma rede social nesta área, que contribua para a coesão e comunicação da comunidade científica em apreço. No seguimento, apresenta-se o projeto Observatório Nacional de Educação em Turismo, que pretende constituir uma plataforma tecnológica de trabalho para esta comunidade académica, com vista à sua organização e funcionamento eficiente em rede, permitindo partilhar conhecimento e experiências relevantes a nível nacional e regional, gerando valor acrescentado para o reconhecimento da importância da educação em Turismo. Também investigamos sobre a conveniência de usar as redes sociais no campo das ciências da educação com o intuito de interpretar a sua aplicação à ciência do Turismo, de modo a justificar a eventual necessidade da criação de uma rede social no Turismo na Região Centro.

**Palavras-chave** | Rede, Turismo, Ensino Superior, Região Centro.

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## 1. Introduction

In the context of the general theme of INVTUR 2012 on Tourism in times of change, the authors consider this reflection that the development of new organizational structures capable of leading successfully with uncertainty in the new social and economic realities and strategies may be necessary for the survival of many organizations, even of a public nature, as are some of the institutions of higher education here included in a social network project that intends to articulate the scientific community of Tourism.

This article intends to study the distribution and the organization of the network institutions and its formative participants working in Tourism in the Higher Education context, with particular attention to the systemic dynamic existent in Portugal's Central Region, following the NUT II criteria. The base of the methodology is an interview, which was made to the coordinators of the graduate courses (first cycle) of this area of studies in 2005, that allows us to gather primary information to understand the formal and informal relations that exist in this scientific community in Portugal, namely in the Central Region. The conception of a particular community could create conditions to develop a forum, in which the users will be able to think and to discuss about the most innovating training techniques among the different courses that will be involved in this platform of regular work. Taking into consideration a national analysis, we wish to demonstrate that the development of Tourism at a regional level demands a rigorous diagnosis and detailed knowledge in order to promote an articulate strategy in training to effectively respond to the challenges of the European Higher Education, as it is postulated in the Bologna Declaration.

We believe that the efficient work supported by the social networks in the world of Tourism might turn out to be a powerful tool to improve the communication process between the different *participants*, either in higher education or in the professional training. Considering the importance of

Tourism nowadays, in the different levels of education, it is important that it is organized in networks, either in a vertical or a horizontal dynamic. In that way, it's necessary to use Sociometry as an important methodology to study the structure and organization of the existent relations between members of the academic community of Tourism in the Central Region.

The investigation conducted in 2005 by the authors of the present article, included in a PhD research (Salgado, 2007), contains a deeper explanation of the methodology in the specific chapter, that permit to show a remarkable receptiveness and interest, by the different responsible persons for higher education degrees in the Tourism area to work in a network logic. Sharing the academic work was another matter, considered very important, with the purpose to introduce changes in the way of work and in the curricular structures of the degrees, namely to stimulate the mobility. The different indicators that have been used show that there's a clear tendency that enhances the organization in network, which has to be well coordinated, having oriented goals that can allow the creation of common politics and educative strategies, in a way to more effectively communicate and dialogue between the pairs which allow a bigger efficiency of the Tourism Education System.

Having in mind the afore-mentioned receptiveness, the National Observatory for Tourism Education (NOTE) project has been introduced as a work platform to the academic community which can be decisive to improve its organization and running in network, helping for a healthy cohesion between the participants, stimulating the sharing and spreading of knowledge and experience at a national level, as well as working as a platform to a powerful social network that congregates "adding value" between the education and formation system of Tourism. In that way, through this study, in a first step, there is the intention to begin building the NOTE in the geographic area that corresponds to the Central Region, where the institutions (universities and polytech-

nics) of its promoters are headquartered, and then spreading to the national territory. It is also going to be analyzed the interest of the social network in the field of the science of education to contextualize its potential for the science of Tourism, to justify the importance of building a social network for the Tourism in the Central Region of Portugal.

## 2. Organization of the Tourism Education Network

The contemporary approach to the reality of the Portuguese Higher Education system seeks to embrace the prevailing conditions arising from the implementation of the Bologna Process. The consistency of educational and curricular policies and practices is reviewed by several authors, who reflect on their impact on the national context. This is an important context in order to characterize the subject area of Tourism.

The Law for the Education System (Law 46/86 of 14 October, art. 47.º and n.º 6) states that the curriculum development in Higher Education aims to establish curricula for each network of educational institutions according to the economic, social and cultural, both national and regional perspectives of integrated planning. The Law allows the necessary freedom to design the different curricula and implement the degrees, but requires this type of planning. For the present study we highlight the need for planning the network of institutions at a regional level. It is a justifiable work under the current national framework in order to improve strategies for joint action. Currently, the configuration of the higher education structures is based on a binary system, which combines university and polytechnic teachings. This systemic solution has a historical basis dating back to the 60s. According to Martins (1998), higher education should be designed within the logic of a "chain of education", both the university and the polytechnic, whether in public or in private. This

work, if it had been fully implemented, could easily help to create a social network on Education in the Tourism area, which will be analyzed as follows.

According to Baggio (2007), tourism is probably the largest economic sector and a tourism destination is considered to be a fundamental unit of analysis for the understanding of this industry. He presented an interested research that examines two such systems, Fiji islands and the island of Elba (Italy), investigating their structural characteristics. Network theoretic metrics are used to gauge the static and dynamic attributes of the networks formed by the websites belonging to the different tourism operators. The general topology is found only partly similar to the one peculiar to many complex socio-economic systems. The structural characteristics are then interpreted in terms of the evolutionary growth of a tourism destination. The NOTE website could function in a similar way in the Central Region of Portugal, with the aim of promoting the increased connectivity within academic institutions in the area of Tourism. To implement the NOTE project we will have in consideration the ideas presented in Noel *et al.* (2008) for the reason that they present a comprehensive review of the contribution of network analysis to the understanding of tourism destinations and organizations. This book discusses both the theoretical and methodological underpinnings of network analysis and then illustrates the relevance of this approach in a series of tourism applications.

## 3. National Observatory for Tourism Education

This project could work as a place of collection, organization and dissemination of knowledge may contribute in positive manner to fill an existing gap between the training and the employment markets. The site NOTE aims to become a work tool useful for teachers, students and employers, and the other players in the education system and in the produc-

tion system of the sector, through the aggregation of the information related to both the public and private sector of tourism (Salgado *et al.*, 2008). The main objectives are: to contribute towards the attainment of the goals defined for NOTE, namely to deepen the knowledge on the tourism education sector, to supply effective analysis tools to teachers and students, managers and institutional participants, to help decision-making, to render the education sector more transparent, and to increase speed in the information availability, to allow a higher interaction, in a medium term between who searches for the information and who wants to disseminate it, e.g., schools, institutions.

The database is structured according to the geographical criteria (NUT II/ NUT III and district/city), the education and training area, (study area/education and training area), type of education (professional, technological or superior) and the nature of the teaching establishment (public or private sector, university or polytechnic, secondary, professional or Basic School). The training courses are divided in accordance to the National Classification of Education and Training Areas: professional education; technological education; higher education.

The diversity of disciplines that contribute to the study of Tourism also reflects the range of academic qualifications and work experiences of educators. As a result, tourism programs assume the character of a particular specialist college or school. In higher education, many degrees have the vocation of tourism business or are based in social sciences. It is also noted the diversity in types of schools and departments where these degrees are taught. The philosophy adopted by these institutions is based on the trend to include the study of Tourism in business schools or faculties of social sciences. The educational reality shows the top degrees in analysis, under the Ministry of Science, Technology and Higher Education and distributed by organized science training and education. The National Classification of Education and Training Areas includes a general area called Services (Portaria n.º 256/2005 of 16 March),

which includes personal services, including the areas of Hotel and Restaurant Management and Tourism and Recreation. There are also Tourism courses in the area called Management and Administration.

#### 4. Interest of social networks in education

The information and communication technologies (ICTs) created fresh perspectives and new opportunities for society. In turn, the Internet provides an increasingly rapid dissemination of knowledge, enabling individuals and organizations a gradual improvement in the effectiveness of working in business development and product promotion. It is, in this context, that the role of virtual social networks is here discussed, which constitute an effective vehicle for exchanging information by being more inclusive, democratic and open. These social networks can be classified as clusters by means of specific software applications (Web 2.0), permitting the recording of profiles with data and general and specific information, and the different forms and types of data, which can be accessed and viewed by others. There is also the formation of affinity groups, with or without permission, and specific areas for discussion, debate and presentation of various themes (communities, forums and blogspots).

Social networks based on Internet are increasingly present in everyday life of students and teachers. However, these tools seem to be still little explored in the classroom. Often, access to this type of action is reduced in schools, according to the concern that the student is interested in matters that are not directly linked to the scientific content sought in the teaching process. A key word is collaboration in social networks. Thus, teachers and students assume the role of collaborators in a mutual exchange of knowledge. The active participation of students in constructing their own learning and collaborating with their peers would be, surely, a very positive aspect. The use of social networks can be implemented

at the school if there is a computer lab, Internet cafés or in the homes of students. The work with students on social networks may require a choice between Orkut and Ning network. However, Ning has the characteristics of a virtual learning environment with more interactive features.

Alexander (2010: 197-198) refers that social networking services routinely enrol millions persons around the world. He considers that students are sometimes better positioned than older campus staff members to enumerate it. Teenagers might blog at the moment, or have either a MySpace or Facebook account, then shift to another platform as it emerges. Now, Wikipedia is both useful to them and perhaps slightly exciting as its notoriety grows. Alexander indicates that future college students are already participating in online social networks, consuming digital media there, and starting to create digital content. Web 2.0 is not remarkable; it describes simply the background structure of media and socialization. How can universities respond to this world, which has erected itself around us in a very few years? Several avenues are open to us and have already been trodden by some institutions: learning from successful architecture, following new and emerging technologies that are changing learning (what some call Learning 2.0), and rethinking literacy. Higher education has also experienced a gold rush in microcontent via course management systems, with enormous amounts of class materials uploaded by faculties. Perhaps focusing on this homegrown microcontent process, making it easier and more visible, will make digital teaching still go further. For the two approaches suggested by Alexander (2010: 201), intercampus collaboration is more necessary than ever. Web 2.0 projects develop with a speed considered fast even for the digital world, rippling across computing categories while developing new ones. Sharing experiences and lessons learned with these many platforms is powerful and benefits from a large field of case studies. Approaches beyond the three outlined above, in this brief discussion, should surface and be discussed in the best traditions of the open source and of the academic world.

The idea of O'Reilly (2010) in his article "What is Web 2.0", assumes the shift to the Internet as a platform, and an understanding of the rules for success in this new platform. The most important rule is to develop applications that take advantage of the network effects to become better, the more they are used by people taking advantage of the collective intelligence.

According to Bohn (2010), creating communities on educational topics is growing and it makes other people interested in this subject, coming together, discussing and sharing information over a network. Some features that can be exploited by teachers are the sites known as wikis, video sharing sites like YouTube, Podcast services, social networks of relationships, among other tools. From these Web 2.0 tools, one that deserves special attention is the social networks. As an example, we have Orkut, a very popular social network among teenagers, Ning and MySpace. Like the tools of Web 2.0, social networks offer a huge pedagogic potential, because they allow the study group, knowledge exchange and collaborative learning. One of the tools of communication that exist in almost all social networks is discussion forums where members can open a new topic and interact with other members sharing ideas. According to Campos (2009), the connection between the higher education institutions and the technological innovation and the development of specific solutions in this area, help to keep the students focused and help them in their learning process. Thus, we have increasingly equipped laboratories, particularly with data-show to present more attractive and dynamic lessons, which creates opportunities to use multimedia resources, etc. In fact, communication between institutions and their participants also follows this path and the technology appears as a link between the active communication and the relationship between the parties. Today, it is almost impossible to find a higher education institution that does not use the new social networks by monitoring their web image and even actively engage in the opportunities that arise with the use of channels such as

Twitter, YouTube, Orkut, Flickr and blogs corporate. In conclusion, connecting to social networks is not a simple task for the institutions as it brings a number of challenges, but also many opportunities, so that the communication can flow in a way that only a network can provide.

The major development offered by these tools is due to the network learning. In countries like England and Japan, this teaching method has had some success: in the virtual space, students discuss classroom topics under the supervision the teacher, or may even ask questions from their own home. Twitter is also adopted by some schools because of one of its peculiarities: the texts can only be 140 characters maximum, and students are challenged to express ideas concisely. In some schools, there even were contests and competitions in which only students with a greater capacity for synthesis would win. A much discussed topic is how to make safe and productive use of networks? Twitter appeals to schools because it gives authenticity. A user must have a user name and password to participate in these sessions. However all the content that results will be available on the Internet. Concerned with this situation, some schools prefer to create their own networks, which function as an intranet, with allows to take measures to take responsibility for what happens on the network and thereby avoiding exposure of the students.

Ning is an interesting pedagogical site because it offers the possibility to create a social network cost free. We can compare it to a Virtual Learning Environment (VLE), because of the many tools it offers, from traditional forum to setting up blogs, upload videos, photos, audio, etc.

The biggest challenge is, perhaps, to make this educational networking really effective. In the U.S., some schools that have tried to implement this teaching method have been forced to withdraw their decision. When the exercises were taking place within the domains of school, it came to light that students preferred to visit their favourite sites and get to chat online while the lesson was still on course. This experience can be characterized as a fiasco. Another dan-

ger of the virtual environment relates to the kind of language that students tend to use on the network, which are far from the writing rules.

Based on international experience, it is now possible to investigate which methods and tools works best. One possibility that has been more successful is to put children sharing network research projects, thus replicating (small scale) what can be seen in research centres. From home, students will exchange information and each will develop its share of the project until a moment in which all parties come together. The interest in this type of researches helps us to explain a study by the Organization for Economic Cooperation and Development (OECD), which states that children with a home computer spend about 30% more time with their studies. It is also evident that the network encourages the speed of thinking, teamwork and the ability to expose the ideas in public, even at a great distance.

For example, a well developed Wiki can be used as a tool for prospective students, the institution getting a public encyclopaedia. A well managed and focused social network could be used as a link between the student and the school even when the student has already left it. It is clear that this methodology should be gradually incorporated, with a range of activities in the classroom and in a virtual environment. For example, the teacher would hold working concepts, tools and purposes in the classroom and later in each class, encouraging students to use this technology. After this stage it would be possible to use the virtual community to supplement the work in the classroom, thus starting the collaborative process. However, in this process there are some barriers to be overcome: it is necessary that teachers get up to date training in these teaching practices and learn how to use these tools, which involves spending time and extra work. Another difficulty is to get students into these environments because although the vast majority of them already knows terms of dynamics and technology, it is necessary that students know their role as a contributor and to benefit from it in their learning process. Teachers will "open the eyes

of students" for this opportunity. At the moment there are already free tools for this purpose and it is necessary that major changes in the learning process are made so that there is not only a passing on of knowledge but also teach students to how to use, modify and even disagree.

Social networks like Facebook or Twitter are helping to change the structure of the tourism industry by allowing consumers to share their experiences, becoming, according to Buhalis (2010), content producers. The "consumer is also becoming a producer of information," which makes the task of travel agents even more difficult, who need to relocate themselves if they don't want to continue to lose market share. Expert in eTourism, Dimitrios Buhalis is considered one of the most respected "gurus" of tourism, especially studying the role of technology in industry developments. In fact, technology has changed the structure of tourism. Improved the way to communicate with customers and the way we influence them. It helps to keep an open dialogue with the client. This changed the competitiveness of tourism industry and the way organizations communicate with customers (Buhalis, 2010).

According to Carrera (2009), the professional social networking sites are changing the way we manage our networks, because each of us is responsible for what we put on the Web like e.g. the profile, which can operate as a professional passport in this century. In fact, this statement supports our interest in developing a social network in education in tourism, which aggregates information from its members, while enhancing the communication between them.

## **5. Social network of higher education of Tourism in the Central Region of Portugal**

The knowledge of links between members of the scientific community of Tourism in Portugal is necessary to determine to what extent the conditions

are made to create a model of networking (Salgado, 2007). The Sociometry is a method which allows the study of the behaviour of people in a group (or social network), their positions and interprets their choices. This is a necessary interpretation to understand the relationships, both formal and informal (through sociometric indicators) between the responsible for the degree in the tourism are. The sociogram shows the interconnections of the degrees and the regularity of the contacts established at the level of a country or region, depending on the scale of analysis. The information provided by the head professors of each degree, being qualitative in nature, reveals the complex structures (network) and the difficulties in interpreting them. The symbols are used in an adaptation of sociograms (Prados, 2000: 67), according to the following guidance: single (public IP, blue circle; U public square of blue, Private IP, red circle; U private, red square) and criteria relationship (sometimes by year, red arrow, once per month, pink arrow, once a week, brown arrow, once per day, blue arrow; many times a day, green arrow).

The formative reality of Tourism described by Salgado (2007), seized in the analysis of secondary information, allows us to disclose the geographic distribution of higher education. It is our intent to complete this preliminary analysis with primary data obtained through the interview with the head professors of each degree. The results obtained allow us to determine the viability of the hypothesis of a network structure among the academic staff members involved in training in Tourism at the level of Higher Education. In this context, we concluded that the public degrees are distributed throughout the territory in general, while private ones are concentrated in the metropolitan areas of Porto and Lisbon and at the archipelago of Madeira. There is a certain wholeness between the two subsystems and with it a more balanced distribution. In several sociograms developed by Salgado the red colour, symbolic of a certain irregularity in contacts between degrees, dominates. This proves that the need for a reorganization of the network, namely the relations

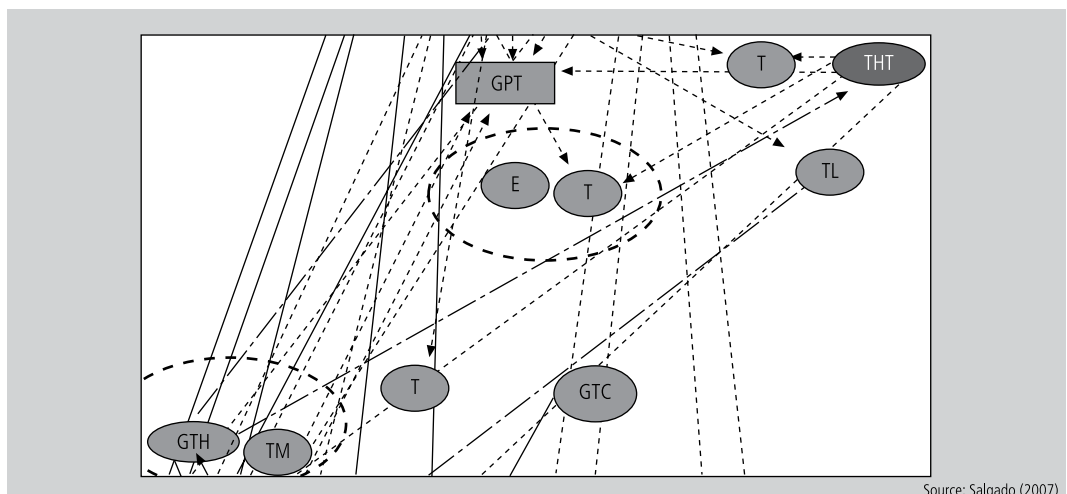
between public and private institutions in the Central Region of Portugal (see Figure 1), and as discussed in this article.

Therefore, there would be a structured institutional platform for regular relationships with the aim of supporting the educational system in the area of tourism. It would be a strategy to develop in order to meet the various challenges, particularly those imposed by the Bologna Process at an European level.

On the one hand, Salgado (2007) concludes that there is a reduced number of contacts in the network and, secondly, on an equally low importance given to the connections between degrees. However, the importance of contacts to achieve the aims and the compatibility between the degrees were derived from the analysis of the average from the evidence. Also the importance given to degrees by their peers is noteworthy. The lack of significant differences by sub-system is one of the findings reported in his doctoral work. Although the institutions value their networks, either private or public, it is stated the desire to broaden the scope of these relationships to better achieve common goals. The organization of this academic community, on a network, provides the necessary strategy to boost the connection between the public and private subsystems, and thus allow the genesis of the training system in Tourism

which is supported in this article. Responsiveness to a membership at a network structure was clearly demonstrated by the interest expressed by head professor of each degree. In the same way it was mentioned that they were willing to promote the necessary changes in their degrees and change its curriculum structure, namely to stimulate mobility. The indicators show a tendency to enhance the network structure, which can be well coordinated, assuming guided aims to the formulation of common policies and educational strategies in order to engage in a more effective communication with peers. The efficiency of the education system in Tourism depends on an effective integration. The organization in network is a necessary instrument for this academic community, which verifies the essential homogeneity to its cohesive establishment, allowing a greater mobility of students and faculty members, the sharing of knowledge, advanced training of teachers, among many other advantages.

Training in tourism becomes increasingly important in Higher Education, which justifies an effective networking among institutions. In the interview questions on this type of operation were analyzed and the study used descriptive and inferential statistics in order to acknowledge the trends. The Sociometry, acting in addition, has outlined some of



Source: Salgado (2007).

Figure 1 | Extract from the network of relations among the Central Region Institutions.



these relations, making possible choices in terms of the network's coordination, in the area of tourism. In this sense, knowledge of the educational structure in question requires a rigorous and updated research, showing the level of coordination between existing institutions. The main aim is to establish a strategy which invigorates the network articulation, the level of the national training system and in particular in the Central Region of Portugal.

The lack of a rigorous educational policy in tourism education in the Portuguese Higher Education, conflicts, in particular, with the corresponding weight and importance of this economic activity in the Country and its Regions (Salgado, 2007). In this context, we emphasize the importance of research on education in Tourism, which can be accomplished at the Portuguese academy, based particularly on the diagnosis of the regional reality to establish some guidelines that allow us a better coordination and interaction among the existing performers in the Central Region.

It is assumed, that the complexity of training in tourism and the perceived disconnection between the performers and, based under these assumptions, the present article seeks to clarify the situation in tourism in order to propose some suggestions to make this system more efficient in the Central Region of Portugal. However, the establishment of an integrated training system in the scientific area of Tourism, at the level of the Portuguese Higher Education, is an important strategy, which ensures the sustained development of this sector (Salgado, 2007). This relationship recognizes the need of designing curriculum processes, which are training and educationally more efficient in its field, enabling it to reach its own scientific status as a teaching area. These processes rely also on the validity of the curriculum and the structuring of the network system, providing essential tools for modern educational practice.

In Tourism, the degrees should be established in accordance with national and regional needs and integrated with the planning of their public and

private net. The training system in Tourism is thus intended to ensure integrated planning (network) of the institutions and degrees nationwide, but from a previous regional coordination, which is assumed in each Region-Plan. This is a desire expressed by the most head professors that experienced a number of benefits from this kind of network (Salgado, 2007). The reference to the fact that the existing degrees do not take into account regional needs within an integrated planning of their public and private net, reveals that most inquired believe that the network is an indispensable tool for a more effective reorganization of the formative system training in Tourism especially in accordance to the Bologna Process.

Curriculum development in higher education may be another essential way to build better syllabi of degrees in Tourism. Indeed, the deficiencies that remain in education in Tourism, especially in terms of curriculum, may compromise the desired network structure, because there is no planning, which the law requires for the national network, covering public and private subsystems.

The curriculum and educational methods used in the past twenty-five years in Tourism education are clearly inadequate to the new reality resulting from the implementation of the Bologna Process. Thus it requires a great effort to adapt, because the training system design is increasingly framed at the European level, which may include strategies that promote quality and efficiency, which are requirements for a better coordination between curriculum theory and the practice of training in tourism. This enlargement to an European level also implies a new relationship in the network. The interaction among the academic community is the path required to achieve the aims of the Bologna Process. The new model of training system that is wished depends on the increasing collaboration of people in a network structure, either nationally or regionally, which eases efficiency and effectiveness of the training processes in question. It will therefore be important to study the best way to implement a social network in tourism, particularly applied to the central region of Portugal.

## 6. Conclusion

The organization of the network of institutions and performers involved in higher education of Tourism, in central Portugal, is one of the aims of this study, which begins by defending / supporting the efficient use of social networks as an interesting tool to develop the field of Tourism education. The interviews done by Salgado (2007) applied to degree coordinators of the 1<sup>st</sup> cycle (bachelor) helped to identify the formal and informal relationships existing in this scientific community in Portugal and especially the weaknesses of the existing network. We believe that the creation of an active and dynamic community, which can become a permanent forum for reflection and discussion on best practices for training, will be an added value through the efficient use of social networks.

The efficient use of social networks by people of the scientific community of Tourism will be an effective working instrument to improve communication between the nodes of the network of higher education, which can be expanded later to the level of training. This effective network articulation will structure and strengthen existing relationships between members of the academic community of Tourism in the Central Region.

The project NOTE will be a platform for this academic community, which can be crucial to improve their organization and network, functioning as a platform to a powerful social network that provides value-added around the education system of Tourism.

## References

- Alexander, B., 2010, *Social Networking in Higher Education*, [http://www.net.educause.edu], (Site accessed 5 September 2010).
- Baggio, R., 2007, *What network analysis can reveal about tourism destinations*, [http://www.iby.it/turismo/papers/baggio\_poster.pdf], (Site accessed 16 January 2010).
- Bohn, V., 2010, *As redes sociais no ensino: Ampliando as interações sociais na Web*, [http://www.conexao professor.rj.gov.br], (Site accessed 5 September 2010).
- Buhalis, D., 2010, *Redes sociais/Informação Facebook e Twitter estão a mudar o turismo*, [http://faceturis.blogs.sapo.pt], (Site accessed 5 September 2010).
- Campos, R., 2009, *Ensino superior e as mídias sociais: relacionamento e transparência*, [http://ricardocampos.wordpress.com], (Site accessed 5 September 2010).
- Carrera, F., 2009, *Networking: Guia de Sobrevivência Profissional*, Edições Sílabo, Lisboa.
- Law 46/1986 of 14 October, *Diário da República*, I Série, Número 237, INCM.
- Martins, G. O., 1998, *Educação ou a Aposto na Relevância*, Debates Presidência da República (ed.), *A Educação e o Futuro*, INCM, Lisboa, pp. 71-79.
- Noel, S., Cooper, C., Baggio, R., 2008, *Network Analysis and Tourism: From Theory To Practice*, Channel View Publications, Clevedon.
- O'Reilly, T., 2010, *What is Web 2.0? Design Patterns and Business Models for the Next Generation of Software*, [http://www.oreilly.com], (Site accessed 5 September 2010).
- Portaria n.º 256/2005 of 16 March, *Classificação Nacional das Áreas de Educação e Formação*, *Diário da República*, I Série-B, INCM, pp. 2281-2313.
- Prados, J. S. F., 2000, *Sociología de los Grupos Escolares: Sociometría y Dinámicas de Grupos*, Universidad de Almería, Almería.
- Salgado, M. A. B., 2007, *Educação e Organização Curricular em Turismo no Ensino Superior Português*, PhD thesis, University of Aveiro, Aveiro, Portugal.
- Salgado, M. A. B., Lemos, F. M. F. R., and Faria, C. M. F. S., 2008, *Education and Training in Tourism: National Observatory for Tourism Education*, in Costa, C., Cravo, P. (ed.), *Advances in Tourism Research 2008, IASK International Conference in Tourism Research*, University of Aveiro, Aveiro, pp. 206-215.