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Innovations in Teaching Social Research Methods At The University in The Digital Era: An Italian Case Study

Paolo Diana^{} and Maria Carmela Catone^{**}*

Abstract: In recent years ICT is having a significant impact upon learning and teaching processes, emphasizing collaborative discourse, knowledge building and the performance of real tasks. This paper illustrates the design activity for the undergraduate course in Social Research Methods offered as part of the bachelor degree in Sociology at the University of Salerno, which will be provided in a blended format, i.e. the use of an e-learning platform as support for the frontal lectures. In particular, the paper examines the construction processes of this online environment aimed to encourage the acquisition of methodological expertise, with students performing specific activities which characterise the social research process.

Keywords: teaching, social research methods, blended learning, ICT

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Introduction

The teaching of social research methods aims to provide students with an understanding of the main principles needed to design and carry out a social research. It is a complex activity which develops students on conceptual, procedural and technical levels (Agnoli, 2004) and consequently requires the acquisition of both theoretical knowledge and practical skills. From a didactic perspective, the relationship between these aspects represents a crucial topic which is becoming the object of debate among scholars who deal with the teaching of the discipline. In fact, in recent years, especially in the United Kingdom, an emerging area of research is focusing on the study of teaching strategies which can enhance learning of social research methods. Our contribution forms part of this branch of research and is characterised by a focus on new educational frontiers marked by the introduction of innovative learning environments and Information and Communication Technologies (ICT) as well as by the changing needs of students. In particular, this paper presents a reflection on the teaching of the discipline through the design of an e-learning course in blended format, which sees the use of an online platform to support the frontal lectures¹. This design activity is the result of previous experiences teaching social research methods through e-learning that have yielded effective results in teaching and learning processes. From our experience, the use of blended learning could overcome some limitations in the practice of teaching and typical difficulties in learning of the discipline. E-learning and especially blended modality represent, for example, an attempt to find the right balance between the theoretical and the practical dimensions of the discipline, to make a flexible the learning path for the student, providing new learning spaces and times different to traditional study as well as involving learners in the educational path as active subjects and agents of change within these context (Grion, 2016; Colombo 2008). These aspects are developed in the following five sections of this article.

¹ This paper is a development of an our previous research experience on the use of ICT and e-learning for a social research methods course, published in the issue 2/2016 of this Journal and called "E-learning in an undergraduate course in research methods for the social sciences: reflections on teaching".

The first section presents a reflection on the teaching of social research methods and the emerging development of a pedagogical culture in the discipline. In the second, we propose a situated design of the course derived from an analysis of the discipline, the main pedagogical approaches, a reflection on the student profile and the socio-cultural context in which the student lives. The third section relates to the strategic choice of a blended course in social research methods, focusing on structure which is realized. The last paragraph deals with development and implementation of specific tools and the activities of blended learning course into the different stages of the social research process.

The development of a pedagogical discourse about teaching social research methods

Social research methods is a complex discipline characterized by a mix of theoretical knowledge, procedural and practical issues (Kilburn, Nind & Wiles, 2014, p. 191); it deals with different concepts that move from the philosophical and epistemological underpinnings of social sciences to formal procedures and to the technical aspects that characterize the social research. More specifically, the methodology of social research plays a central position on the continuum between the analysis of the methodological postulates that make knowledge of social reality possible and the development of research techniques (Gallino, 1978, p. 465) and is characterized by a dual dimension: the operative capacity that guides the practice of research and the normative one which provides an abstract elaboration of these research practices (Ricolfi, 1997).

The complex nature of the discipline raises a number of issues from a teaching point of view at undergraduate level, especially concerning the need to balance the procedural, formal aspects of the discipline and the operational, practical ones in a coherent didactic path (Barraket, 2005; Trowler, 2005; Tarifa & Zhupa, 2014) and consequently to provide students with the acquisition of both conceptual knowledge and practical skills, needed to proficiently use the methodological toolkit of the research process (Becker, 2007).

Despite the specific differences of exam programs between universities and degree programs, both Italian and international, teaching social

research methods at undergraduate level usually aims to provide students with the adequate skills needed to develop the conceptual framework of empirical research, to formulate a researchable question, define a research strategy, select appropriate techniques of collection and analysis of information that best answer a research question. In this sense, it implies the need to impart a wide range of different skills, such as research creativity, numeracy, data analytic flair, social sensitivity, intellectual craftsmanship, computing, knowledge of data sources and library sources (Marsh, 1981; Payne & Williams, 2011). These skills, considered as the result of the connection between knowledge and the real context in which the learner works (Facchini & Zurla, 2015), move on different levels: intellectual (e.g. ability to identify and read academic research and articulate theoretical orientations), analytical (e.g. capacity to explore, describe, explain social problems), critical thinking (e.g. the skill to critique research design and evaluate research results) to communicative (e.g. to debate, discuss, present the research path) and research ethics (e.g. to understand and practice the researcher's code of conduct) (Ni, 2013). The acquisition of the skills is only part of a wider reflection related to the teaching of the discipline, i.e. to the different issues concerning how research methods should be taught within higher education in order to support and improve the learning process of the students (Pfeffer & Rogalin, 2012). Even if there is constant and extensive reflection indicating the *how to do* social research methods, limited attention has been given to how they can be taught (Wagner, Garner & Kawulich, 2011).

As indicated by Earley (2014), social research methods education is not an recognized field of research like other disciplines, for example, math, science or statistics (Garner, Wagner & Kawulich, 2009; Wagner, Garner & Kawulich, 2011) and there are not specific journals devoted exclusively to teaching research methods, that are usually inserted in other journals related to different disciplines. Also the research literature on the teaching of research methods is not particularly extensive, suggesting that systematic reflection on the development of pedagogical knowledge should be promoted (Earley, 2014; Kilburn, Nind & Wiles, 2014; Nind, Kilburn & Luff, 2015; Lewthwaite & Nind, 2016). In particular, Wagner, Garner, and Kawulich (2011) conducted a systematic literature review of 195 articles published in 61 journals between 1997 and 2007, pointing out that a pedagogical culture on social research methods has still not developed. The

results of this review showed that the majority of publications do not provide a specific support to teaching practices of social research methods and three themes require a substantial theoretical and empirical treatment: “the role and characteristics of the teacher; the challenges of teaching and learning specific aspects of research methods; common similarities and differences in research methods between disciplines” (Wagner, Garner and Kawulich, 2011, p. 82). A wider literary review carried out by Earley (2014) on 89 articles published between 1987 and 2012, concerning the teaching and learning of research methods, also confirmed that the teaching of the discipline is not based upon common and established practices and that the research on these topics does not help to give guidance and suggestions on how to facilitate the learning process of students. Moreover, the analysis review also suggests that the development of a pedagogy in social research methods should promote active learning approaches to teaching the course so that it offers “hands-on exposure to research methods” (Earley, 2014, p. 248). Although there is a general lack of systematic reflection on teaching research methods, in recent years there has been many signals of a growing interest in the pedagogy of research methods at international level, especially in the United Kingdom² (Lewthwaite & Nind, 2016). As underlined by Lewthwaite and Nind (2016), the publication of edited collections related specifically to teaching social research methods (Garner, Wagner & Kawulich, 2009), quantitative (Payne & Williams, 2011) and qualitative ones (Hurworth, 2008) as well as some research that has been carried out, point towards the development of an educational culture on the discipline. These signals are also confirmed by a thematic review carried out by Kilburn, Nind and Wiles (2014) on 24 published papers from 2007 to 2014 indicating that a pedagogic dialogue is

² In United Kingdom the discussion about research methods is particularly developed also thanks to the support of different organizations and programs financed by the national government: the National Centre for Research Methods (NCRM) that was established in 2004 as part of the Economic and Social Research Council’s (ESRC) plan to enhance the developments of research methods across the UK social science community; the centre is involved in research, training and development of capacity building in social research methods, both at the national and International level. Q-Step is a programme, funded by the Nuffield Foundation, ESRC and Higher Education Funding Council for England (HEFCE), planned to specifically foster a quantitative social science training in the UK.

beginning to arise especially in terms of active, experiential and reflective approaches of learning. This pedagogic vision is also in line with the most recent developments of the constructivist approach (Howard & Brady, 2015) that considers learning as an active process, where knowledge is constructed through experience and reflecting upon that experience. In other words, constructivism stimulates the activation of experiential learning through the students' own experiences with the subject (Barraket, 2005). Other research has been carried out in order to identify the main aspects needed to foster an effective teaching of social research method and on how teachers can facilitate the learning of the discipline amongst both students and early-career learners in different contexts. The majority of these (Trowler, 2005; Tarifa & Zhupa, 2014; Nind, Kilburn & Luff, 2015) have highlighted how teaching must create a link between methodological theory and practical research if students are to gain an understanding of the discipline and engage in critical thinking. More specifically, Persell, Pfeiffer and Syedd (2008), on the basis of a research conducted on 44 experts in the area of sociology and social research methods, identified important goals that students should reach during their learning process and identify the role that practical activities and assignments play in order to encourage students to think sociologically. Pfeffer and Rogalin (2012) carried out a brief case study, identifying three-strategies for teaching undergraduate research methods focused on (1) active learning assignments and discussion-based learning, (2) the participation in faculty guest discussion events and (3) doing research in the real world. Trowler (2005) and Tarifa (2014) promoted to teach sociological theory with an empirical orientation; they explored various approaches of teaching sociological theory in order to enhance students' capacities to think critically, link sociological theory with sociological practice and apply sociological theory to everyday contexts. This research is also in line with the ideas expressed by Andriessen, Kerremans and Sloodmaeckers according to which "students acquire useful skills through application - not memorization and regurgitation" (2015, p. 2) in reference to the idea of practice by doing and active learning. "By repeatedly applying research methods, students can master skills. Secondly, learning from one's mistake enables student to hone his or her skills due to iterations of trial and error" (2015, p. 2). In addition, also Payne and Williams argue that "the best way for teaching social research methods consists in the integration of methods training and

hands-on-research across as much of the program as possible. Applying research skills is the most effective way of showing this relevance of this training and reinforcing these skills” (2011, p. 44). Much of the recent research is included in a special issue dedicated to the teaching of research methods (Nind, Kilburn & Luff, 2015) and identifies the main challenges and pedagogical themes such as the lack of pedagogical reflection supporting research methods teaching and learning; the role of reflection; the different background, attitudes and approaches of learners; the role of methods software in teaching and learning. For example, Corti and Van den Eynden (2015) examined the teaching and learning of data management skills, both quantitative and qualitative, among students and professionals from different disciplinary backgrounds, encouraging a learning by doing flexible training. Another important and recent study has been carried out by Lewthwaite and Nind (2016) who organized a panel with the participation of international experts in order to investigate teaching and learning practices in social research methods. The results of this research identified three prominent goals towards which the teaching of social methods research should aim. Firstly, it is necessary to make research *visible*: this means encouraging and allowing learners to have active engagement with research methods, so that students can get actively involved, also promoting the practice of doing research in real world contexts. Next, teaching should support students to reflect on their research activities, enhancing the capacity of the learner to critically review what they have done, to analyze their performance and share their acquired knowledge with peers and teachers. In this way the learner develops the ability to link concrete experience, theoretical knowledge and at the same time “to critically analyse connections between actions, thoughts and emotions, and knowledge” (Ryan & Ryan, 2015, p. 78).

Focusing on the Italian context, the main discussion on the various issues related to teaching and learning of research methods is expressed in the book edited by Baldissera (2009) in which practices, experiences, approaches as well as the innovations in the organization of the courses in the area of social sciences methodology within the Italian university education context are presented. From an analysis of the institutional and legislative changes regarding the Italian academic system, the book discusses the methodological training process for the undergraduate and Master degree in Sociology as well as the Master postgraduate and Ph.D.

courses. It presents, for instance, a comparative analysis of exam programs in the area of methodology of Italian undergraduate degrees in sociology, also taking into account of the denomination given to each of the courses, the assigned credits and its contents (Agnoli, 2009); some sections are devoted to the role multimedia technology as a support for the education of students (Arcangeli & Diana, 2009; Gobo, 2009); besides, the teaching models, the role of the methodology in sociology bachelor degrees (Fasanella, 2009) as well as the training processes, the evaluation (Agodi & Morlicchio, 2009) and the scientific production of doctorates in the methodological field (Cardano & Manocchi, 2009) are explored. In recent years, also other works have investigated the teaching and learning processes of social research methods through the use of ICT (Freddano, 2010; Catone & Diana, 2015, 2016, 2017; Diana & Catone, 2016).

As we will see in the next section, from the research and the reflections mentioned above, it is clear that the development of a pedagogical culture in teaching research methods should be encouraged and ensured. In our opinion, it is crucial to develop an educational culture that allows us to explore and address uncertainty and to create guidelines which make for high quality teaching and learning processes (Messina & De Rossi, 2015).

According to De Rossi (2015) the construction of a pedagogical reference framework can be realized which addresses theoretical, practical, social and ethical issues. In particular, from his point of view, the first aspect that encloses dialectically the theory and practice considers the pedagogy as knowledge that deals with the possible actions to be implemented in the educational contexts, identifying effective relationship between the study outcomes, critical reflection and the concrete operativity. In addition, it is necessary to consider the social dimension of the educational relationship, intended as ground of listening, communication and circular empathy. Finally, ethics issue also play an important role, as it refers to the choice of aims and the necessary methods and tools to promote the critical exercise of reason.

Following this perspective, it is needed start from these key interrelated aspects to move towards the construction of an educational culture, developing specific action guidelines that could provide effective teaching and learning paths.

Social Research Methods course: a “situated” design

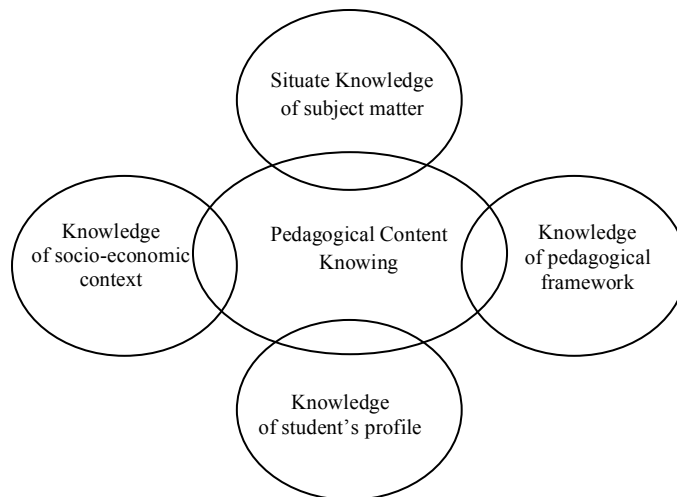
Starting from the arguments expressed in the different international studies previously synthesized and on the operational aspects they pose concerning the development of a pedagogical culture of social research methods, we here present our teaching experience and some specific issues that have led us to start a phase of design of the undergraduate course in social research methods in order to offer a quality learning experience. In this way, we intend to provide our contribute to the articulate reflection on the teaching social research methods.

The design of a university course is a complex process which must cover different aspects. First of all, it means to develop a pedagogical knowledge that embodies a reflection on the specific subject content, i.e. the characteristics of the discipline, and take account of the profile of learners in order to provide a personalization of learning processes. The need to design a situated and contextualized education path was addressed by Shulman (1987) who proposed a construct for the teacher education, called Pedagogical Content Knowledge (PCK). This model introduced the concept of pedagogical knowledge of the subject content that consists of an analysis of the subject content, a general pedagogical knowledge and an understanding of the student profile. Later developments of this construct have gone in the direction of promoting learning processes, focused on *specific content*, addressed to *specific students* in *specific contexts* (Cochran, De Ruiter & King, 1993; Van Driel, Verloop & De Vos, 1998). These concepts are needed to be considered in order to provide an high quality educational process.

More specifically, the design and implementation of a course implies the need to undertake a deep reflection on the following aspects (Fig.1): knowledge of the discipline and specification of the pedagogical framework, knowledge of student profile and of the socio-cultural context. First two dimensions concern the subject matter, i.e. an analysis of the characteristics and specificities of the discipline, and the pedagogical framework, i.e. the choice on the teaching and learning modalities; next, the knowledge of the student and of the context identify an analysis of the profile of learners, as well as an a socio-cultural exploration of the conditions in which the learner operates. According to us, only a careful combination of these components can provide an educational path, capable

of realising situated teaching strategies that respond to specific learner needs.

Figure 1. Pedagogical Content Knowledge model



Source: Our elaboration of model by Cochran, De Ruiter and King (1993).

We now explore each dimension in the context of the course in social research methods that takes place in the second year of the Bachelor Degree in Sociology offered by the University of Salerno (Italy); it has a duration of 60 hours with a total of nine credits and last year an average of 130 students attended the course. As will be developed in this section, our reflection starts by carefully identifying the main characteristics of the social research methods discipline linking it to the learning aims, the typical difficulties met by students during the undergraduate course, its pedagogical implications in terms of teaching strategies and learning processes as well as the choice of the pedagogical framework that better promotes the knowledge and understanding of the discipline.

Social research methods is a discipline that aims to provide students with an understanding of the principles needed in order to design and carry out an empirical research. It encourages students to critically select, apply

and evaluate appropriate research methods for investigating social phenomena, developing understanding of different phases of the research process with a focus on the main procedures related to data collection and analysis. In particular, the course in social research methods discussed in this paper is designed to introduce students to the main principles of quantitative methods, as during the first year students already complete a course of social sciences methodology that address the epistemological underpinnings of social research and will have another specific exam in qualitative methods. At the end of the course students should be able to translate a generic question about a social phenomenon into practicable empirical research designs, collect data with a survey or secondary data, organize a data matrix, use appropriate statistical data analysis techniques through specific software, present the results of data obtained and, throughout this the course, should encourage students to use their sociological imagination. According to this perspective, the course of social research methods aims to develop learner's knowledge and understanding of specific techniques for social research, but also the ability to apply knowledge and understanding acquired. In other words, it promotes the acquisition of the so-called methodological expertise which is made up of two aspects: to do research, i.e. to define the most appropriate research design for the sociological problem, lead data collection and data analysis techniques, link the results to the initial hypothesis and to evaluate a research carried out by others, i.e. critically read and understand the results obtained by others, identifying possible methodological errors, etc. (Meraviglia, 2004). From these learning aims, there is an evident need to link the methodological reflection to specific activities in the practice of research, in order to develop practical research skills as well as to enhance a better internalization of the discipline, to boost critical thinking and stimulate the interest of students.

In our opinion, a balance between theory and practice in the teaching of social research methods could also respond to the need to some typical problems that students usually encounter in the learning of the discipline that have been developed in recent studies (Catone & Diana, 2015; Diana & Catone, 2016). According to them, a typical difficulty in the teaching of social research methods relates the concept of method itself that is often considered by students as rigid sequence of steps aimed at achieving a cognitive objective; as noted by Marradi (1996), method in social research

is a form of art that implies the ability to choose the most proper methods and techniques, needed to answer and develop the sociological research question. To overcome this issue, it is necessary for social methods teaching to encourage the socialization of learners into the “culture of research” (Eisenhart & DeHaan, 2005, p. 7), as a set of activities, characterized by intellectual, rational and intuitive and imaginative elements, that constitute the productive process of science (Bruschi, 1999).

Another common difficulty, often based on prejudice, relates to the numerical concepts of the discipline as students usually feel a sense of anxiety and even fear over statistics (Payne & Williams, 2011). In this sense, it is important to approach student and make him confident with the numerical aspects as part of a logical system of reasoning, based on argumentation and exposition (Catone & Diana, 2017).

A further typical problem relates the acquisition of linguistic register of the discipline; as pointed out by Marradi (2007) methodology relates with the production of scientific language, i.e. a specific and precise language with its own vocabulary that allow to overcome the uncertainty and redundancy that is typical of the common language (Bruschi, 1999). Students are not used to adopting a linguistic register, using inappropriately specific terms and do not understand the need to acquire this skill. To solve this aspect, it could be useful to promote a teaching strategy which creates moments in which students make direct use of the methodological language.

Another critical aspect relates to the formal nature of the methodology of social research that deals with the rules, the principles and the conditions underlying the scientific research and the correctness of the procedures adopted; this aspect also has an impact on the ability to make abstractions, i.e. apply known and already used procedures to a new and different context. The formal connotation of this discipline makes it less directly comprehensible and motivating than other substantive subjects (Gobo, 2009). For this reason, it is needed to favour the transition from theoretical concepts into concrete research applications, fostering the idea of method that, although formal, has also a concrete validation in its use of empirical research.

All these issues, according to us, are also linked to the need to find the correct balance between the formal, procedural, theoretical aspects of the discipline and the practical ones that it is often difficult to combine in a

coherent didactic path. From our teaching experience the practical dimension of the discipline is often neglected for several reasons: first, during the lectures, it is usual to spend more time on explanations of theoretical aspects, precluding the opportunity to provide specific time for empirical research applications. Secondly, the practice of research is often overlooked because of the difficulty that the lecturer meets to follow and supervise the activities of a large audience of students.

Based on the characteristics of the social research methods course and specifically its learning aims, we have reflected on the pedagogical framework to adopt, what impact this has on the educational strategies to implement and how this can better support the learning process of the student. Among the different pedagogical approaches, we believe that constructivism could foster a deeper understanding of the discipline, contributing to overcome the difficulties mentioned above and balancing the relationship between theory and practice. Constructivism is an educational model that places the student at the center of the knowledge building process, through collaborative activities among peers and the realization of authentic tasks (Jonassen, 1994). More specifically, constructivism considers learning as an active process, where knowledge is built in relation to former experiences in complex and real situations and it enhances knowledge construction through social negotiation instead of knowledge reproduction. Moreover, this pedagogical approach enhances specific teaching strategies (Calvani, 1998; Rivoltella, 2003; Rossi, 2010) that engage learner in more active modes of experiencing new knowledge and skills, by providing environments and activities such as real-world settings, case-based learning, simulations that allow students to internalize a concept by applying it in a practical activity and in this way fostering critical reflection, meta-cognitive processes and, at the same time, to encourage participation with a personal imprint to a collaborative knowledge construction.

Beyond the aspects related to the nature of the discipline and the choice of the pedagogical framework, another fundamental dimension to consider in order to provide a quality learning process and, in our case, to redesign a course in social research methods is understanding the socio-economic and cultural points of views in which students live as well as an analysis of the typical student profile in terms of expertise, knowledge and capabilities owned (Mannay & Wilcock, 2014).

The context in which our learner operates is Campania³, a Southern Italy region characterized by a complex configuration of socio-economic factors (labor market, employment, entrepreneurial skills, innovation, human capital etc.). According to the Istat data, Campania suffers a significant gap in the average levels of education when compared with Italians in other regions: in 2016, only 15.2% of the young population (20-34 years) possesses a degree; it is the region with the lowest rate of graduates after Sicily (13.7%) and Sardegna (13.2%) and with high rates of unemployment (20.4% in 2016 with peaks of 21.5% and 21.7% in 2013 and 2014); NEET (Not in Education, Employment or Training), i.e. young people of between 15 and 29 years who have neither a job nor are they included in a course of education or attending a course vocational training, in 2017 is 35% of the population between 15 and 29 years which is nine points higher than the national average (26%). Moreover, considering the level of the infrastructure, Campania is one of the territory's most geographically isolated and exposed to the digital divide (Istat, 2016).

Moving on to the analysis of the characteristics of the learner, the course discussed in this paper is offered to students that usually have both literacy and numeracy problems and inadequate study methods (Arcangeli & Diana, 2009). Relating to literacy, students usually have gaps in understanding, evaluating, engaging with written text to participate actively in society and to realize their goals (PIAAC Literacy Expert Group, 2009). Concerning numeracy they do not often have the capacity to access and communicate mathematical concepts applying it in the different situations in adult life (PIAAC Numeracy Expert Group, 2009). At the same time, some of these students belong to the so-called millennials, i.e. a generation that grew up with computers, the Internet and digital technologies and that has a high familiarity with digital interfaces and new kind of languages (Tapscott, 2011; Capeci, 2014). Another important feature of the student profile concerns the high number of working-students and student-workers and high early dropout rates specifically for the undergraduate course in sociology at the University of Salerno (Arcangeli & Diana, 2009). A student profile with these characteristics must be considered in order to

³ According to the "Rilevazione sull'Istruzione Universitaria 2015" carried out by Istat, 94% of students of the University of Salerno came from the Campania region.

create appropriate strategies that respond to their needs, skills and limitations as well as to create more flexible educational paths, which can adapt to non-traditional times and places of study.

The strategic choice of the blended learning

The open issue we have identified, related to the disciplinary aspects of social research methods, the socio-cultural context in which the learner lives and their specific profile, have led us to rethink how we offer the course in social research methods in order to make it suitable for the formative aims and the learning needs of the students (Ghislandi, Raffaghelli & Cumer, 2012).

Starting from the analysis of these dimensions, we have explored and reflected on the different alternatives that define the design of an university course and we have chosen to adopt a blended learning format, i.e. the integration of traditional face-to-face lectures with online activities and tools thanks to the support of an e-learning platform (Osguthorpe & Graham, 2003). This decision is also suggested by a previous experience we have started from the academic year 2000/2001 related to the course of a Methodology of Social Sciences, delivered both in blended and full distance modes, which registered high levels of satisfaction from participants and facilitated the educational path of the students (Catone & Diana, 2016).

The discussion on the role that e-learning and more in general ICT play to support teaching and learning processes is wide (Trentin, 1998; Bonaiuti, 2006; Ranieri, 2011; Messina & De Rossi, 2015). Many important issues on ICT and education relationship are developed in some reviews that specifically stress on the role of technology in the higher education (e.g., Webb & Cox, 2004; Kirkwood & Price, 2014), its effects (e.g., Tamim *et al.*, 2011), its barriers and limitations (e.g. Bingimlas, 2009). According to several research, ICT can increase access to learning opportunities and benefit student learning experience, fostering motivation, collaboration and specific skills (e.g. Grabe & Grabe, 2007); ICT can also produce a potential to transform and improve teaching methods, reducing, for example, the typical distance between teachers and students. At the same time, other studies state that the effects generated on technology integration in

education, from a methodological point of view, are supported by only limited and unclear empirical research (Bocconi *et al.*, 2013; Pandolfini, 2016). Taking account of the complexity of educational system, according to Pandolfini (2016), it is needed to adopt a systematic and multidimensional approach to explore different levels of analysis and to not focus the role of the educational technologies only in terms of learning outcomes that students can achieve now than before.

Focusing on the use of blended learning in the higher education, both advantages and limitations are discussed in a many studies (e.g. Trentin, 2008; Ranieri, 2011; Salmon, 2012). According to Ausburn (2004), blended learning meets the needs of flexibility, customization, variety and self-regulation; learning engagement and ability to communicate effectively are other aspects identified in a research on the student satisfaction with blended learning carried out by Dziuban *et al.* (2005). Garrison and Vaughan (2008) and Garrison and Kanuka (2004) state that this approach keeps alive the traditional values of face-to-face teaching and integrates the main strengths of online learning, e.g. the improvement of interaction with the student, the implementation of the so-called peer-to-peer education, the opportunity to get in touch with hard to reach students, the possibility to constantly monitor the learning processes and the fostering of new form of learning. About the last point, the use of an online platform also enables course professors to go beyond the dimensions of the frontal lecture and to foster new forms of knowledge construction rather than being mere channels for transmitting information (Garrison & Vaughan, 2008). In particular, these online environment provide: “(a) multiple means of representation to give learners various ways of acquiring information and knowledge, (b) multiple means of expression to provide learners alternatives for demonstrating what they know and (c) multiple means of engagement to tap into learners’ interests, offer appropriate challenges and increase motivation” (Rao *et al.*, 2009, p. 29). For example, they allow to an easier access to study materials and to a wide range of information, more dialogue and spaces for discussion with the active participation in communities favouring form of collaborative learning (Rovai & Jordan, 2004) and they lastly allow students to complete activities and projects, which are based on authentic practice and encourage collaborative work, drawing on the strengths of the diverse skills available in the learning community (Taylor, 2002). Another advantage of using an e-learning

platform is the possibility to support frontal lectures by creating laboratory paths fostering, as we will present in the next section, a project based learning (Ranieri, 2005). Beyond the strengths, blended learning has different limitations such as computer illiteracy of students and their difficulty to access to private computers (Al Zumor *et al.*, 2013); moreover, it is not well suited for students with a low sense of motivation as it requires a significant effort to carry out different types of activities and tasks.

In the case of the course in social research methods, the platform will be primarily used as a place of practice that promotes a learning by doing approach: this means that in the classroom students will acquire models, principles and theories that they will put into practice in virtual labs, or spaces dedicated to individual and collective exercise (Bruschi & Ercole, 2005, p. 27). According to this perspective, the contents of the course will be firstly presented and explored during the frontal lectures and after the student will integrate them with the activities provided in the e-learning platform.

This use of the e-learning platform is particularly effective because it allows teachers to offer students more flexible places and times of study, in order to perform certain activities which cannot be performed during traditional lectures (Harasim, 2012); it also offers the learners the opportunity to put the knowledge acquired during the frontal lecture into practice (deductive approach), implementing one of the fundamental principles of the constructivist theory, i.e. situated learning; moreover, it also promotes the learning by doing (inductive approach) thanks to the activities provided by the platform (Bruschi & Ercole, 2005). As we will present in the next section, the learner will face with *real* tasks during which he/she can formulate questions, discusses ideas, collects and analyzes data, draws own conclusions, rather than to follow traditional didactic activities where learning is fragmented and sequenced. In this way, the learning process is characterised by the constant drive of the student through the application of what he/she has learned (Bruschi & Ercole, 2005). In a certain sense, the blended learning realizes a hybrid learning space, which is not the simple product of a mechanical combination of the real and virtual components, but is based on their interrelations. This configuration goes towards the direction of the last educational trends focused on the so-called *always – on education* (Trentin, 2015) and the

challenges linked to "infosphere", i.e. a space that includes "all existing things, digital or analogical, physical or non-physical and the relations occurring between them and between them and the environment" (Floridi, 2013, p. 135).

In this educational path that sees the integration of the classroom and the online environment the role of the teacher and a specialized tutor are crucial. The former carries out the frontal lectures and organizes their integration with online activities on the e-learning platform; the tutor follows and supports the students in their use of the platform. These figures facilitate the transition between the frontal and the online dimensions, creating a unique and coherent learning environment in which e-learning tools and traditional ones, like the textbook are strategically integrated⁴.

The lesson planning process takes account of different components: the identification of goals and objectives, the development of instructional strategies (methods), the selection of resources and materials (materials) and the choices of assessing student progress and outcomes (assessment). In other words, the definition of clear goal statements allows the teacher to specify the skills and concepts that students have to acquire (Rao & Meo, 2016).

According to the learning aims, specific strategies are developed and employed to implement a lesson, to convey information and engage students in the process of developing mastery of skills and content. The acquisition of knowledge is fostered by using resources and materials that provide multiple means of representing and expressing information and concepts or engaging with content. Moreover, assessment activities are then designed to evaluate the level of knowledge acquired.

We will now explore how the e-learning platform is designed and implemented in order to support the frontal lectures in effective way.

The e-learning platform is built by using Moodle, an open source Learning Content Management System (LCMS) that enables users to easily upload learning materials, use tools for the on-line collaboration (wiki, forum, workshops, etc.), as well as data analytics tools which allow users to monitor students training activities and evaluate their realization of the

⁴ According to us, the textbook represents a fundamental tool to guide the student and foster his/her intellectual growth. Over the last year, the following textbooks have been used: "La ricerca sociale: metodologia e tecniche – le tecniche quantitative" and "La ricerca sociale: metodologia e tecniche: l'analisi dei dati", Corbetta (2003), Bologna, Il Mulino.

tasks (Gogan, Sirbu & Draghici, 2015). In particular, the Moodle platform allows users to implement the fundamental principles of the constructivist model that guide our course design: collaboration among peers, the realization of authentic activities and interactions between learners (Dabbagh, 2005). We considered these aspects when designing the internal structure of the course.

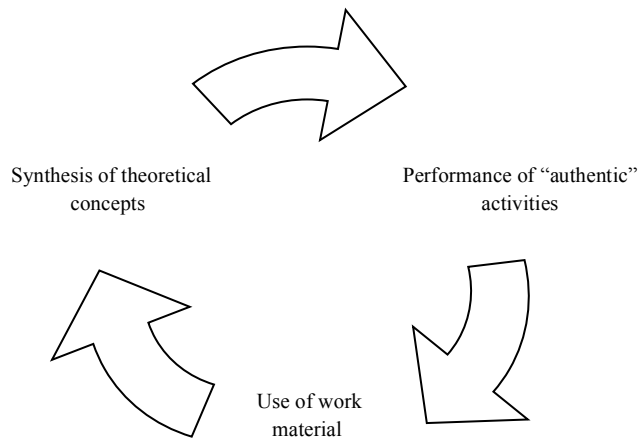
The contents of the course are organized in units that are released directly by the teacher according to the topics discussed during the frontal lectures. This structure also responds to the typical difficulties of university students regarding time management and method of study and the need to guide them in their learning path.

Each unit is made up of three sections (figure 2): the first includes a brief synthesis and explanation of the topics discussed during the frontal lectures; multimedia resources, charts and summaries tables are used in order to make complex concepts more easily understood and at the same time to arouse the interest of the student.

This section represents the point of contact with the frontal lecture and allows teachers to maintain a continuity between different learning environments. Another section hosts a wide library of activities and tasks that allow the student to practice and familiarize himself/herself with the knowledge gained and to verify the level of understanding acquired; moreover, he/she is guided in the performance of *authentic* activities i.e. scenarios, cases or issues which engage the learner in realistic tasks and allow him to observe the direct implications of their actions and to apply the knowledge acquired to real world situations.

The opportunity to engage the learner in these tasks is also fostered through the work material, resources and tools - dataset, research reports, questionnaires, etc. -, included in the last section of each unit that represents the methodological toolkit that the learner could use. The activities as well as the working material represent fundamental scaffolds, intended as incremental supports designed and implemented to help students to acquire a high level of knowledge about the content.

Figure 2. Unit sections



These sections do not represent isolated and sequential moments of learning but are linked to one another, providing a systemic educational framework in which the student can move, acquiring autonomy in the performance of activities and in the use of the materials and platform tools and awareness in the choice of the learning path to follow. This process favours the centrality of the learner who in this way becomes active in the educational process, as he/she is required to acquire, select, store and process information, developing meta cognitive skills (self-orientation of information; reflecting on the activities performed, understanding their own capabilities), organizational (classification, systematization and development of materials), social capabilities (collaborative working) (Capogna, 2008).

The central idea, underlining the design of the course, is promoting knowledge building and emphasizing collaborative activities as useful ways to provide a high quality courses (Chao, Saj & Hamilton, 2010): thanks to specific actions and tools provided by the e-learning platform, learners can work together online to identify the main issues of understanding, to apply their new understanding and constructing plans or developing explanations for phenomena (Harasim, 2012).

Through specific types of tasks, students can improve their learning outcomes (Oxford, 1997), receiving more input from their peers and acquiring a surplus of knowledge that depends on each other's contribution (Brindley, Blaschke & Walti, 2009). Moreover, collaborative activities, provided in a virtual environment, also foster the social relationships that give students the feeling of belonging and enhancing enjoyment with increased interaction, that help motivate them in their studies (Stacey, 2002) as well as allowing them to acquire a greater sense of responsibility (Kessler, 2009).

The collaborative activities that accompany all the five units are firstly promoted by using synchronous (chat) and asynchronous (discussion forum and email) tools that not only facilitate communication between peers, the teacher and the tutor but also activate processes of knowledge generation. *Forums* act as virtual environments that allow students to discuss topics of common interest, share ideas and debate as well as offering participants time to reflect on an idea and formulate a response. Collaborative learning is also enhanced by the creation of specific *Wiki*, i.e. shared document created that allow learners to interact with the same pages, edit, delete them or integrate them constantly maintaining a history of any intervention and variation while also allowing the restoration of the previous version (Shih, Tseng & Yang, 2008). This activity, enabled by using a function of the Moodle platform, i.e. the Wiki module, encourages the learner to actively create new forms of knowledge as well as to create and be part of active study community.

Another collaborative activity relates the *peer assessment* i.e. the assessment of students' work done by their peers. This task, is made possible through use of a specific tool on the Moodle platform, i.e. the Workshop Module, means that students can submit their work that are evaluated by other classmates who provide appropriate feedback one each other. This task sees the students involved in a metacognitive process that generates judgment, critical thinking, as they play the role of appraisers, and self-awareness skills (Chao, Saj & Hamilton, 2010) because they became able to judge their own work (Sadler, 2010). Another specific collaboration-focused tool is the building of a glossary that allows participants to create and maintain a list of definitions, like a dictionary.

A common element of the collaborative activities provided by the e-learning platform is the possibility to make use of writing that is generally

very marginal during lectures, in which instead prevails oral communication⁵. Writing is considered as powerful articulations and representations of our thoughts (Harasim, 2012) and its appropriate acquisition allow the learners to raise awareness and reflexivity (Ong, 1986) as they have time to reflect and think about what they want to communicate (Geer, 2009). Starting from the structure of the didactic units, tools, the activities that we have planned for the e-learning platform, we present in the next section how we have translated and implemented in the delivery of contents of social research methods course.

The stages of the social empirical research implemented through blended learning

The path on which we implemented the e-learning course reproduces the quantitative empirical research process, i.e. the complex system of procedures and activities that need to be selected, planned, organized and applied in concrete research situations in order to achieve a specific cognitive goal (Agnoli, 2004). The empirical research path forms the base of tools and strategies to carry out social research and is the process through which keys of description, understanding, explanation and intervention are developed in relation to the phenomena being investigated. A deep and informed understanding of the social research process implies the capacity to organize, at a symbolic level, the set of activities that must be taken at the practical level in order to reach the cognitive aim.

According to the methodological literature, the steps that characterize the empirical research path are research design, construction of the empirical basis, data organization, data analysis and presentation of results (Ricolfi, 1997). These five phases, addressing specific issues that characterize the social research process, correspond to the units of the e-learning platform.

Each unit provides activities and work materials and resources that allow the learner to carry out a sociological empirical research in the all of the five phases. In our opinion, the decision to build a learning path by structured around the stages of empirical research is appropriate because it

orientates the student in the complex activity of the social investigation: the five units acts as a compass, providing a point of reference for the learner, helping him/her to understand both the sequence of the stages, the importance of each activities and the complexity of the entire process. Moreover, the structure of five phases seems educationally effective because the student can place the different activities provided for each unit in the appropriate stages, without getting lost in the complex and articulated research process.

This didactic strategy is also an attempt to make the research *visible*, involving learners in the practice of methods and promoting reflection on the research activity (Kilburn, Nind & Wiles, 2014; Lewthwaite & Nind, 2016): the learner is the active actor, rather than be passive observer, in the process of investigation, making him/herself aware of the activities to be completed and orienting themselves in the different stages to follow. This idea to put the empirical process at the centre of the learning path, providing students with opportunities to apply what they have learned in authentic situation, represents a further development of the design of the course that we have carried out during last years (Catone & Diana, 2017). This extended model, we here present, encourages the student to carry out an empirical research on a contemporary social phenomenon so he/she who has, in this way, the opportunity to *do* the experience of a social investigation and to *live* the conditions and situations that may occur during a research path.

For the next academic year the research topic will concern a social phenomenon such as the immigration phenomenon, focusing on the study of the foreign presence in the Campania region and its evolution in the last 15 years. The decision to investigate a real and contemporary issue, such as the characteristics of immigration in a southern Italian region, indicates how everyday knowledge can be integrated into the practices of institutions of higher learning and, in the case of this course, enhances the role of research methods in ordinary life, promoting and arousing the interest and curiosity of learner (Payne and Williams, 2011). The five stages of the empirical process only provide an ideal route must be considered not as a subsequent step chronologically, but as logical activities, through which the work of the researcher develops (Ricolfi, 1997). While the structure of the research design has a certain rigidity, its implementation, however, requires flexibility because the empirical investigation is a concrete experience

(Agnoli, 2004). In this sense, with the design of the platform we attempt to validate the concept of research as an open and creative cognitive process rather than a simple validation path of already ideas formulated (Baylin, 1977): the student is guided in the activities provided from the platform, but at the same time he is encouraged to invent, explore and innovate and, by so doing, to seek the conceptual knowledge needed to solve possible problems he/she may meets.

We now explore the stages of empirical research and describe the related activities as well as the resources and the online tools that are implemented on the platform; the activities and the tools are designed to allow the learner to acquire different kind of skills both of a disciplinary and transversal nature (Table 1).

The first stage of the empirical process, that corresponds with the first unit of the e-learning platform, is the research design, i.e. a conceptual phase during which students are led to define the cognitive research aim and to translate it into a practicable research design. In particular, the learner defines the study of the foreign presence phenomenon in the Campania region, through the performance of different tasks and the use of various materials and tools provided on the e-learning platform: he/she is guided in the completion of critical literature review in order to choose the concepts to empirically translate and select the appropriate methodological and technical strategies.

A thorough review of the literature allows student to explore existing theories on the topic and the findings of other researchers and to better focus the scope and significance of the problem investigated. In this task the learner is supported in the correct use of specific online bibliographical databases such as *Scopus*, *Google Scholar*, specific archives used in the social sciences such as *Sociological Abstracts* and *Social Sciences Citation Index* (Corbetta, 2003), as well as the online library of the University; in this way, student can also understand the meaning and the role of theory, intended as “a set of organically connected prepositions, located at a higher level of abstraction and generalization, than empirical reality, derived from empirical patterns” (Corbetta, 2003, p. 60) as well as the formulation of hypothesis which enables the theory to be transformed into terms that can be empirically grasped.

Table 1. Stages of the empirical research on immigration phenomenon

Stages	Aims	Activities	Working material, tools and resources	Skills
Research design	-Formulating a research question - Providing a literature review - Identification of the dimensions of the research question - Choosing of appropriate methods and techniques	-Exploration of online database - Building a concept map - Creation of a specific Wiki - Creation of a methodological glossary	- Online database: Sociological Abstract, Sociological Citation Index, Scopus, Google scholar, University library website etc. - Concept map tools: Mindomo, Cmap, Mindmeister, Inspiration - Wiki Moodle module - Glossary Moodle module	- Conceptualising and abstraction - Critical thinking - Problem solving - Designing - Collaboration
Data Collection	- Collection of primary or secondary data	- Performance of interactive exercises on the questionnaire techniques - Exploration of library with examples of questionnaires - Use of line guides to administer a questionnaire - Use of online database - Discussion	- Drag and drop and multiple choices exercises - Guide to administer a questionnaire - Online database: “Immigrati & Nuovi cittadini” Istat section; - OECD.stat- International Migration Database; Integrazionemigranti.gov.it website; European Commission Migration section website; Demo: demografia in cifre; Noi Italia; Italia in cifre, Eurostat, World Bank, UNESCO; - Forum	- Searching for and retrieving information - Evaluation - Critical thinking - Collaboration
Organization of the empirical basis	- Creation of the CxV matrix - Data coding and entry into the matrix - Cleaning of data	- Performance of exercises and quiz - Use of CxV matrix - Watching of tutorial	- Interactive, multiple choices and drag and drops exercises - SPSS and Excel matrix - Video tutorial	- Computing - Data management
Data analysis	- Selection of the data analysis techniques that respond to the research question - Data Analysis	- Performance of data analysis exercises - Use of data analysis software - Creation of tables and graphs	- Interactive, multiple choices and drag and drops exercises - SPSS and Excel software - Guides to use statistical software - Tables and graphs tools: Excel, App.rawgraphs.io, Tableau, Infogr.am	- Computing - Problem solving - Numeracy - Analysis
Presentation of results	- Communication of results - Identification of new starting point of the research	- Writing a research report - Exploration of library with scientific research report - Creation of info graphics - Peer assessment	- Research report on integrazionemigranti.gov.it website; European Commission — Migration and Home Affairs website - OCSE, Istat, Caritas, Fondazione Migrantes, ISMU research reports; - Info graphics tools: Infogr.am, Picktochart, Tableau, App.rawgraphs.io, Prezi, Power Point - Peer assessment Moodle module	- Writing -Communication - Evaluation - Critical thinking

According to the knowledge acquired, the student learns to trace a concept map, including the concepts related to the main research question that will be empirically translated during the next phases (Trepagnier, 2002); the building of the concept map is realized by using specific online tools included in the platform such as *Mindomo* (www.mindomo.com), *CmapTools* (<https://cmap.ihmc.us>), *Mindmeister* (www.mindmeister.com/it), *Inspiration* (www.inspiration.com). In the case of the research on the foreign presence in the Campania region, students for example could focus their study on the socio-demographic characteristics, the living conditions and the level of integration (social, cultural and economic) of immigrants coming from selected European countries etc.. The dimensions identified, as well as the methodological choices needed to carry out the research, are specified in a research plan. In this task the student chooses the unit of analysis, the kind of sampling to adopt and the type of data and indicators to collect; more specifically, he/she decides whether to carry out the research using primary data, obtained by realizing a survey, or collecting secondary data, i.e. data already collected during other researches.

The organization of the research plan is facilitated by the creation of specific *wiki*: the class is divided in a group of about 10-15 people, who realize a wiki, i.e. shared document and allow learners to interact with the same pages, edit and delete them. Using this collaborative tool, the learners develop a document, including the researchable question, the relevant theoretical frameworks and the appropriate research methods selected. The wiki are also discussed during the frontal lectures, in order to better define the research design with the support of the teacher and identify the possible research paths that students could undertake in the next phase. During this unit student also builds a glossary, a useful tool for specialized vocabulary learning (Ratz, 2015), considering already existent social sciences vocabularies (e.g. Glossary of Social Science Terms – ICPSR, University of Michigan). This assignment takes place throughout the entire research path in order to promote the use of a methodological language and improve the acquisition of the correct linguistic register. Through the activities of this phase learners can develop mainly intellectual and cognitive skills (column 4 of Table 1), such as the capability to formulate researchable problems, to conceptualise issues, to develop research questions, also activating critical thinking and problem solving skills in the choice of the methodological

strategies to adopt. At the same time, the ability to imagine new and different research paths and to plan the research project (Marradi, 2007, p. 19) also refers builds both creativity and design capabilities.

The next unit relates to the building of the empirical basis, i.e. the moment when the information is collected. According to the methodological choices of the student, different research scenarios are configured. In the case of primary data, the learner learns how to build a structured questionnaire which is one of the most used data collection techniques. Specific interactive exercises (e.g. drag and drop and multiple choices) regarding the structure type of a questionnaire and the correct wording of questions and answers are provided. Also a wide library of questionnaire examples on immigration (e.g. the questionnaire on the *Condizione e integrazione sociale dei cittadini stranieri* Istat surveys), are inserted on the platform allowing students to identify the structure, the methodological characteristics and possible presence of distortions in the drafting of questions and to acquire both critical thinking and evaluation skills. Furthermore, a specific forum on the building of the questionnaire (the number and the types of questions, the types of answers etc.) are also created in order to favour the sharing of ideas regarding the empirical translation of the dimensions identified in the previous unit as well as to foster the collaboration of students. Based on the comments on the forum, the definitive version of the questionnaire is distributed during the frontal lecture and then uploaded to the platform.

The next task of this unit is administering the questionnaire. The work material section includes a special guide on the main rules to administer a questionnaire and also the tips to avoid the typical distortions of the interviewee and interviewer. This exercise involves the learner in a real experience in the field: each student gives a questionnaire to about 4-5 immigrants, selected according to the sampling for point of aggregations, a specific sampling technique developed by Blangiardo (1996) and he/she has the opportunity to get to know the main methodological issues related to the questionnaire administering, overcoming both the dimension of the classroom and the online platform.

In the case of secondary data, a specific focus concern the use of an online database. The development of Internet and ICT has facilitated the collection and diffusion of data, by providing important opportunities to social scientists who carry out research based on secondary data. From our

point of view, it is essential that student is oriented in understanding these new resources that promote the acquisition of practical skills such as the searching for and retrieving of information. In particular, students are guided to explore the most relevant data banks at the national and international level on immigration such as the *Immigrati & Nuovi cittadini* Istat section, the *Immigrati.Stat* data warehouse, that include the most updates data on the immigration phenomenon in Italy as well as indicators, tables, graphs and interactive maps and the OECD International Migration Database and the European Commission Migration section website on the migration flows. Also as part of this task, a specific forum is activated where students collaboratively discuss the data to collect and analyze. During this second unit, students acquire a wide range of skills: practical, such as the capacity to search for and retrieve information; intellectual capabilities needed to build the questionnaire; communicative skills related to the administering of the questionnaire; collaborative abilities derived from the different group research activities (building of the questionnaire, forum discussion) .

After the construction of the empirical basis, the next step of the research is the organization of the collected information: during this stage the data is organized in formalized structures. The activity of this unit provides exercises of data coding in the cases for variable (CxV) matrix included in the platform. Students input the questionnaire answers administered in the previous phase and also carry out tasks to clean the data matrix by checking for wild codes and inconsistent responses in order to make data analyzable in the next stage. Moreover, regarding the organization of secondary data identified in the previous phase, the student is then shown how to export and input the data into a matrix. This kind of activity requires a lot of practice and is linked with the acquisition of computing skills and data management, so some video tutorials are included on the platform to help the learner to better follow the procedures needed for the performance of this task.

Once the data have been gathered, the data analysis stage follows. This phase is usually considered by the students as the most complex of the entire research process, as they often have preconceptions about the numeracy and statistical aspects of quantitative methods that are usually seen as technical dexterities and not as part of a logical system of reasoning (Payne & Williams, 2011). To face with these problems and to foster

greater familiarity with data analysis techniques, the e-learning platform supports student “to engage with the contest, to bring statistical data alive and to produce a narrative that is supported by empirical evidence” (Williams & Sutton, 2011, p.75). The platform provides activities and interactive exercises involving student in the analysis of the dataset collected and organized in the previous stage: they are taught to reflect and choose the type of analysis best suited to the cognitive objective of the research, to apply the main data analysis techniques, using the basic features of Spss (trial version) and Excel (Open Office free version) software (how to create a crosstabs, calculate statistical coefficients, present data in graphical form) and finally to interpret the results obtained, linking the statistical imagination to sociological imagination. In order to assist students in understanding the two data analysis software, synthetic and intuitive guides on its use are prepared and inserted into the platform.

The last level of the research process is the presentation of the results. In this unit students acquire skills to prepare a research report that summarizes the findings obtained, as well as the methodological choices done. To understand the structure of a report, the work material section of this unit hosts a library with the main and recent research reports on immigration, carried out by national and international research institutes, organizations and associations such as OCSE, Istat, Caritas, Fondazione Migrantes, ISMU etc.

Next, each student draws up a research report and upload his/her own work, done individually, on the platform and, in the second step, is involved in a peer assessment: this activity engages students in a mutual evaluation exercise where a student evaluate the research report of another student. This type of strategy enhances the sharing and negotiation of knowledge, involving the student in a metacognitive process of reflection on the empirical research and also promotes the acquisition of methodological expertise that consists not only in the capacity to do research but also to evaluate the works of others. Another aim of this unit also is to develop the knowledge and skills needed to learn the most innovative tools of data visualization in order to realize infographics or interactive presentation. To achieve this purpose, the student is guided in the use of specific online data presentation tools such as *Infogr.am*, *Picktochart*, *Tableau*, *App.rawgraphs* etc., and in this way he/she can present the main results of the empirical research on immigration.

After the performance of the activities and tasks as well as the use of the different kind of materials provided by the platform, students are aware of different phases of empirical research and its principles and critical issues. This education strategy could also be effective for different reasons. First of all, as discussed in this paper, it could enhance the learning process of the student as he/she has the opportunity to apply and put into practice the knowledge acquired during the frontal lectures. Such opportunity also responds to the needs of Italian students on the Sociology degree course who, according to the results of the survey conducted by Facchini and Ricotta (2015), have expressed the wish to practice social research methods more regularly during their study.

Moreover, the support of an e-learning platform also facilitates the use of new ICT social research tools by the students. Internet and related technologies are changing the ways to approach social research, as it provides a vast and increasingly valuable source of information, knowledge, arguments and research findings, through a wide range of online data, apps, visualization and analytics software (Edwards, 2013; Rogers, 2013; Marres & Gerlitz, 2016). Faced with the numerous resources and tools offered by the Internet (Pangbourne *et al.*, 2011), it is necessary to guide the student to its informed use. According to us, the e-learning platform, if carefully designed, can serve as a guide to help student to use these resources: moreover, being an online environment, the platform also allows a direct access to the new web resources of social research.

Finally, the impact of the blended course design will be evaluated during the next academic year, when it will be offered. Quantitative data on the actions carried out by students on the platform will be collected and analyzed, through a specific module provided by Moodle: e.g. the time spent on the platform, level of use of study materials, the access to the forums, the level and quality of interaction between students, the modality of use of the wiki and the peer assessment. The level of knowledge acquired by learners will be assessed by an analysis of the tasks and exercises they carry out, based on the results automatically collected on the platform; furthermore, the scores that students will achieve during the final exam will be analyzed and compared with the scores of the cohorts of students in the previous academic years that are automatically registered in a specific online platform, accessible from the lecturer, managed by University of Salerno. Lastly, also a questionnaire on satisfaction of the

blended course experience will be given to the students in order to understand the educational path from the point of view of the learner.

Conclusions

The reflection developed in this paper is part of a wider and emerging area of research related to the teaching of social research methods.

Our effort has concerned the design and implementation of a learning path that allows the learner to experience the social research process and, in this way, to acquire the different skills needed for the so-called methodological competence that consists of the ability to do research and to evaluate the research of others. This opportunity is fostered by the blended learning format that allows student to use online tools and to do activities that, when integrated with the frontal lectures, can become resources capable of bringing out new forms of knowledge, critical reflection as well as enabling students to carry out contextualized tasks, developing meta-cognitive and problem-solving skills (Messina, Tabone & Tonegato, 2015).

In addition, the use of e-learning and, in general, ICT as support for the frontal lectures connects the new generations of university students of social sciences, who are part of the generation of so-called Millennials (Capeci, 2014), to the understanding and to the conscious and rigorous use of a complex discipline, such as social research methods. Our ongoing challenge is to shape and articulate the teaching of the discipline through the use of new digital artifacts that are part of the cognitive, educational and cultural background of this new generation and to intercept the semantics of their language, by channeling it into a scientific framework.

In other words, it means to establish a relationship with a generation born into the web, that makes a constant and natural use of social networks, blogs, forums, and that builds its identity and its representations in the digital world, in a participatory and collaborative ways. All this requires us, as academics, to readjust and transmit new content and knowledge without losing the rigor and scientific and heuristic value of our discipline. To try and ignore these challenges and changes in technological and cultural social nature would not allow us to establish a continuous and effective dialogue with our university students who need to recognize the actuality

and the absolute value of concepts, processes and experiences that are the foundation of our discipline.

References

- Adriaensen, J., Kerremans, B., & Slootmaeckers, K. (2015). Editors' introduction to the thematic issue: Mad about methods? Teaching research methods in political science. *Journal of Political Science Education*, 11(1), 1-10. doi: 10.1080/15512169.2014.985017
- Al Zumor, A. W. Q., Al Refaai, I. K., Eddin, E. A. B., & Al-Rahman, F. H. A. (2013). EFL Students' perceptions of a blended learning environment: Advantages, limitations and suggestions for improvement. *English Language Teaching*, 6(10), 95-110.
- Agnoli, M. S. (2004). *Il disegno della ricerca sociale*. Roma: Carocci.
- Agnoli M. S. (2009). Le lauree triennali: la formazione metodologica nei corsi di laurea della classe sociologica. In A. Baldissera (Ed.), *Insegnare metodologia delle Scienze Sociali* (pp. 25-53). Acireale-Roma: Bonanno.
- Agodi, M. C., & Morlicchio, E. (2009). L'insegnamento della metodologia nel dottorato in Sociologia e ricerca sociale dell'Università di Napoli Federico II. In A. Baldissera (Ed.), *Insegnare metodologia delle Scienze Sociali* (pp. 217-229). Acireale-Roma: Bonanno.
- Arcangeli, B., & Diana, P. (2009). Insegnare metodologia delle scienze sociali in modalità e-learning. In A. Baldissera (Ed.), *Insegnare metodologia delle Scienze Sociali* (pp. 55-71). Acireale-Roma: Bonanno.
- Bailyn, L. (1977). Research as a cognitive process: Implications for data analysis. *Quality & Quantity*, 11(2), 97-117.
- Baldissera, A. (Ed.). (2009). *Insegnare metodologia delle scienze sociali: il linguaggio della disciplina e quello degli studenti*. Acireale-Roma: Bonanno.
- Barraket, J. (2005). Teaching research method using a student-centred approach? Critical reflections on practice. *Journal of University Teaching and Learning Practice*, 2(2), 64-74.
- Becker, H. S. (2007). *I trucchi del mestiere*. Bologna: il Mulino.
- Bingimlas, K. A. (2009). Barriers to the successful integration of ICT in teaching and learning environment: A review of literature. *Eurasia Journal of Mathematics, Science and Technology Education*, 5(3), 235-245.

- Blangiardo, G. C. (1996). Il campionamento per centri o ambienti di aggregazione nelle indagini sulla presenza straniera. In Aa. Vv. (Eds.), *Studi in onore di Giampiero Landenna* (pp.13-30). Milano: Giuffrè editore.
- Bocconi, S., Balanskat A., Kampylis P., & Punie Y. (Eds.). (2013). *Overview and analysis of learning initiatives in Europe*. Luxembourg: European Commission.
- Bonaiuti, G. (Ed.). (2006). *E-learning 2.0: il futuro dell'apprendimento in rete fra formale e informale*. Trento: Erickson editore.
- Brindley, J., Blaschke, L.M., & Walti, C. (2009). Creating effective collaborative learning groups in an online environment. *The International Review of Research in Open and Distributed Learning*, 10(3). Retrieved from: <http://www.irrodl.org/index.php/irrodl/article/view/675/1271>.
- Bruschi, A. (1999). *Metodologia delle Scienze Sociali*. Milano: Bruno Mondadori.
- Bruschi, B., & Ercole, M. L. (2005). *Strategie per l'e-learning. Progettare e valutare la formazione on-line*. Roma: Carocci.
- Calvani, A. (1998). Costruttivismo, progettazione didattica e tecnologie. In D. Bramanti (Ed.), *Progettazione formativa e valutazione* (pp.43-58). Roma: Carocci.
- Capeci, F. (2014). *Generazione 2.0. Chi sono, cosa vogliono, come dialogare con loro: Chi sono, cosa vogliono, come dialogare con loro*. Milano: Franco Angeli.
- Capogna, S. (2008). Il Processo di incorporazione dell'e-learning nell'università: offerta capillare e socializzazione nella/alla rete. In M. Colombo (Ed.), *E-learning e cambiamenti sociali. Dal competere al comprendere* (pp. 36-64). Napoli: Liguori.
- Cardano, M., & Manocchi, M. (2009). La formazione metodologica di terzo livello. La scuola di dottorato in Sociologia e Scienza politica dell'Università di Trento. In A. Baldissera (Ed.), *Insegnare metodologia delle Scienze Sociali* (pp. 283-303). Acireale-Roma: Bonanno.
- Catone, M. C., & Diana, P. (2015). E-learning to overcome the problems with the teaching of social sciences methodology. In F. Falcinelli, T. Minerva e P.C. Rivoltella (Eds.), *Apertura e flessibilità nell'istruzione superiore oltre l'e-learning?* (pp.142-144), Atti del Convegno SiremSiel2014, Reggio Emilia: Sie-L Editore.
- Catone, M. C., & Diana, P. (2016). L'esperienza del corso blended di metodologia delle scienze sociali: la voce degli student. In M. Rui, L. Messina & T. Minerva (Eds.), *Teach different!* Proceedings della Multiconferenza EMEMITALIA 2015, (pp. 379-382) Genova: Genova University Press.
- Catone, M. C., & Diana, P. (2017). Social Research Methods 2.0: e-learning design. *Je-lks, Journal of e-learning and knowledge society*, 13 (3), 9-22.
- Chao, I. T., Saj, T., & Hamilton, D. (2010). Using Collaborative Course Development to Achieve Online Course Quality Standards. *International Review of Research in Open and Distance Learning*, 11(3), 106-126.
- Cochran K. F., King, R. A., & DeRuiter, J. A. (1993). Pedagogical content knowledge: An integrative model for teacher preparation. *Journal of Teacher Education*, 44(4), 263–272.
- Colombo, M. (2008). Introduzione. In M. Colombo (Ed.), *E-learning e cambiamenti sociali. Dal competere al comprendere* (pp. 1-17). Napoli: Liguori.
- Corbetta, P. (2003). *Social research: Theory, methods and techniques*. London: Sage.

- Corti, L., & Van den Eynden, V. (2015). Learning to manage and share data: jump-starting the research methods curriculum. *International Journal of Social Research Methodology*, 18(5), 545-559. doi: 10.1080/13645579.2015.1062627
- Dabbagh, N. (2005). Pedagogical models for E-Learning: A theory-based design framework. *International Journal of Technology in Teaching and Learning*, 1(1), 25-44. Retrieved from <http://www.sicet.org/journals/ijttl/issue0501/DabbaghVol1.Iss1.pp25-44.pdf>
- De Rossi, M. (2015). Saperi pedagogico-metodologico-didattici. In L. Messina, M. De Rossi (Eds.), *Tecnologie, formazione e didattica* (pp. 149-186). Roma: Carocci.
- Diana, P., & Catone, M. C. (2016). E-learning in an Undergraduate Course in Research Methods for the Social Sciences: Reflections on Teaching. *Italian Journal of Sociology of Education*, 8(2), 110-142. doi: 10.14658/pupj-ijse-2016-2-6.
- Dziuban, C. D., Moskal, P. D. & Hartman, J. (2005). Higher education, blended learning, and the generations: knowledge is power no more. In J. Bourne, J. C. Moore, (Eds.), *Elements of Quality Online Education: Engaging Communities*. Needham, MA: Sloan Center for Online Education.
- Earley, M. A. (2014). A synthesis of the literature on research methods education. *Teaching in Higher Education*, 19(3), 242-253. doi: 10.1080/13562517.2013.860105.
- Edwards, A., Housley, W., Williams, M., & Sloan, L., Williams, M. (2013). Digital social research, social media and the sociological imagination: Surrogacy, augmentation and re-orientation. *International Journal of Social Research Methodology*, 16(3), 245-260. doi: 10.1080/13645579.2013.774185.
- Eisenhart, M., & DeHaan, R. L. (2005). Doctoral Preparation of Scientifically Based Education Researchers. *Educational Researcher*, 34(4), 3-13.
- Facchini, C., & Ricotta, G. (2015). Offerta formativa, pregi e difetti: il punto di vista dei laureati in sociologia. In C. Facchini (Ed.), *Fare i sociologi. Una professione plurale tra ricerca e operatività* (pp. 203-222). Bologna: il Mulino.
- Facchini, C., & Zurla, P. (2015). Le competenze dei sociologi tra formazione e professioni, *Sociologia Italiana*, 6, 89-115.
- Fasanella, A. (2009). La formazione metodologica delle lauree specialistiche. In A. Baldissera (Ed.), *Insegnare metodologia delle Scienze Sociali* (pp.163-198). Acireale-Roma: Bonanno.
- Floridi, L. (2013). *Ethics of Information*. Oxford, New York: Oxford University Press.
- Freddano M. (2010), Evaluating a Blended Course of Methodology of Social Research II, *Proceedings of the 2010 MIT LINC Conference*, 818-830.
- Gallino, L. (1978). *Dizionario di sociologia*. Torino: UTET.
- Garner, M., Wagner, C., & Kawulich, B. (Eds.). (2009). *Teaching research methods in the social sciences*. Burlington: Ashgate Publishing.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and higher education*, 7(2), 95-105.
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. New York: John Wiley & Sons.
- Geer, R. (2009). Strategies for blended approaches in teacher education. In E. Stancey, P. Gerbic (Eds), *Effective blended learning practices: evidence-based perspectives in ICT-facilitated education* (pp. 39-61). IGI Publishing.

- Ghislandi, P. M., Raffaghelli, J., & Cumer, F., (2012). La qualità dell'eLearning. Un approccio qualitativo per l'analisi dei feedback degli studenti e dei docenti. *Ricerche di Pedagogia e Didattica*, 7(2), 25-47.
- Gobo, G. (2009). La didattica multimediale: ipotesi, esperienze, suggerimenti. In A. Baldissera (Ed.), *Insegnare metodologia delle Scienze Sociali* (pp. 87-102). Acireale-Roma: Bonanno.
- Gogan, M. L., Sirbu, R., & Draghici, A. (2015). Aspects concerning the use of the Moodle platform—case study. *Procedia Technology*, 19, 1142-1148.
- Grabe, M., & Grabe, C. (2004). *Integrating Technology for Meaningful Learning* (4th ed.). Boston: Houghton Mifflin.
- Grión, V. (2016). Conclusion: higher education, participation and change. In M. Fedeli, V. Grión, D. Frison (Eds.), *Coinvolgere per apprendere Metodi e tecniche partecipative per la formazione* (pp. 359-370). Lecce: PensaMultimedia.
- Harasim, L. (2012). *Learning Theory and Online Technologies*. New York: Routledge Press.
- Howard, C., & Brady, M. (2015). Teaching social research methods after the critical turn: challenges and benefits of a constructivist pedagogy. *International Journal of Social Research Methodology*, 8(5), 511-525. doi: 10.1080/13645579.2015.1062625.
- Hurworth, R. E. (2008). *Teaching qualitative research: Cases and issues*. Rotterdam: Sense Publishers.
- ISTAT (2016). *Cittadini, Imprese e ICT*. Roma: Istat.
- Jonassen, D. H. (1994). Thinking Technology: Toward a constructivist design model. *Educational Technology*, 34(3), 34-37.
- Kessler, G. (2009). Student-initiated attention to form in wiki-based collaborative writing. *Language Learning & Technology*, 13(1), 79-95.
- Kilburn, D., Nind, M., & Wiles, R. (2014). Learning as researchers and teachers: The development of a pedagogical culture for social science research methods?. *British Journal of Educational Studies*, 62(2), 191-207. doi:10.1080/00071005.2014.918576.
- Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical literature review. *Learning, media and technology*, 39(1), 6-36.
- Lewthwaite, S., & Nind, M. (2016). Teaching research methods in the social sciences: expert perspectives on pedagogy and practice. *British Journal of Educational Studies*, 64(4), 1-17. doi: 10.1080/00071005.2016.1197882
- Manney, D., & Wilcock, C. (2014). What students want? Exploring the role of the institution in supporting successful learning journeys in online distance education. *Widening Participation and Lifelong Learning*, 17(1), 49-63.
- Marradi, A. (1996). Metodo come Arte. *Quaderni di Sociologia*, 40 (10), 71-92.
- Marradi, A. (2007). *Metodologia delle scienze sociali*. Bologna: il Mulino.
- Marres, N., & Gerlitz, C. (2016). Interface methods: renegotiating relations between digital social research, STS and sociology. *The Sociological Review*, 64(1), 21-46. doi: 0.1111/1467-954X.12314
- Marsh, C. (1981). The assessment of skills in research methods. *Sociology*, 15(4), 519-25.
- Meraviglia, C. (2004). *Metodologia delle scienze sociali. Un'introduzione*. Roma: Carocci.
- Messina, L., & De Rossi, M. (Eds.). (2015). *Tecnologie, formazione e didattica*. Roma: Carocci.

- Messina, L., Tabone, S., & Tonegato, P. (2015). Conoscenza sulle tecnologie. In L. Messina, M. De Rossi (Eds.), *Tecnologie, formazione e didattica* (pp. 149-186). Roma, Carocci.
- Ni, A.Y. (2013). Comparing the effectiveness of classroom and online learning: Teaching research methods. *Journal of Public Affairs Education*, 19(2), 199-215.
- Nind, M., Kilburn, D., & Luff R., (2015). The teaching and learning of social research methods: developments in pedagogical knowledge. *International Journal of Social Research Methodology*, 18(5), 455-461. doi: 10.1080/13645579.2015.1062631
- Ong, W. J. (1986). *Oralità e scrittura. Le tecnologie della parola*. Bologna: il Mulino.
- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *Quarterly Review of Distance Education*, 4(3), 227-33.
- Oxford, R. (1997). Cooperative learning, collaborative learning, and interaction: Three communicative strands in the language classroom. *The Modern Language Journal*, 81(6), 443-457.
- Pandolfini, V. (2016). Exploring the Impact of ICTs in Education: Controversies and Challenges. *Italian Journal of Sociology of Education*, 8(2), 28-53. doi: 10.14658/pupj-ijse-2016-2-3
- Pangbourne, K., Philip, L., Pignotti, E., & Edwards, P. (2011). Some researchers do, some researchers don't: reflections on interdisciplinarity and Digital Social Research. *Social Science Research Network (SSRN) Electronic Journal*.
- Payne, G., & Williams, M. (2011). *Teaching Quantitative Methods. Getting the Basics Right*. London: Sage.
- Persell, C. H., Pfeiffer, K. M., & Syed, A. (2008). How Sociological Leaders Teach Some Key Principles. *Teaching Sociology*, 36(2), 108-124.
- Pfeffer, C. A., & Rogalin, C. L. (2012). Three Strategies for Teaching Research Methods A Case Study. *Teaching sociology*, 40(4), 368-376.
- PIAAC Literacy Expert Group (2009). PIAAC Literacy: A Conceptual Framework, OECD Education Working Papers, 34. Paris: OECD Publishing. doi: 10.1787/220348414075.
- PIAAC Numeracy Expert Group (2009). PIAAC Numeracy: A Conceptual Framework, OECD Education Working Papers, 35. Paris: OECD Publishing. doi: 10.1787/220337421165
- Ranieri, M. (2005). *E-learning: modelli e strategie didattiche*, Vol. 3. Trento: Edizioni Erickson.
- Ranieri, M. (2011). *Le insidie dell'ovvio. Tecnologie educative e critica della retorica tecno-centrica*. Pisa: ETS.
- Rao, K., Dowrick, P. W., Yuen, J. W., & Boisvert, P. C. (2009). Writing in a multimedia environment: Pilot outcomes for high school students in special education. *Journal of Special Education Technology*, 24(1), 27-38.
- Rao, K., & Meo, G. (2016). Using Universal Design for Learning to Design Standards-Based Lessons. *SAGE Open*, 6(4), 1-12. doi:10.1177/2158244016680688
- Ratz, S. (2015). Vocabulary Learning with the Moodle Glossary Tool: A Case Study. *Journal of Perspectives in Applied Academic Practice*, 4(1), 44-51.
- Ricolfi, L. (Ed.). (1997). *La ricerca qualitativa*. Roma: NIS.
- Rivoltella, P. C. (2003). *Costruttivismo e pragmatica della comunicazione on line. Socialità e didattica in Internet*. Trento: Edizioni Erickson.

- Rogers, R. (2013). *Digital Methods*. Cambridge: MIT Press.
- Rossi, P. G. (2010). *Tecnologia e costruzione di mondi: post-costruttivismo, linguaggi e ambienti di apprendimento*. Roma: Armando Editore.
- Rovai, A. P., & Jordan, H. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *The International Review of Research in Open and Distributed Learning*, 5(2), 1-13.
- Ryan, M. E., & Ryan, M. (2015). A model for reflection in the pedagogic field of higher education. In M. E. Ryan, Mary Elizabeth (Ed.), *Teaching Reflective Learning in Higher Education: A Systematic Approach Using Pedagogic Patterns* (pp. 15-27). Cham, SW: Springer.
- Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment and Evaluation in Higher Education*, 35(5), 535-550.
- Salmon, G. (2012). *E-moderating: The key to online teaching and learning (3rd ed.)*. Hoboken: Taylor and Francis.
- Shih, W. C., Tseng, S. S., & Yang, C. T. (2008). Wiki-based rapid prototyping for teaching-material design in e-Learning grids. *Computers and Education*, 51(3), 1037-1057. doi: 10.1080/02602930903541015.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard educational review*, 57(1), 1-23.
- Stacey, E. (2002). Social presence online: networking learners at a distance. *Education and Information Technology*, 7(4), 287-294.
- Tamim, R. M., Bernard, R. M., Borokhovski, E., Abrami, P. C., & Schmid, R. F. (2011). What forty years of research says about the impact of technology on learning: a secondorder meta-analysis and validation study. *Review of Educational Research*, 81(3), 4-28.
- Tapscott, D. (2011). *Net Generation. Come la generazione digitale sta cambiando il mondo*. Milano: FrancoAngeli.
- Tarifa, F., & Zhupa, A. (2014). Theory, Imagination, and Practice: Teaching Sociological Theory at the University. *Journal of the World Universities Forum*, 7(1), 33-43.
- Taylor, J. C. (2002). Teaching and learning online: The workers, the lurkers and the shirkers. *Shanghai International Open and Distance Education Symposium*. Retrieved from: <http://www.ouhk.edu.hk/CRIDAL/cridala2002/speeches/taylor.pdf>
- Trentin, G. (1998). *Insegnare e apprendere in rete*. Bologna: Zanichelli.
- Trentin, G. (2008). *La sostenibilità didattica formativa dell'e-learning*. Milano: Franco Angeli.
- Trentin, G. (2015). Orientating Pedagogy Towards Hybrid Learning Spaces. In R.V. Nata (Ed.), *Progress in Education*, vol. 35 (pp. 105-124). Nova Science Publishers Inc: Hauppauge, NY.
- Trepagnier, B. (2002). Mapping sociological concepts. *Teaching Sociology*, 30(1), 108-119.
- Trowler, P. R. (2005). A Sociology of Teaching, Learning and Enhancement: improving practices in higher education. *Papers: rivista de sociologia*, 76, 13-32.
- Van Driel, J., Verloop, N., & DeVos, W. (1998). Developing science teachers' pedagogical content knowledge. *Journal of Research in Science Teaching*, 35(6), 673-695.

- Wagner, C., Garner, M., & Kawulich, B. (2011), The state of the art of teaching research methods in the social sciences: Towards a pedagogical culture. *Studies in Higher Education*, 36(1), 75-88.
- Webb, M., & Cox, M. (2004). A review of pedagogy related to information and communications technology. *Technology, pedagogy and education*, 13(3), 235-286.
- Williams, M., & Sutton, C. (2011). Challenges and Opportunities for Developing Teaching in Quantitative Methods. In G. Payne, & M. Williams, M. (Eds.), *Teaching Quantitative Methods: getting the basics right* (pp. 66-84). London, UK: Sage.