
THE CHALLENGES BEHIND RESEARCH-BASED PRACTICES AND PRACTICE-FOCUSED RESEARCHES IN DISTANCE EDUCATION

Selçuk Karaman, Engin Kurşun, Ataturk University, Turkey

Introduction

Scientific research was generally categorized as pure basic research (Bohr), pure applied research (Edison), and use-inspired basic research (Pasteur). There are many studies carried out to present the relationships between these research types and present their superiority in the field of philosophy of science. In this study, the relationship between research and practice has been discussed within the scope of distance education based on institutional experiences rather than discussing the perspective of philosophy of science.

Ataturk University Distance Education Application and Research Centre (ATAUZEM) is one of the leading distance education centres with the variety of programs of study offered in Turkey. This centre was established in 2008 to bring research and practice together. ATAUZEM has offered a variety of distance education programs from associate programs to undergraduate completion program, from campus-based courses to masters -without thesis- programs. ATAUZEM, with 23,500 distance education graduate students, has currently 3,200 active distance education students and each semester has about 15.000 active on campus students.

This study is based on six years experiences of a team of distance education practitioners in ATAUZEM which is composed of two parts. In the first part of the study, it has been explained that why practitioners could not adequately benefit from research findings during planning and designing of distance education programs. In the second part, challenges behind producing practical results or why distance education research is limited in practical use have been discussed.

In this sense, the aim of present study is two-fold:

- to understand challenges behind research-based practices in distance education;
- to understand challenges in undertaking practice-focused researches in distance education.

It is expected that understanding challenges behind research-based practices and practices-focused research will contribute to the expansion of appropriate distance education program

models. Understanding these challenges will also help distance education researchers to take precautions before conducting their studies.

Challenges behind research-based practices

In this part of the study, impact of low and high research support (L-HRS) on effectiveness of practices (EP) is modelled in Figure 1. According to this model, HRS-EP represents ideal case where practices are designed based on research findings and practitioners used these findings appropriately. It can be claimed that the likelihood of distance education program success is in the highest level for this case.

In LRS-EP, research findings could not support practice but distance education program can be effective because of experiences or tacit knowledge of the practitioners who are experts in the application of a variety of forms of distance education. Although in this case practitioners' tacit knowledge can intuitively guide educational decisions and effectively facilitate the program, it is not beneficial in directing new research and producing new model and theories (Simonson et al., 2009).

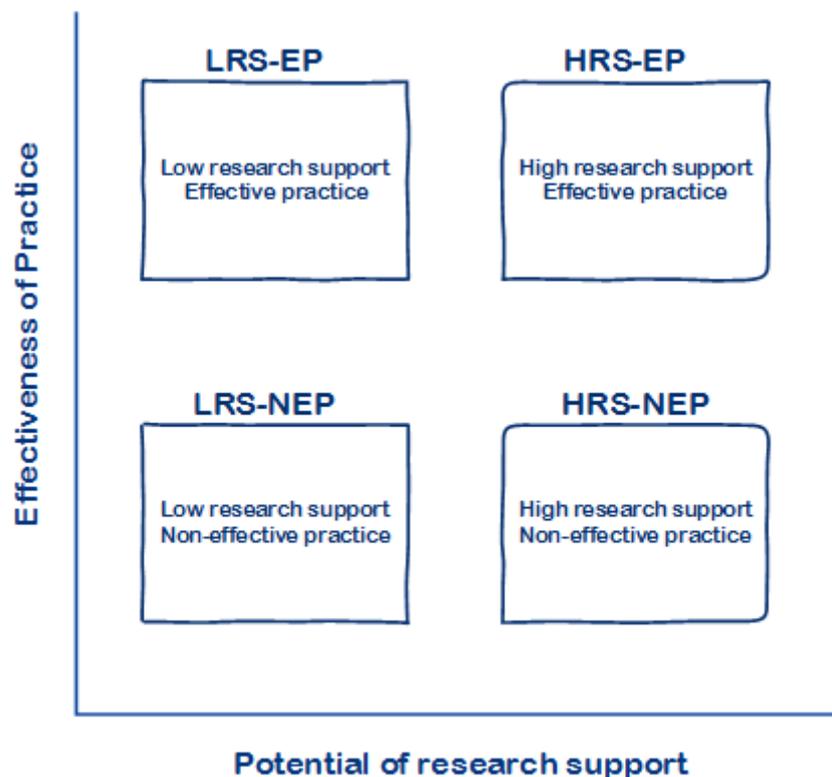


Figure 1. Research support on effectiveness of practices

Actually the focus in this study is LRS-NEP and HRS-NEP because they are not effective distance education programs. Take HRS-NEP for instance, it was designed and developed in line with the research findings but the program is not effective. Our experiences showed that stakeholders' (teachers, students, personals etc.) negative attitudes toward distance education or their resistance may prevent successful integration of the research findings into distance

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education programs. Apart from this, sometimes theory has a negative effect on practice. That is, research findings don't work in practice as expected. Organizational and structural constraints are also main reasons behind failures of this type of programs. While designing a distance education program, time, financial resources, human resources can be regarded as a constraint. Therefore, instead of research findings, current resources can be main factors while designing distance education programs.

As for LRS-NEP, this might be the worst case in distance education practices because there is lack of research findings or theoretical frameworks that guide design and implementation of distance education program. In other words, for this case distance education literature does not provide practical solutions to distance education problems. For instance what would be the optimal student number or optimal time in live class session? What makes a live classroom session successful? These are some questions that we want to find literature support for these practical problems we faced. Beside lack of research findings, when practitioners have no experiences about the issue, then the program is likely to fail.

Challenges behind practices-focused researches

In this part, different challenges in undertaking research which yields practical results for distance education problems are discussed. These challenges are briefly discussed considering main scientific research components (e.g., research design, sampling, data collection etc.) in the following sub-titles.

Challenges in conducting experimental studies

Experimental studies, where variables are under control and subjects are randomly distributed, are the most conclusive research methods (Fraenkel & Wallen, 2011). However, nature of the distance education does not well fit with experimental studies because of its defining characteristics; the distance (Bernard et al., 2004). Distance education students are working self-paced, wherever and whenever they want, therefore it is difficult to keep track of their study time, their interaction with materials, and allocated time for the activities. In addition, obtaining valid achievement scores, receiving informed consent form, communicating with participants, and assigning students to groups randomly are the main challenges while conducting true experimental studies in distance education (Bernard et al., 2004). As a result, there is a lack of true experimental studies conducted on distance education in the literature. In general, research studies in distance education are related to specific cases. As founded in their review study, Zawacki-Richter, Bäcker and Vogt (2009) indicated a significant positive trend towards more qualitative research in distance education. Therefore all these issues make it difficult to produce practicable or generalizable findings.

Challenges in valid and reliable data collection

There are some limitations during data collection in research studies of distance education. It is difficult to conduct face to face interview with distance education students. There is a low participation rate in online surveys (Bernard et al., 2004). As a powerful technique of obtaining detailed information, conducting observation is also hard to do in distance education studies. All these challenges affect validity and reliability of research studies. This may be one of the main reasons of distance education research yields few conclusive results.

Heterogeneous sampling

The student groups are heterogeneous since distance education programs allow students enrol from different regions, with various prior knowledge, experiences and cultures in general. There is also no age limitation. Therefore the generalizability of findings of the research has been decreased and this situation directs the researchers to specific research designs, which compel them to work on more focused groups.

Various dependency of distance education

Since distance education is dependent on various variables such as platform, technology (Garrison, 2000), context, structure, process, procedure and legal issues, these variables should be taken into account in the research. For instance, online examination cannot exceed 20% of total grade of the course according to the regulation of distance education in Turkey. Because distance education is dependent on all these variables, generalizability of the findings has been affected negatively.

Lack of consistent terminology

Another difficulty in distance education literature is the lack of consistent terminology. Even in main concepts such web-based education, online education, e-learning, there is no consensus. These terms can be used in the literature interchangeably. Garrison (2000) has stated this issue as “conceptual confusion is created with the advent of new terminology (virtual, open, distributed and distance education)” (p.1). This lack of common terminology especially prevents practitioners from finding related information from the distance education literature.

Lack of theoretical framework

Another problem faced in literature related with distance education is lack of theoretical framework. Garrison (2000) defines theory as “a coherent and systematic ordering of ideas, concepts, and models with the purpose of constructing meaning to explain, interpret and shape practice. Theory can provide a perspective that reduces complexity while suggesting generalizability” (p.3). Keegan (1988) has stated that “lack of accepted theory has weakened distance education” (p.63). Similarly, Holmberg highlighted the same problem that “distance

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education has been characterized by a trial-and error approach with little consideration being given to a theoretical basis for decision making. He suggested that the theoretical underpinnings of distance education are fragile” (Simonson et al., 2009, p.42). Therefore, lack of theoretical base in distance education is a significant problem since the theory has a direct impact on the practice of the field (Schlosser & Simonson, 2002). It is theory that guides not only practitioners but also researchers by providing a coherent ordering of relevant variables and relationships (Garrison, 2000). As a result, the lack of theoretical framework makes it difficult to provide applicable suggestions for distance education practices.

Conclusion and Suggestions

The aim of this study is to understand challenges behind research-based practices and practices-focused research in distance education. It is clear that there is a serious gap between theory and practice in the field of distance education. In order to close this gap, every stakeholder should take their responsibility. First of all, to ensure successful practices, these practices should be based on sound theoretical underpinning. So main aim of all stakeholders in distance education should leverage research studies and practices to HRS-EP level (see Figure 1). To do this, different suggestions can be proposed to practitioners, researchers and leaders in the field of distance education. Practitioners can convert their experience, trial and errors or tacit knowledge into research findings (LRS-EP to HRS-EP). They can propose practitioners guidelines combining their tacit knowledge together as well. Instead of undertaking research isolated from practices, researchers can conduct practice-focused research (i.e. design-based, developmental research) by considering challenges behind it (HRS-NEP to HRS-EP). To decrease level of challenges, they can be more careful in the selection of research design, detail explanations of sampling, environment, and procedures in their research studies in order to ensure transferability of their practical findings into different cases correctly. Finally leaders or organizations (e.g., EDEN, ICDE) in this field should take main responsibility of structuring consistency in distance education terminology and proposing new theoretical framework for distance education.

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