The Dispositions of Student Teachers Regarding the Use of Technology in Education

Perihan KORKUT

Abstract

The latest technology has re-shaped the world we live in and caused a new paradigm in the educational practices. It is the current practice that teaching and learning situations are designed using technological resources. Therefore, devices such as projectors and computers having access to internet have taken their places in the classrooms. As in every educational situation, the teacher education situation has a focal place for technological devices. In the education faculty, it is possible to see these devices being used for the bachelors’ degree courses in the classrooms, too. The purpose of this research is to identify the student teachers’ dispositions regarding the use of technological devices for teaching purposes. The participants are junior level students at the ELT department of a Turkish state university. The data were collected via focus group interview and analyzed with thematic analysis. The study yielded results in three domains; evaluation of technology, pedagogical value of ICTs, and practical value of ICTs.

Key Words: Focus Group Interview, Technology in Teaching, Teacher Education

Özet


Anahtar Kelimeler: Odak Grup Yöntemi, Eğitimde Teknoloji, Öğretmen Eğitimi

INTRODUCTION

The rapid developments in information and communication technologies (ICTs) have opened new doors in many aspects of our lives, including education. Access to ICTs is one of the factors that have impact on student achievement (Erdoğdu & Erdoğdu, 2015). Thus, the teachers tend to have positive attitudes for technology in their classes. Nevertheless, they cannot use technology as much due to curricular, infrastructural and logistical reasons (Zyad, 2016, Cüre & Özdener, 2008). Most teachers’ ICT-use is restricted to only internet, email and word processing (Tezci, 2009). The situation is the same with pre-service teachers. Although pre-service teachers belong to the digital-native generation considering their age, their ICT use is greatly limited to power-point presentations during their teaching practices (Aslan & Zhu, 2015; Savaşçı-Akalın, 2014; Uluyol & Şahin, 2016). As Gill, Dalgarno & Carlson (2014) explained, “the ICT skills they bring from their prior studies or from their social and private lives do not necessarily translate into awareness of use for teaching” (p.57).

The integration of ICTs has caused learning skills and cooperation move to a more focal point in education (Srimshaw, 1997). In addition, the arrival of computer to our post-industrial community has created new discourse types so it has become necessary to teach students how to successfully communicate via computer (Warschauner & Meskill, 2000).

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However, the new emphasis on ICTs did not automatically change the teacher’s approach. “In practice, teachers can employ software in ways that fit their own educational philosophies, rather than automatically taking up the particular educational stance that the designer may favour” (Scrimshaw, 1997, p.108). For that reason, changing the teacher’s dispositions becomes more important for the desired change to happen than just introducing new technologies. “Change can be promoted by involving individuals in some form of research into their own practice. This may be through a detailed study, or it may be through something smaller in scale” (Smoekh & Davis, 1997, p.5). Thus, the aim of this small-scale study was to find out the dispositions of pre-service English teachers regarding technology use for language teaching purposes. The findings can inform teacher education practices. It is considered important to answer this question because as argued previously, the starting point of the change lies in how the teacher uses the technology rather than what technologies are introduced, and in turn, how the teacher uses the technology lies in what he or she thinks of it.

**Technology in Education**

Once technology was introduced to the classrooms, it brought many advantages with it (Borko, Whitcomb & Liston, 2009). First of all, computers provide us limitless capacity to store, access and retrieve information. Secondly, the teachers are able to juxtapose multiple artifacts to prepare more effective lessons. A further point is that, it enables students to participate in any time and any place easily. Thanks to this flexibility, a larger audience can be reached. Communication through notice boards and chat rooms makes administration easy. Finally, the possibilities of virtual worlds require more collaboration, causing the nature of the work change.

On the other hand, Borko et al. (2009) list some common concerns regarding technology use. First of all, the circulation of information has become faster, causing confusion because the required knowledge is never fixed and the teachers have to keep up. Moreover, the technology itself is developing rapidly, which means that most of the new technologies are not fully tested before being introduced to the market. Another problem is that the software and hardware require more financial resources. Finally, the stored information is always under considerable risk of getting lost due to system errors and bugs.

Technology is not just an add-on to education; it has changed the teacher’s roles and responsibilities. Teachers must acquire Technologic, Pedagogic and Content Knowledge (TPACK) (Koehler & Mishra, 2009). However, beyond technology knowledge, TPACK means that the teachers should also be able to evaluate its usefulness with regard to the pedagogic techniques they want to employ and the content they want to teach with those techniques. In other words, the teachers need to become “tech-savy teachers” (Borko et al., 2009).

In the language education field, technology first appeared in the form of language laboratories. The “failed promise of the audio-lingual lab of the 1960s have created a residual distrust of technology and account for many language teachers’ reluctance to plunge into the implementation of any new technologies” (Blake, 2008, p.8). The downfall of behaviorism during the 1980s and 1990s resulted in two main directions of development. The first strand was the cognitive approach. Text construction systems, concordancing software and multimedia simulation software enabled the individual to actively form an inner grammar system. The second strand was the socio-cognitive approach which made use of internet for tasks such as making websites or engaging in on-line discussions (Warschauner & Meskill, 2000).

There has not been a consensus about the usefulness of technology in the field of ELT. On one hand, there is Computer Assisted Language Learning (CALL) that has taken names according to the current practices of the times such as “behavioristic call”, “communicative call” and “integrative call” (Warschauer, 1996). On the other hand, there is another trend called
Dogme ELT which argues for “a pedagogy unburdened by an excess of materials and technology” (Thornbury, 2006, p.70). According to Dogme, any material or technology enslaves the teachers and numbs the students. Instead, the teachers should focus on what students already have rather than using one-size-fits all materials.

When we look at the issue of technology and education from the teacher training perspective, studies cluster around three levels as “micro-level, institutional level, and an overarching level which applies to both of them” (Tondeur et al., 2012, p.141). At the micro-level, the teacher education program should integrate technology throughout the curriculum rather than having one or two separate technology courses. In addition, student teachers should find the opportunity to use technology in authentic situations such as practicum or course presentations. At the institutional level, the facilities and training for teacher trainers are required. At the overarching level, systemic and systematic efforts to align theory and practice are required.

**Focus Group Research in the Classroom**

Focus group is “a method for collecting qualitative data through a group interview on a topic chosen by the researcher” (Morgan, 2006, p.121). Kamberelis & Dimitriadis (2005) argue that “focus groups are unique and important formations of collective inquiry where theory, research, pedagogy, and politics converge” (p.888). In this respect, the focus group method provides us rich data not only of the attitudes and values of individuals, but also the political and social implications of those values in relation to a group and how the individual meanings interact with the social meanings to form pedagogical implications.

Focus group is a unique and extremely useful data collection method to use with school classes. First of all, classrooms can be considered as natural social groups; they are not formed for research purposes (Shensul, 1999). As in all social groups, the behaviors within the class are normative and these norms are not always articulated. It might take long observations and inhabitation to understand how these norms operate. “Focus groups induce social interactions akin to those that occur in everyday life but with greater focus” (Kamberelis & Dimitriadis, 2005, p.904). In other words, focus group can provide a quicker turnaround in understanding the group norms and ideas than other methods. In addition, “in Freirean pedagogies, the development and use of generative words and phrases and the cultivation of conscientization are enacted in the context of locally situated ‘study circles’ or focus groups” (Kamberelis & Dimitriadis, 2005). The pre-existing group’s focus group discussions can yield naturally-occurring data about its own argot and ways of regulating information flow (Bloor, Frankland, Thomas & Robson, 2001). A final advantage is the familiarity of the procedure. “The focus group format is based on the collective experience of group brain-storming” (Dörnyei, 2007, p.144). In addition, group discussions are used as “an opportunity to learn about the ways in which participants are thinking and making decisions about a topic” (Schensul, 1999, p. 54). Both brainstorming and group discussions are popular techniques in the classroom. It can be expected that students will be more comfortable with these familiar interaction structures rather than one-to-one interviews or questionnaire formats. The synergy of the focus group can help students remember information that might not otherwise be readily accessible in individual memory.

On the negative side, the classes are usually bigger than the advised focus group size. Larger groups are not advised because they are difficult to moderate and hard to transcribe. Individuals might express more socially-accepted opinions and keep to themselves the ones that risk any blame (Dörnyei, 2007). In the case of classroom, where the group has a history and a future together, the social pressure on the participants might be even greater. Furthermore, Berg (2001) warns us that the focus group data are “group data” that reflect the collective notions shared and negotiated by the group, therefore, it cannot account for the intra-group individual variation.
Previous Research

When we look at the literature in Turkey, focus group studies are very scarce. In relation to technology for education, Harmandaoğlu-Baz (2016) used focus group interview to validate quantitative data from a scale which was implemented with 98 pre-service English teachers. Baydaş and Göktaş (2016) held focus groups on the basis of teaching branch with 21 pre-service and 13 teachers to investigate their intentions to use ICTs.

Other research regarding technology in education are mostly in the quantitative paradigm. With pre-service teachers, self efficacy beliefs (Korkut & Akkoyunlu, 2008), views (Akbulut, Odabaşı & Kuzu, 2011), TPACK (Kabakçı-Yurdakul, 2011), and attitudes (Merç, 2015) were investigated. There have also been many quantitative studies done with in-service teachers. For example, Cüre and Özdener (2008), and Tezci (2009) did their research with in-service elementary school teachers, and both investigated their attitudes towards technology in education. Bozdoğan and Özen (2014) worked with in-service ELT teachers and investigated their self-efficacy levels.

There are also qualitative studies investigating technology in education, however these are usually carried out with in-service teachers (Atalay & Anagün, 2014; Çelik & Aytın, 2014; Savaşçı-Akalın, 2014; Uluyol & Şahin, 2016) rather than pre-service teachers (Aslan & Zhu, 2015). Various qualitative techniques were used in these studies from interviews (Atalay & Anagün, 2014; Çelik & Aytın, 2014; Aslan & Zhu, 2015) to on-line interviews (Uluyol & Şahin, 2016) and lesson plans (Savaşçı-Akalın, 2014).

It can be seen from the reviewed literature that in Turkey, although technology in education is a well-researched area, qualitative studies are relatively fewer. Moreover, most of the qualitative studies are directed to in-service teachers rather than pre-service teachers. It can be a problem that the quantitative information on pre-service teachers’ attitudes, self-efficacy beliefs and competencies might be too general and sweeping to be effectively informing for the actual preparation of the teachers for technology use. It is also evident that there is a lack of focus group studies in Turkey. In this respect, this study can be said to have fit in a research gap.

METHOD

This is a qualitative study which is designed according to Grotjahn’s (1987) “exploratory-interpretative research paradigm” (p.59). It is a non-experimental study which makes use of qualitative data and utilizes interpretative analysis procedures which are “based on the interpretations which in the course of interaction are continually reformulated and mutually agreed upon” (Grotjahn, 1987, p.57).

Participants and Setting

The participants were 20 junior ELT students in 2015-2016 academic year, spring term at a state university in Turkey. There were 12 females and 8 males in the group. The group had come together at a classroom at the faculty to attend their regular agenda of courses. They had been exposed to a considerable amount of technology use in most of their courses at the faculty. In addition, they were allowed to use technology in their own presentations during some of the courses. The theoretical issues and background information were covered in different courses such as the Approaches and Methods, Special Teaching Methods, and Teaching of English to Young Learners.

Data Collection and Analysis Procedures

It is advised that typically, the focus questions must be as open ended as possible (Grotjahn, 1987) without being vague, leading or misleading (Schensul, 1999). The single focus question is engineered carefully to provide enough contextual background and allow for different
opinions without dictating a preferred answer. The researcher first explained the aim of the study and the focus group methodology. Then she presented the focus question by writing it on the board:

"Today, in many language teaching classes we can see teachers using computers with projectors, through PowerPoint slides, and audio-visual materials as a medium of presentation. Your own classes here at university are no different. Does the way we use such materials contribute to the students’ development? If yes, how so? If no, what is missing from the way we use technology? Discuss the issue with examples from your personal experience."

The session, which lasted about 90 minutes, was observed and field notes were taken by the researcher. In order to ensure validity, two volunteer students also took notes. According to Dushku (2000), unlike more quantitative research paradigms in which the relationship between the researcher and participant is seen as a threat to validity, in exploratory-interpretative paradigms such as focus group, it is an important source of validity, because “valid data can only be obtained when an appropriate relationship is built up between the researcher and the subject” (Grotjahn, 1987, p.65).

After the session, the notes taken by the volunteers and the researcher were compared, the inconsistencies between the three sets of notes were figured out with the help of the group. Since the results cannot be duplicated, reliability is a lesser concern in focus group research (Schensul, 1999, p. 105). Thus, instead of seeking inter-coder reliability, the thematic analysis of the notes was done by the researcher herself for reasons of economy. Accordingly, the researcher reviewed the contributions and organized them into categories which were then put under general themes to achieve a better grasp of the results. These themes and subcategories were further analyzed for variations in response.

**RESULTS**

At the end of the analyses, three general themes emerged. In Table 1, the general themes, the categories of response and their descriptions were summarized along with the variations in response.

<table>
<thead>
<tr>
<th>General Theme</th>
<th>Category of response</th>
<th>Description</th>
<th>Variations in response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Evaluation of technology for education</td>
<td>a) Positive and accepting</td>
<td>Contributions that include positive evaluative statements</td>
<td>It is a part of the real world.</td>
</tr>
<tr>
<td></td>
<td>b) Negative and rejecting</td>
<td>Contributions that include negative evaluative statements</td>
<td>We shouldn’t become the slave of technology.</td>
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<tr>
<td>2) Pedagogical Value</td>
<td>a) Students’ needs</td>
<td>Contributions in which the students’ needs and affective states are taken into consideration</td>
<td>We should use technology to make students active.</td>
</tr>
</tbody>
</table>

Table 1: Results

- Slides improve attention.
- It appeals to different learning styles.
- We should use technology in age- and need-appropriate ways.
- Slides can be boring if used poorly.
The first theme that emerged from the contributions was positive or negative evaluations of technology. It was evident from the bulk of the conversation that no one in the group was totally against technology. While they were often mentioning its benefits, the barriers or problems came up sparsely. Students tended to include positive evaluative statements when
they first took the floor. The positive evaluations were listed below along with some example quotes to illustrate them.

- **Example Quote for “It is a part of real world.”**
  “First, I strongly support using technology in classes. Today, we are all using technology in every area of our lives. That is why, it is very normal, also necessity, using the technology in schools.”

- **Example Quote for “It is useful and practical.”**
  “Usage of PowerPoint is very useful both teachers and students. Formerly, teachers wrote on the blackboard the important things of the lesson. It was time consuming for both teachers and students.”

- **Example Quotes for “It is easy and fun to use.”**
  “Technology is awesome. It’s getting better every day. As teachers we should follow technological developments because using technological materials is very easy and fun.”
  “For example when I was at high school, my English teacher used to use smartboard. We watched videos from the internet on it about the topic which we learnt so it was more enjoyable for me.”

Only one of the participants began his words with a negative evaluative statement: He said we shouldn’t become the slave of technology. The other members in the group agreed and pointed out that any materials which we use slavishly, regardless of students’ needs and immediate classroom realities would bring about undesirable results in terms of teaching.

- **Example Quotes for “We shouldn’t become the slave of technology”**
  “We once watched a video. There was a teacher. He uses a program to teach English. But I think he is slave of that program. The teacher must be more dominant than technology in the class. In this point, I don’t mean the lesson must be teacher oriented; teaching must be student oriented.”
  “I agree with (my friend) in that technology should be used, but technology shouldn’t use the class.”

The second theme that emerged from the data was the responses relating to the pedagogical value of technology. When analyzed further, more subcategories emerged. Firstly, there were contributions which addressed how technology can cater for students’ needs and affective states in the classroom.

- **Example Quote for “We should use technology to make students active.”**
  “If a teacher wants to use technology in a lesson, he or she must choose activities to make students participate actively. For example, after showing a picture or a video, the teacher can ask students to talk about it or discuss it.”

- **Example Quote for “Slides can improve students’ attention”**
  “Different programs of learning, for example slides, also affect students’ attention for learning.”

- **Example Quotes for “It appeals to different learning styles.”**
  “It is good for all types of students for example visual students can understand better because they can see some visuals, auditory students can hear some sounds, etc.”

On the other hand, they also talked about the need that these benefits would occur only if the use of technology is age- and need- appropriate. Especially, if the slides are used inappropriately, they can be counter-productive.

- **Example Quote for “We should use technology in age- and need-appropriate ways.”**
  “Also we should use technology according to students’ level. For example, we should not want a second or third grade student to write a business e-mail.”

- **Example Quote for “Slides can be boring if used poorly.”**
  “I had an experience. In our lesson, the teacher came and opened a slide show. She started to read it. She didn’t stop to explain anything. At the end of the lesson nearly no one had an idea about what we learned in that lesson. We must avoid this kind of mistakes.”
As a second subcategory was the participants’ underlying belief about the importance of learner autonomy and constructivist learning. The participants’ epistemological stance was evident from their contributions. Upon one participant’s contribution that knowledge is not the aim of education any more, the discussion took a new path. They began to discuss how ICTs can improve self-learning and the importance of information literacy as well as the ways of using technology to contribute to students’ critical thinking skills. As an example, concordance programs were given.

- Example Quote for “Knowledge is not the aim of education anymore.”
  “In the past, people had difficulty in finding some information that was needed but now, they have what they need. But they don’t know how to use it effectively and appropriately.”
- Example Quote for “It fosters learner autonomy.”
  “When we use internet and computer, it strengthens self-learning and self-confidence. Because they try to explore the new information and it directs them to research and analyze.”
- Example Quote for “We should teach them information-literacy.”
  “So I agree with using computers, PowerPoint slides, projectors, and audio-visual materials as a medium of presentation but using these is only bringing them safe information. We should teach them where to find information and which sources to trust.”
- Example Quote for “We should use technology not only for presentation, but also for teaching 21st century skills.”
  “If I mention 21st century skills, I can say that they are critical thinking and problem solving, creativity and innovation, collaboration, teamwork, cross cultural understanding, career and self-reliance, etc. Therefore, using 21st c. skills shouldn’t mean using only computer, powerpoint or projector in our lesson.”
- Example Quote for “Corpus linguistics can inform our students’ learning.”
  “For example, if you want to learn the meaning of a word or areas of its usage, you can search immediately from the internet. There is a corpus system in there. It shows us a lot of words, usages of these words or how many times did we use these words and where they are used, etc. We can teach our students how to use this corpus system.”

Intertwined with this strand of discussion were the dispositions about what affordances technology provides for language development. This was considered as the third category.

- Example Quote for “Its affordances to improve listening skills.”
  “Especially internet provides a rich source for basic skills. For example, a young learner teacher wants to make students listen some songs from the internet to teach them the “fruits” topic.”
- Example Quote for “Its affordances to improve speaking skills.”
  “On the internet, they can meet with different people, especially international people like American or English and they can make some dialogues face to face to develop their speaking skills.”
- Example Quote for “Using electronic dictionaries as a learning aid.”
  “I remember one of my teachers taught us how to use the online dictionary, and how to find a specific document about our homework or something else. It made a great impact on my learning.”

A final category was formed for the pedagogical value that the participants attribute to the technology in terms of its potential in fostering world-citizenship. In the discussion, this topic was brought up in relation with autonomy and learning speaking topics.

- Example Quote for “It is important that students become citizens of the world.”
  “Students can take a field trip to the Great Wall of China without actually leaving the classroom. We can lead them to participate in projects with other cities and countries. These are a few examples for using technology to educate them as global citizens.”
- Example Quote for “It is important that students learn about other cultures.”
"For example when I was at primary school we didn't have any technological devices and I didn't know anything about the other parts of the world. When our teacher gave us homework we would look it up in the encyclopedia, but now learners have all access to other parts of the world."

The dispositions of the participants regarding the practical value of technology are grouped together as the third main theme for discussion.

- Example Quote for “Typing is better than handwriting.”
  “Instead of writing on the board, the teacher or a student takes notes on the computer and projects this onto the screen so the whole class can see; it enables students to read what has been written more easily than the teacher’s handwriting.”

- Example Quote for “It is easier to carry materials around in their electronic format.”
  “It is also useful for teachers, for example, a teacher prepares everything for a lesson; he has books worksheets, and some other materials. It is too difficult to carry them all to the classroom.”

- Example Quote for “Groups can work together and share easily.”
  “If students work in small groups, they can share their notes on the computer.”

Some negative points were also proposed.

- Example Quote for “Creating materials is time consuming.”
  “You sometimes spend hours to prepare a slide and it takes five minutes to show it.”

- Example Quote for “Content is more important than medium.”
  “When I was in high school, my teachers used to use technology in an effective way but at the end of the term most of the students in our class failed the exams. So, it means not only the technology and other devices but also content and approaches are very important.”

- Example Quote for “The required facilities might not exist.”
  “Many students may not have access to a computer or internet in their home. So, it may be difficult to do their homework.”

- Example Quotes for “Teachers need more training.”
  “Interactive whiteboards are being used like regular whiteboards because the teachers don’t know how to use them.”

DISCUSSION AND CONCLUSION

The findings from the first general theme; the positive and negative evaluations of technology, are parallel with the findings of other research. In almost all of the previous studies, the attitudes of pre-service teachers tended to be positive rather than negative (Merç, 2015; Harmandaoğlu-Baz, 2016; Uluyol & Şahin, 2016; Baydaş & Göktaş, 2016). For the students participated in such studies, it seems that technology has positive connotations in terms of education. They also seem to perceive technology pedagogically and practically relevant.

The participants in this study did not find the chance of experiencing technology as a teacher although they practiced it through their presentations, micro-teachings and other ways of teaching practice. Nevertheless, they were able to account for its advantages and disadvantages. The topics that were brought about in this focus group covered most of the issues in the related literature (see for example Borko et al., 2009). They frequently shared their own learning experiences and former teachers’ use of technology in their classes. Considering that we tend to teach in ways we are taught, the use of such technological devices in their own learning might affect the way trainees use technology after they graduate (Baydaş & Göktaş, 2016). It can be concluded that our students could project themselves into their future selves based on their already existing experiences.

Even in this short focus group session, the pre-service teachers’ TPACK was evident. Knowledge of technological devices and facilities such as corpus concordance programs that
are specific to linguistic studies, and the way their constructivist views beam through their responses regarding learner autonomy and group work proves that pedagogic knowledge is successfully intertwined with their practical knowledge. We can state that this finding is in line with Gill et al. (2014) whose pre-service participants were beyond the uncritical and accepting stage.

In terms of pedagogical value of technology, wide array of topics was put forward. For example, they talked about the 21st century skills, critical thinking, autonomy, global citizenship, learning styles, motivation, and information literacy in relation with technology. On one hand, their ability to discuss these in relation to a given domain is promising; on the other hand, it is not surprising because these topics largely constitute the unit headings covered in their methodology courses. In that sense, the fact that they brought up these pedagogical uses of technology does not necessarily mean that they actually possess the necessary teaching skills. Knowledge might not always transfer directly to practice. In many studies such as Tezci (2009), Savaşçı-Akalın (2014), Aslan and Zhu (2015), and Uluyol and Şahin (2016), teachers and pre-service teachers were reported to use technology only in basic ways. We cannot know if the participants in this study will be able to use technology in the way that they have projected in this study until we actually observe them in their lessons.

The participants were able to scrutinize the topic satisfactorily and the result shows great consistency with the data from research with other data collection methods such as interviews, surveys and observations. Considering the short data collection time, our students might not have come up with so many ideas if they had answered the focus question individually. Together, they were able to map the concept of technology for education effectively. Presumably, they have also learned from the contributions of one another. The whole experience itself has implications in terms of the potential of focus groups as “important pedagogical sites” (Kamberelis & Dimitriadis, 2005, p.889). In that respect, this study highlights the usefulness and importance of spreading focus group research especially in the education field.
REFERENCES


Eğitim Fakültesi Öğrencilerinin Eğitimde Teknoloji Kullanmasına İlişkin Görüşleri

Perihan KORKUT

Geniş Özet

GİRİŞ

YÖNTEM

BULDULAR

YORUM VE SONUÇ
İlk tema altında yalnız bir olumsuz görüşe karşı pek çok olumlu görüş olmasından öğretmen adaylarının teknolojiyeye ilişkin görüşlerinin daha çok olumu yönde olduğu analizləməktədir. Bu çalışmada da aynı doğrultuda bulgular bulunmuştur (Cüre & Özdemer, 2008; Tezci, 2009; Atalay & Anagün, 2014; Aslan & Zhu, 2015). Bu çalışmaların katılımcıları henüz gerçekten öğretmenlik yapma fırsatı bulamadığını olsalar da teorik olarak teknoloji
kullanımının pedagojik değerini oldukça derinlemesine tartışabilmişlerdir. Bu, umut verici bir 
bulgudur. Odak grubu yöntemi sayesinde bireysel görüşmelere göre çok daha hızlı veri 
toplamak mümkün olmuştur. Ayrıca, tipki bir beyin fırtınası gibi herkes ortaya fikirlerini 
döktüğü için belki bireysel olarak sorulsa ortaya çıkmayacak kadar derinlemesine konuyu 
incelemek mümkün olmuştur. Bu açıdan, bu çalışma öğretmen adaylarının görüşlerini ortaya 
koymının yanında odak grup yönteminin eğitim araştırmalarındaki yeri için de bir örnek 
teşkil etmektedir.