TEACHER RESEARCHERS: TECHNOLOGY AND ETHICAL CONSIDERATIONS WHILE CONDUCTING AN ACTION RESEARCH

ÖZGRETİM GÖREVLİSİ ARAŞTIRMACILAR: EYLEM ARAŞTIRMASINDA TEKNOLOJİ VE ETİK KONULARINA YÖNELİK DÜŞÜNCELERİ

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ABSTRACT: The research study stimulates critical approach to research and practice, with an increasing emphasis on ethics and ethical decision making of the teacher researchers within action research process by using technology in its process. The study investigates the impact of technology within the action research, ethical considerations and dilemmas while teacher researchers conduct educational research as critical friends within same academic institution. The research study was carried by eight participants in Educational Sciences Department who are teachers and at the same time experienced action research to develop teaching policy within their educational practices as researchers. This research has qualitative nature that focus groups, researcher observation and self-reports of the participants are relevant data collection techniques. The research study empowers that teacher researchers need to be reflective, proactive and critical friends among colleagues in each step of actions within educational practice by putting emphasis on technology and ethics.

Key words: action research, critical friends, ethics, technology

ÖZET: Bu çalışma, araştırma ve uygulamaya eleştirel bir yaklaşıma temel alarak, eylem araştırması yaparken araştırıcı olarak rol üstlenen öğretmen görevlilerinin teknoloji kullanımı ve etik konusunda karar alma sürecini dikkate alılarlarını vurgulamaktadır. Bir başka devişle, çalışmada kendi kurumunda eylem araştırması yapan öğretmen görevlilerinin teknoloji kullanma eğilimleri ve etik boyutuna karşı hassasiyetleri belirtilmiştir. Bu çalışma, Eğitim Bilimleri Bölümü'nde görev yapan sekiz gönlülü öğretmen görevlilerinin katıldığı ile gerçekleştirilmişdir. Gönlülü katımcılar, kendi kurumlarında eylem araştırması yapmaya, kendi kurumlarının gelişmemesine bu yolla katkı koymaktadırlar. Nitel araştırma desenini kullanıldığı bu çalışmada, grup mülakatı, gözlem ve kişisel değerlendirmeye raporları aracılığı ile veri toplama süreci gerçekleştirilmiştir. Çalışma, araştırıcı rol üstlenen öğretmen görevlilerinin eylem araştırması gerçekleştirirken araştırmanın her süreçinde kurumun gelişmesi açısından meslektaşı için yanıtçısı, eleştirel olmalıdıriquetağını ve teknoloji, etik konularında hassasiyet göstermeleri vurgulanmıştır.

Anahtar sözcükler: eylem araştırması, etik, meslektaş, teknoloji

1. INTRODUCTION

Ethics is the critical element within the progress of the educational research. In fact, there is no guarantee not to face with ethical problems in the research process. As a researcher, it is vital to examine ethical practice and its consequences within the research. Therefore, there is intensified need to be aware that in each step of the research can be an ethical dilemma and teacher researchers need to be action-oriented in coping with ethical decisions during and before conducting the research process. Regarding post-modern thinking on educational knowledge and research; researchers need to think in a constructive, reflective way in each stage of the research process that leads them to act as proactive in ethical decision making (Pring, 2000).

In order to be proactive in ethical decision making process, teachers as researchers need to be aware on ethics codes of practice which these are the important guidelines for researchers in order to make decisions. Significantly, it is crucial to examine the ethical decision making process during and before conducting educational research at home context (Malone, 2003).

Research is often defined as systematic inquiry. Research involves finding out something which was previously not known or shedding fresh light on an issue or problem. People often seem to regard research as something mystifying which is only conducted by professional researchers. It also can be

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defined as systematic, controlled, empirical and critical investigation of hypothetical propositions about presumed relations among natural phenomena. Within the methods of research, there are stated processes that become closely bound up with the values, attitudes and perceptions of the researchers (Cohen, Manion, Morrison, 2000). Especially in educational research, academicians or teachers have active roles to map out a better understanding of the nature and process without any bias. Technology is the factor that fosters the process of the research especially in action research. Teacher as researchers use various technological facilities such as video cameras, data projector, simulation to present training during the action research and collect data from the participants (Roblyer, Edwards, 2000). Ethics is another subject matter of educational research that researchers can face with possible problems. In fact that the field of education itself is at least as complex. Educational researchers should be aware on context, participants, process and issues of ethics in order to enrich qualified research (Pring, 2000).

It is not a surprising professional development that teachers as researchers need to have fully informed research knowledge and be decision makers, policy makers in research. In today’s understanding of educational research carry us to undertake the issue of ethics which is the current limitation of research for researchers in relation to authenticity of research and turn attention to technology that enhance the simultaneous actions during the research. Therefore, teachers as researchers need to be most recently active on possible decision making in the use of technology and alternative ways for arisen ethical dilemmas within any stage of the research process. Teachers also begin to adopt the accountability movement which demanded a self monitoring strategy to justify their practice and examine critically context in which research practice takes place. Within the complex system of educational research, teachers propose to review the practice of context, perceptions and attitudes of participants, implementation in technology to create harmonic picture on valid, reliable results from research. The important perspective here is that there is need to have consciousness on reflectivity, generating critical approach, being proactive in actions during educational research by teachers who implement an action research to develop or change of educational practices within their home context (Schön, 1991; Verma, Mallick, 1999; Pring, 2000).

2. AIM OF THE STUDY

The limited studies which provide arguments on the impact of technology and ethics in action research, stimulate critical approach to educational research by putting emphasis on ethical decision making in action research by teacher researchers. In this respect, research aims to investigate the perceptions and experiences of teacher researchers about the use of technology during research process and the ethical considerations while they are conducting action research within their home context. In order to reach out research focus, the following research questions need to be answered:

Q1. How do teacher researchers involve in ethical decision making process while conducting an action research?
Q2. To what extent, do teacher researchers use technology by considering ethics during action research?
Q3. To what extent, do teacher researchers become critical friends while conducting a research for changing and developing educational practice within their home context by using technology?

3. RELATED STUDIES

Within the educational research setting, teachers who have enthusiasm to involve in educational research are active researchers to implement actions for change and development in educational practice through action research. While conducting educational research through action research, teacher as researchers need to have awareness on being reflective and critical friends about impact of
technology during the research, decision making process in ethics and possible dilemmas, solutions in ethical problems.

The following related studies support the argument that the impact of technology and ethical considerations at home context are the heart of the educational research to have qualified, credible research for policy development and change in educational practices.

3.1. Technology and ethics in action research

Action research can be defined as harmony of the word of action and research to increase knowledge about practice and contexts of practice (Pring, 2000). It is the process of planning, taking action, fact finding that group of people come together in order to change practice. It can be used variety of areas where it is needed to change and action like policy development, management and control, school or courses restructuring. It has crucial process how individuals achieve successful reflectivity and collaboration during the action research for change and development (Bryman, 2004; Cohen, Manion, Morrison, 2000; Mills, 2003). The important impact to ethics within the action research is the generalisability that creates problem for the validity and reliability of research. In addition, gaining soft, subjective data within action research, degree of reflectivity, collaboration and subjectivity creates the ups and downs in degree of validity and reliability during the action research. In this respect, teacher researchers need to consider the possible dilemmas while implementing action research for change and development within their teaching policy (Pring, 2000).

The technology is one of the fundamental factors that teacher researchers need to consider within action research. As the teacher researchers have enthusiasm to use technology for the concrete learning of the students, they use various technology facilities to implement actions and propose changes within their teaching policies during their research process (Anderson, Baskin, 2002; Cajas, 2000; Gordon, 2000). Therefore, technology is a tool to collect data within action research such as recorder, computers, video cameras, ohps, simulation, etc. While using such a kind of technology to facilitate research process; teacher researchers need to be care on ethical issues by protecting soft data, privacy and confidentiality of the participants (Malone, 2003; Pring, 2000).

3.2. Being reflective: teacher researchers as critical friends

The teacher researchers need to focus on collaboration, collective activities to propose change for development. The critical friendship can be defined as combination the elements of non-judgmental support; friendship, combined with constructive, critical analysis of context, or to put it another way, benevolent support and assistance implied by friend and, at the same time, provision of an external perspective and challenge implied by critical (Qiss, 2004; Swaffield, 2002). In relation to this definition, critical friendship practices are seen when “a trusted person (…) asks provocative questions, provides data to be examined through another lens, and offers critiques of a person’s work as a friend” (Swaffield, 2002). Critical friends are careful to take the entire context into consideration before offering feedback. Critical friends are good listeners and problem solvers who help others sort out their thinking, make sound decisions and define expectations and intentions. From this perspective, a critical friend is a person who can help others with their educational actions and decisions. In other words, critical friends encourage others to articulate precisely their rationale for those decisions and help them to see important information from a different perspective.

During the action research that proposes change through collective based actions, there is intensified need to look for other’ supports and point of views to reach out quality in educational practice (Pring, 2000). Therefore, there is a need to conduct research about critical friendship while conducting change oriented actions within the institutions (Foster, 2003).
3.3. Ethical decision making process

Sumption (2000) stresses the necessity for teacher researchers to reflect on ethical dilemmas to identify deliberate, transparency of practice on educational research. On the other hand, the location of ethical space and consciousness of logical decision making based on alternative views due to changeable situations, and issues, researchers should touch different kinds of disclosures, strategy of confidentiality for participants in order to keep balance between ethical and unethical attributes (Wiener, 2001). Ethical concerns encountered in educational research in particular can be complex and subtle. Ethical concerns frequently create dilemmas for the researchers which can be irresolvable results for the high credibility, validity and reliability of the research. Researchers have a great responsibility to keep the equilibrium on creating honesty, trustworthy, confidentiality bridges for getting right to know and creating disclosure to express thoughts and experiences of participants (Cohen, Manion, Morrison, 2000; Husu, Tirri, 2001).

Coulter (2002) also indicates the essence of creating common worlds and understanding between researchers and participants in terms of ethics in order to grand a base for confidentiality, trustworthy, transparency for valid, accurate, reliable research results. Bryman (2001) indicates that ethical issues arise at a variety of stages in social research. Taking side about ethical decision making by alternative ways is the current arguments to create preventions on ethical dilemmas while conducting educational research as teacher researchers at home context.

3.4. Possible dilemmas and solutions in ethical problems

Lucas and Lidstone (2000) address the importance of ethical issues in research methods. Several kinds of misconduct between participants and researchers create important loose of trustworthy, confidentiality to gain contributively results from research. On the other hand; Pitt (1998) points out terms of confidentiality and trustworthy problems within ethics with dilemma of “resistance”. The arisen arguments in here enlighten catching implications of interpretive, constructive decision making for ethics. In fact; it is frequently underlined that researchers have roles and responsibilities in ethical implications within research process. Another argument digs our minds on concerning ‘what could be the possible fallacies of ethics if teacher researchers conduct research at their home’. In order to minimize fallacies of ethics, there are alternative guidelines about ethical implementations while conducting educational research especially action research at home context.

Ethical codes of universities and associations are effective guide for researchers to have consciousness about possible problems that researchers can experience within research process. In addition to these, ethical codes provide a deeper look to research standards for catching quality, commitment for practice of research. Therefore; having idea on ethical concerns create a new look to the researchers in order to widespread research practice with minimizing risk of dilemmas. Critical reviews of studies carry us to examine list of issues due to ethical considerations that are listed in the following:

- Researcher should be active in decision making process about ethics
- There are particular policies due to the research focus, methods and participants for decision making of ethics about pitfalls
- It is inevitable to not face with ethical pitfalls
- The most challenge way of ethical decision can be seen in conducting research as researcher at home
- Confidentiality, trustworthy, authenticity are the important concern of ethics in research process
- There should be examination of practice in order to gain reflective perceptions of teacher researchers
Reflective and professional position of teachers as researcher is the new paradigm on ethical decision making.

Educational research and action research are also associated with multiple perspective and new paradigm on ethical standards.

The necessity of ‘utilitarianism’ and ‘constructivism’, ‘pluralism’ way of looking to ethical considerations and practice within research process are the new dimensions of contemporary educational research standards.

Technology is the factor that fosters the process of the action research and it can be also the issue of ethics.

4. METHODOLOGY

The research study stances on qualitative research design. The research has qualitative nature which takes place in the natural world, fundamentally interpretive and emergent. In other words, the research stands on socially constructed meanings through the perceptions and experiences of teacher researchers who experienced action research within their home context (Marshall, Rossman, 1999; Creswell, 2003). In line with the phenomenological view; interpreting experiences by understanding the subjects through interactions and interpretations of researcher based on inductive process provide to gain insights on the perceptions of teacher researchers about ethics, ethical decision making process, being critical friends while conducting a research within their home context (Marshall, Rossman, 1999; Cohen, Morrison, Manion, 2000).

4.1. Sample

The research was taken place at Educational Sciences Department in Higher Education Institution as a sample. Eight teachers who experienced action research to change or develop teaching policy and educational practice participated to the research. Therefore, participants of the research were selected based on purposive sampling that they are already known and experienced action research process within their context. Participation to the research stances on voluntarism thereby eight participants showed enthusiasm in participating research and contributing to the data collection process. The name of the higher education institution is not underlined throughout the research for keeping the trustworthy between researchers and participants (Cohen, Manion, Morrison, 2000).

4.2. Data collection techniques and analysis

As the research aims to investigate the perceptions and experiences of the teacher researchers about impact of technology and ethical considerations, dilemmas in action research; focus groups and self-reports, researcher observations are the relevant data collection techniques to have in-depth data in relation to technology, ethics, decision making process in ethics, being critical friends in change and development oriented activities such as research. Focus group is a collectivist research method that focuses on the multivocality of the participants’ experiences and perceptions. It is the collective human interaction that proposes the participant involvement and participation in the discussion (Denzin, Lincoln, 2003). In this research study, focus groups were constructed two times as two distinctive groups that each group has four members. In the first meeting, general discussion on conducting an educational research and current researches within home context was negotiated among participants and these discussions were observed, interpreted by researchers within a natural collegial activity. In the second meeting, it was aimed to gain insights about the perceptions of participants on ethics and their experiences about ethical dilemmas in action research. The discussions in two meetings were observed and interpreted by the researchers based on content analysis. In line with the focus groups, researcher observations supported the findings on the using technology in action research by teacher.
researchers. Self-reports were used as data collection technique to collect data on experiences and perceptions of the participants about technology, ethics and action research process. Self-reports provided a review of documents, since documents and literature are self-effacing methods that effectively portray the values, experiences and beliefs of participants in their setting (Marshall, Rossman, 1999). Therefore, participants had a chance to explore their experiences on technology, ethical dilemmas in action research and show their reflective practice on research through self-reports. The results of the self-report were analyzed based on content analysis. In addition, data from focus groups, observation and self-reports were triangulated in order to increase the credibility of the findings (Cohen, Manion, Morrison, 2000).

5. RESEARCH FINDINGS

5.1. Focus groups

As the focus groups relies on collective rather than individualistic research method that focuses on participants’ attitudes, experiences; compared to individual interviews, it proposes advantage for researchers to observe interactive processes occurring among participants (Denzin, Lincoln, 2003). In this respect, two meetings were done among participants to discuss issues of ethics, ethical decision making process and being critical friendship while gaining ethical perspective and decisions.

The preliminary meetings set the objectives of the discussions. The importance of ethics within research and the impact of technology in enhancing the research process were explored by the teacher researchers. The second meeting by the groups supported the first meeting and confirmed that technology and ethics are interrelated factors which can foster and limit the credibility of the action research.

5.2. Researcher observation

The observation provided to report to what extend teacher researchers use technology within action research and which technology facilities are used by the teacher researchers during the research process. Regarding to researcher observation, it is confirmed that teacher researchers have intellectual flexibility and enthusiasm to use technology in their teaching and at the same time in research process in order to provide simultaneous actions for change. In addition to these, researchers reported their observations during the focus group discussions. This also empowered that teacher researchers are aware on the importance of technology and ethics in research process.

5.3. Self-Reports

The background of the study is associated to the perceptions of teacher researchers as critical friends about ethics in conducting educational research at home context. Eight teacher researchers as critical friends’ perceptions and experiences about ethical decision making involvement provide the ground for the research focus.

5.3.1. Reflections of teacher researchers

Participant 1 clarified the ethics as protection of participants’ privacy. S/he thinks that protection of ethics can be done through fully informed consent form in order to keep confidentiality between researcher and participants. S/he experiences the ethical considerations and dilemmas in research in data analysis. In order to minimize the risk on ethical dilemmas; s/he uses the category of analysis in action research. On the other hand; having insider perspective because of knowing
participants create difficult process in data analysis. Therefore; s/he suggests to be careful on the being insider researcher and conducting research at own context. In addition, participant 2 defined ethics as keeping confidentiality and trustworthy between researchers and participants. In educational research; s/he conducted research that mainly s/he is familiar with people who are her/his colleagues. S/he stated that “I was concerned that that their responses may have been coloured by a desire to give good impression”. Again s/he experiences that conducting research at own context is the critical way of gaining valid and reliable results for the research which arise ethical dilemmas.

Participant 3 addressed the ethics in data analysis stage of research. S/he experiences to have consciousness of integrity as researchers in implementing ethical considerations. In addition to this; s/he also experiences the difficulty of conducting research at own context in terms of creating confidentiality. Participant 4 emphasized the concept of ethics as confidentiality and anonymity. S/he suggests having objective position to prevent ethical dilemmas in any stage of research process by being outsider researchers. Because of keeping confidentiality and anonymity in research process; s/he did not face with ethical dilemmas in getting response from participants.

These four participants created a stance for the research focus which is “ethical considerations and dilemmas of teacher researchers while conducting action research at their home context”. They concentrate on the meaning of ethics as confidentiality and trustworthy, dilemmas that can be seen in any stage of research process. Furthermore, four of teacher researchers provided valuable experiences and perceptions on issue. All their perceptions and experiences created harmonic picture for “ethical considerations and dilemmas in action research”. In addition, following four participants as teacher researchers provided extended answers on the concept of ethical considerations and dilemmas in conducting educational research. The answers can be categorised by four questions as “How do you define ethics in action research”, “Do you set criteria on ethical issues before conducting research”, “How do you set criteria in order to prevent ethical dilemmas”, “Could you explain your experiences in terms of ethics while conducting an educational research”.

Participant 5:
Q1 “In my point of view ethical issues in research is: 1. Concerning the political aspects 2. Academic/Cultural and social/Personal aspects might cause barriers while conducting any kind of research”. Q2 “No, I do not set but I guess what you mean is whether I consider the ethical issues before conducting a research and of course I do while planning the research it is inevitable not to consider the ethical aspects within a research.”. Q3 “By planning in advance but there is no rule that as a researcher even though you planned it that you might not face up with problems. As you move along still you will face up with ethical concerns because in all aspects you deal with human beings or various bodies, organizations even materials/documentary analysis etc”. Q4“The most recent experience of mine is that last semester while collecting my data I had to write to various bodies of the institution that I worked for and before actually starting off I had to get the approval otherwise you are not officially allowed to carry out the research. Although I received the approval and at the same time it took sometime of mine, from various departments I had difficulties in communicating and explaining the purpose of my research but then, through the support of all I managed to succeed in collecting my data without causing any problems to anyone, so to cut the story short it was not as hectic as I thought so”.

Participant 6:
Q1 “I believe that ethics in educational research stands for respecting the original work/idea. This seems to be related to plagiarism. In research, we base our ideas on whatever produced previously and follow up from there. Therefore, it is crucial to respect the original ideas/works produced before our work. To do this, whenever we quote or paraphrase we provide reference to prevent plagiarism. In addition to plagiarism, there is another ethical issue that is very crucial in educational research: participants’ rights and anonymity. In research, if we stated in the questionnaire, for example, that it will be anonymous, then we should do so to protect the rights of the participants. Another issue is to remain neutral and objective in your research especially if you are conducting action research. Your students’ willingness to participate in your research should not affect your attitude towards them in the lesson”. Q2 “Yes I think I do. For example, if I'll do a survey, I
consider whether it'll be anonymous or not, and I always inform the participants on this”. Q3 “If we think about plagiarism, we should make sure that we make the right references each time we quote/paraphrase. If we take students' consent and state that their answers will not affect their performance in the lesson, we should abide by this strictly. Actually I believe that it's a crucial issue especially if you are conducting research in your own classroom. In this case you have double roles: researcher and lesson instructor. So you need to make sure that you are objective towards your students throughout even if they are not willing to answer your questionnaires, for example”. Q4“This experience of mine is related to one of the questions I asked to attendants in a survey. This question was related to income of students' families. I gave the questionnaires to the students myself. As I was administering the questionnaires, I noticed that some students did not feel very comfortable as they were answering these questions. I felt bad too. I wished I had asked family income in a more indirect way”.

Participant 7:
Q1 “To be honest, open to the participants and to me while collecting and analysing data during research process. That also means I should not humiliate the participants. I shouldn’t try to benefit from the participant, by using violence, for my own sakes”. Q2 “yes”. Q3 “anonymous quire, getting participant's consent and nor forcing them. Not telling lies to participants etc”. Q4 “first I prepare the questionnaire anonymously. While giving the questionnaire to participants, First I take his/her consent/. If s/he says OK, then I give the questionnaire. I don't force them. While interviewing the participant, first I inform them that whatever they say will not report with their names. I never force the participants to provide the answers that I want. I do not tell lies regarding the purpose of the research. I do not report the participants' views differently when writing the paper”.

Participant 8:
Q1 “Ethics is the protection of people privacy, consistency among research process to research focus and also understanding of transparency in order to get valid, reliable results”. Q2 “yes, of course, I think that we should consider ethics in possible dimensions”. Q3 “I try to catch confidentiality and trustworthy between me and participants and I try to design fully informed consent form to make participants voluntary to research participation”. Q4“I also faced with ethical dilemma while conducting research. Sometimes; confidentiality and privacy can not be kept because of conducting research within familiar setting. Therefore; I try to catch balance of transparency and trustworthy to eliminate possible dilemmas”.

5.3.2. Developing arguments from the self-reports

Based on the reflections of colleagues about ethics and ethical dilemmas; it is not possible to eliminate existence of ethical dilemmas in any particular stage of educational research process. In relation to teacher researchers’ experiences, self-reports on ethics, the issues of trustworthy, confidentiality, consciousness on difficulty to conduct action research at home context are underlined. Furthermore, colleagues create arguments on pitfalls in setting criteria for ethics depending on context and participants. Regarding being critical friends while conducting an action research, self-reports provided less evidence on critical friendship and confirmed that teacher researchers conduct research individual bases whether action research proposes collective efforts to change and develop educational practice.

5.3.3. Triangulated data from focus groups, observation, self-reports

Reflections of critical friends and colleagues depending on their perceptions and experiences enlighten the current discussions on technology and ethical considerations in action research. Thus, there is a gap between ethical standards as theoretical stance and their practice; there should be deeper
touch to researchers’ experiences as teachers in their context in order to grasp risks of fallacies on ethics and impact of technology in research. Minimizing risks of ethical dilemmas and having consciousness on eclecticism about setting ethical standards in research process contribute researchers to have qualified, credible research in academic profession.

In respect to what extend teacher researchers become critical friends while conducting a research for changing and developing educational practice within their home context by using technology, focus groups, research observation and the self-reports findings revealed that teacher researchers are aware of the importance of considering ethics and the technology within action research process. Furthermore, they have a firm belief that action research plays a great role to change and develop educational practice based on collaboration. Although they have consciousness on the impact of negotiation and collaboration as critical friends to change and develop educational practice, there is intensified need to turn attention to collective efforts of the professionals instead of conducting research individual bases.

6. DISCUSSIONS AND CONCLUSION

The responsibility of the teacher researchers is to clarify the nature of the ethics, set criteria for preventing ethical dichotomy in research, especially at their context (Verma, Mallick, 1999). Teacher researchers can be outsiders or insiders within the research process. There are particular advantages and disadvantages either being outsider or insider within research process. Bridges (2001) points out teacher researchers can be outsider researcher in order to create clearly, objectively understanding of the experience of those who are inside community. In fact; insiders can properly represent the experience of a community. But being insider as teacher for own context creates more ethical dilemmas based on privacy, articulating views of others about results, confidentiality. In that point; it is necessary to set principles, utilitarian perspective on ethics in order to establish mutual happiness and higher satisfaction between participants and researcher for valid, reliable results. It is the dichotomy argument to suggest either being outsider or insider in research process that each of the position is associated to principles and right application of ethics understanding. Campbell (2001) also indicates the necessity of applying ethical standards to actual situations in any professionally and ethically satisfying way. Principles and standards of ethics are decided on basis of self-regulation, confidence of teachers due to the context and content of research. Ethical standards and principles should appreciate to research context, participants and dignity of research that professional teacher researchers should know how ‘right’ may be done about ethics. Teacher researchers need to be reflective professional to make sense of concrete application on bridge between practice and theory in terms of ethical considerations. In action research for policy development or change, there can be internally and externally caused problems in terms of ethics. Reflectivity of teachers’ action in any stage of research for ethical problems provides professional solutions to the educational research. Commitment between teachers and creating committees on gaining ethical perspective at home context is the new paradigm in handling pitfalls of ethics.

Educational research has the multi-disciplinary essence in its nature. Ethics is the core element of the action research (Mills, 2003). Therefore; teacher researchers have responsibility to make a careful evaluation of its ethical acceptability in research process. In the field of education; ensuring confidentiality of research data through trustworthy and confidentiality of participants carries us to have credible research process through principles, rules, in terms ethical decision making process. In other words; teacher researchers need to clarify possible dilemmas in research process and propose ethical guidelines as checklist based on their ethical perspective by touching the concept of trustworthy, confidentiality, authenticity in order to catch qualified research in their home context for policy development practice in institution and teaching profession. Moreover, teacher researchers need to be more deliberate on decision making about technology and its impact to research process. For further studies, there can be extended studies on critical friendship as one of the fundamental for professional growth through using technology. Moreover, comparative studies between education
departments from various countries can be done on the issue of critical friendship by using technology and ethical guidelines and decision making process in action research.

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GENİŞLETİLMIŞ ÖZET

Bu araştırma, eylem araştırması uygulaması sırasında teknoloji kullanımı ve etik konusunda karar alma sürecinin önemini vurgulamaktadır. Eylem araştırması uygulaması, öğretim politikalarının değişmesi ve gelişmesine katkıda bulunması açısından günümüz araştırmalarında büyük önem taşımaktadır. Bu konunun önemini de kendi kurokularında araştırma yapan öğretmen görevlileri ortaya koyabilmeaktedir. Bu nedenle, araştırmacı ruhu öğretmen görevlileri eylem araştırmasında bağlı olarak kurunun değişim ve gelişiminde önemli rol almaktadırlar. Bu bağlamda, bu araştırma eylem araştırması çerçevesinde araştırma yapan öğretmen görevlilerinin, paydaşlığa dayalı teknoloji kullanımı


Teknoloji, eylem araştırması yürütülmenin düzenlenmesi gereken bir başka önemli noktadır. Teknoloji, eylem araştırması aşamalarında aşamaları bütünleyici görev üstlenmektedir. Bir başka deyişle, teknoloji kullanımı olaylar arasında bağlantılı kurulması, katılımcılar ve araştırmacılar arasında iyi bir iletişim ağı kurulmasına için önemli bir etkendir. Araştırma yapının öğretn verdikleri, ortak algoritı oluşturduktan sonra teknoloji kullanımlarına önem vermesi kaçınılmazdır. Teknoloji, eylem araştırmasının niteliğini artırmaktadır, aynı zamanda bu süreçte veri toplamada bir araç olarak kullanılacaktır. Eylem araştırması esnasında teknoloji, veri toplamada bir araç olarak kullanıldığında araştırmacıların bu bağlamda etik konusuna ayrıcık önem vermeleri gerekmektedir.


Grup mülakatı, araştırmacı gözlem raporu, katılımcıların kişisel değerlendirme raporları dayalı verilerde iş içinde, araştırmacı öğretim görevlilerinin eylem araştırmasında teknolojiye önem verdikleri ve etik konusunda karar alma sürecine duyarlı oldukları sonucuna varılabilmektedir. Bu araştırma ile, araştırmacı öğretim görevlilerinin teknoloji kullanımı ve etik kararların eylem araştırmasındaki yeri hakkında farklılıklarını geliştirilmişdir. Ayrıca
zamanda, araştırma sürecinde, yapılan etkinlikler sayesinde araştırmacı öğretim görevlilerinin katılımcılığı ve meslektaslığı artırılmıştır. Bir başka deyişle, araştırmada katılımcı olarak bulunan öğretim görevlileri, eğitim bilimlerindeki araştırmalarda etiğin önemi, eylem araştırmasının kurum iyileştirilmesinde yeri ve önemi, meslektaslığının mesleki gelişimde yeri hakkında görüş birliği oluşturma fırsatı bulmuşturlardi.