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E-MENTORING AT A DISTANCE: AN APPROACH TO SUPPORT PROFESSIONAL DEVELOPMENT IN WORKPLACES

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ABSTRACT

The rapid growth of technology has had a significant effect on educational activities. As a result of this growth, a shift has taken place from a behaviorist teaching style to a constructivist perspective which enables adult learners to build up knowledge collaboratively. Mentoring, a valuable tool within the constructivism approach, can offer a two-way knowledge-sharing environment in which participants can adopt what they learn into their workplaces through a process called transformative learning. Mentoring has now embraced technological advances so that participants can contact each other with synchronous and asynchronous communication tools such as Skype and e-mail respectively. This research project was conducted in a governmental company as a case study in order to study how the participants of mentoring understand their roles, and how they perceive these roles when communicating through Skype and e-mail. The project culminates in suggestions for a new e-mentoring model for practitioners. One of the findings in the research shows that the understanding of the mentoring relationship is diverse, and most participants have confusion about the different meanings of coaching, mentoring and consulting. However, almost all the participants agree that mentors should have a strong position to foster transformative learning in a mentoring process. Although transformative learning has not occurred in the relationships, Skype is a supporting technology for mentors to complement e-mail dialogs by clarification, and building up a trusting relationship. Moreover, some mentors often take an active role to manage and control the relationships as a leading position, but mentees mostly support this action by asking good questions and initiating meetings. Additionally, e-mail is used as a storage tool to review previous conversations, and it is used to re-schedule and initiate online meetings. Lastly, the researcher reflects on the implementation process as practical implications for other practitioners who would like to implement electronic mentoring in workplaces.

Keywords: **Online education, e-mentoring, computer mediated communication, professional development, workplace learning.**

INTRODUCTION

In recent years, the rapid growth of technology has had a significant effect on teaching and learning activities in a wide range of contexts. Even though the understanding of education was more likely to be related to classroom based activities in the past, today, people have been interacting with a great deal of communication tools on the computer for their learning and training activities. In this respect, there has been a shift from non-technological education, which provided standardized curriculum in classrooms, to individual learning environments enhanced with developed technology. Today's learners have different opportunities provided by computer technologies. They can learn and

acquire knowledge individually at a distance without being a student at an educational institution. Considering that everyone has different preferences and learning methods, online education has provided individualized learning opportunities to understand how one learns in the learner's natural context considering his or her needs (White 2005).

Not only have such individual learning needs encouraged educators to use technology in order to enhance teaching and learning activities, it has also raised the notion of life-long learning. Furthering this point, education has to be shaped and adopted to support all people for their careers and to meet the needs of all learners. The reason to keep learning after school is most likely associated with having different jobs in different occupational fields after graduation, since people may contribute to the society and organizations where they are working during their career by fostering their personal and professional development. To do this, mentoring, one of the important approaches to elicit the potential of people and enable those people to transfer their experience into daily life (Kuzu et al. 2012, p. 1), might play an important role in supporting professional development in different contexts. The notion of mentoring has also embraced technological advances to enhance and support the mentoring process through emerging communication tools. This has encouraged researchers to develop the idea of electronic mentoring.

This research project is conducted as a case study in a governmental company in order to investigate how the participants understand their roles in a mentoring process, and to examine how communication tools relate to this understanding of electronic mentoring. The paper is divided into five chapters: introduction, purpose of the study, literature review, method, findings and discussion, conclusion and practical implications.

Purpose of the Study

The research is conducted in a governmental company—one of the biggest companies in Turkey. One of the main problems for the company is that if there is a specific in-service activity for some staff, they have to go to the training centers from different cities in Turkey in order to take the training sessions. As a result of this, such activities are costly for the company due to travelling expenses and the preparation of these traditional education approaches. Due to these challenges, the company management has already attempted to digitalize some content in order to turn traditional education into online education. Nevertheless, the rapid growth of the technology has encouraged the company to find out different solutions to increase the quality of these activities and the satisfaction of the staff.

E-mentoring relationships might be a part of the solution to deal with such issues for the company since it has many advantages such as cost-effective training and orientation activities. When electronic communication tools are used for a mentoring relationship, other online education practices can also facilitate this relationship.

LITERATURE REVIEW

The Paradigm Shift from Traditional Education to Online Education

The question of how educators can improve the effectiveness of education for their students has been a serious topic of discussion amongst educators and students alike. In fact, different theories and considerations have been proposed to better educational activities for a long time, but today, this issue has slightly changed due to the advent of the computer and Internet. Many researchers and practitioners have attempted to adjust and shape technology with educational theories. As a result of this, using theories and technology together in an effective way is one of the fundamental considerations among researchers in the literature. Anderson (1982), for instance, examines three key benefits of educational theories for technology-enhanced learning environments: helping educators make communication effective for learners; using time and educational sources wisely; and enabling the educators to think further about technology usage. Using online education in the context of this research study has similar consideration as many

employees use online technology, such as e-mail without being aware of the educational benefits. Similarly, Laurillard (2012) argues that theoretical formal education and technology should be used in harmony. These thoughts show that there is a tension between technology usage and educational considerations due to the rapid growth of the technology. Many software and tools, for instance, are available on the Internet to use them for our daily life such as communicating with people, but the problem is how to harness those tools and software to enhance learning. In this respect, Conole (2013) points out a new form of educational environment in which learners engage with different tools on the Internet and through computer technologies based on educational theories. She argues that "there are three fundamental shifts: a shift from a focus on information to communication, a shift from a passive to more interactive engagement, and a shift from a focus on individual learners to more socially situative learning" (p. 82). That is, learning takes place in a situation in which the learners can construct the knowledge, and this can allow them to transfer what they learn into their work context (Laurillard 2012, p.55).

The Characteristics of E-Mentoring

Electronic mentoring is sometimes defined as telementoring, cyber-mentoring or virtual mentoring in the literature (Single and Single, 2005; Akin and Hilbun, 2007). A brief definition of electronic mentoring might be that "a computer-based communication way in which mentor and mentee can contact each other with discussion boards, chat rooms, blogs and Web conferencing" (Circle et al. 2010, p.30). In opposition to Pachler and Redondo's (2012) observation that there are few definitions of e-mentoring, many definitions and explanations can be found in the literature. All these explanations, however, cannot give a robust structure for implementation and practicality. Therefore, there is a need to focus on some details in order to understand the characteristic of e-mentoring. Although e-mentoring literature is quite scarce, general considerations can be categorized into two main topics, namely transformative learning and effective technology usage. In this part of the paper, these topics are discussed in order to identify some key characteristics of electronic mentoring.

Transformative Learning

As some initial points discussed in the paper indicate a paradigm shift from traditional education to online education, educational considerations take place in understanding how the electronic mentoring process makes learning effective and transformative with the advance of technology. Although Rowland (2012) describes the relationship between mentor and mentee as a knowledge transmission, collaborative and situative learning should be taken into account. In other words, this relationship is far beyond a knowledge transmission, rather knowledge construction and active learning take place so that the participants can use constructed knowledge in their workplaces. In this respect, Crow (2012) adds the importance of the constructivist perspective for a mentoring relationship and states, this learning does not simply involve a transmission of knowledge. The learning that takes place with these strategies involves the social construction of knowledge, in which knowledge is co-constructed through the social negotiation process of relationship. Thus, rather than identifying and transmitting a set of facts, and practices, mentoring and coaching involve a creative process in which mentors and mentees together construct the knowledge of school leadership and make sense of the mentee's practice (p.233).

It is crucial to bear in mind that the mentoring or e-mentoring relationship should foster meaningful learning regardless of context differences. Since e-mentoring is a mentee-centered process, learning should be in a transformative way in which the mentee can use and adapt the knowledge for his or her work place context. Pachler and Redondo (2012) identify a similar characteristic of a mentoring relationship that: mentoring and e-mentoring for us are closely linked to capacity building: not just in terms of enabling individual learners to cope with and thrive as individual members of the knowledge economy, but also in terms of making a systematic contribution to the management and exploitation of existing as well as the generation of new knowledge (p.462).

Indeed, CMC (computer mediated communication) is the key element to facilitate and enhance knowledge construction between the mentor and mentee as long as it is used properly. Furthermore, not only is using communication tools with an educational perspective taken into account, ICT skills are also a fundamental factor to get more performance from an electronic mentoring relationship.

Effective Technology Usage

ICT or computer skills are often discussed issues regarding electronic mentoring process in the literature, but ICT literacy, defined as the ability of using technology "as a tool to research, organize, evaluate and communicate information (P21 Partnership)", should not be overlooked. Although there are many kinds of literacy, such as information literacy, digital literacy and so on, ICT literacy is one of the most important parts of an electronic mentoring relationship in any context, as participants in an e-mentoring process need to actively engage with different synchronous or asynchronous communication tools, and they need to deal with different challenges related to communication on the computer. Ensher et al. (2003, p.276), for instance, identify five challenges in terms of using CMC for a mentoring process as follows:

- **Misunderstandings in communication**
- **Slow pace of building up relationship**
- **Technical and written communication skills**
- **Hardware and software problems on computer**
- **Privacy issues**

Many of these challenges might never appear in a traditional mentoring relationship, but CMC is different than FtF since "e-mentoring adds a human element to computer-mediated-learning" (Homitz and Berge 2008, p.329).

Another example of using technology for the mentoring relationship is given by Bamford (2011). He defines the role of technology as the heart of an e-mentoring model.

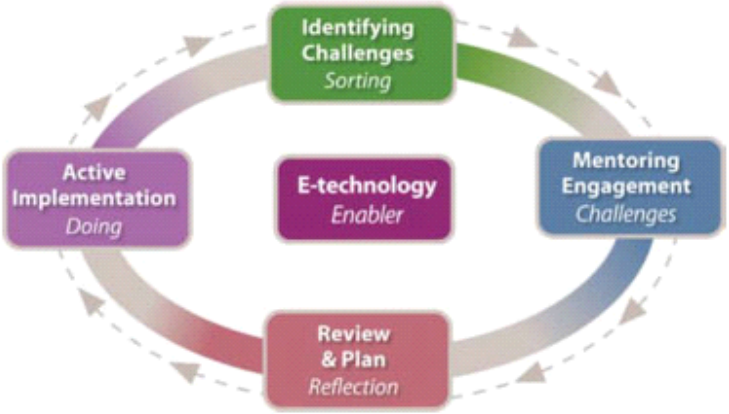

Figure 1. The e-Mentored Learning Model (Bamford 2011, p.153)

The figure indicates that technology facilitates almost every step of an electronic mentoring process. Technology is not only used to facilitate online communication between mentor and mentee in an e-mentoring system, it also plays an important role during implementation of an e-mentoring process. Basic ICT skills belonging to the participants might be enough in a short-term period, but the participants need to use technology in a meaningful way so that a successful and effective e-mentoring process can occur over a long-term period. From this point of view, computer or ICT literacy does not only include technical skills (Whitworth 2009), but rather it is an ability to use technology for an effective learning process. Therefore, ICT literacy skills are more likely

to help and support the participants in order to reduce possible problems in an e-mentoring process.

Similar Cases in Turkey

Even though there is plenty of research related to mentoring and electronic mentoring in Turkey, many of them are conducted in educational settings such as schools and universities. However, research about workplace settings in terms of mentoring are quite scares. For instance, one of paper focuses on training school managers through mentoring in schools (Eres, 2009). According to researcher, having leadership feature by school managers could positively affect making productive decisions and plans, using time wisely and arranging managements skills. Although this research project is conducted in a school setting, improving leadership skills for school managers could be considered as a professional development process.

One of the papers about professional development through mentoring is conducted by Celik (2011). The paper examines how to use mentoring and coaching process to support librarians' professional skills. An example of mentoring implementation given by the researcher, which is conducted in the Library of Dogus University, improves job qualifications for novice librarians through experienced staff. The end of the three months mentoring process, it is observed that full time novice librarians start to work more professionally.

A review article by Sen and Alan (2014) examines mentoring process in order to improve nursing competences. According to the researchers, experiences staff should learn new methods like mentoring to develop novice nurses rather than guide and order them. By doing this, organizational culture could easily transfer and orientation process could be done effectively.

When we look at the research and papers about mentoring process in Turkey, it could be observed that empirical research is very limited and vague. It should be also pointed out that electronic communication tools to facilitate mentoring relationships are not used by the researchers. Therefore, e-mentoring projects at workplace settings for professional development need to be conducted to have empirical data and embrace new educational methods to improve competences.

METHOD

The researcher has two main purposes of this research: the first one is to investigate how the participants understand their roles in an e-mentoring relationship to contribute to the literature as a researcher; the second is to identify, test and reflect an e-mentoring implementation experience as a practitioner. Therefore, the researcher is going to establish a small size group of e-mentoring relationships in order to analyze these research questions:

- To what extent do participants understand their roles in a mentoring process?
- How is using Skype related to this understanding?
- What are the roles of e-mail as a supporting technology in the mentoring process?

Before referring to the methodology, it might be useful to mention the philosophical considerations that underpin the rationale for the research. Cohen et al. (2011) point out that social reality can be viewed from two perspectives, namely ontological and epistemological points of view. The researcher in this research study is interested in knowledge in social science, which can be generated or interpreted. Thus, an epistemological viewpoint is an important consideration to analyze data that will be found out at the end of the research. Research in the social sciences requires more interpretations, thoughts, and opinions to understand knowledge, as understanding social issues about a human being, such as

educational phenomena, is more complicated than natural science. On this, Cohen et al. (2011) highlight, "the social and educational world is a messy place, full of contradictions, richness, complexity, connectedness, conjunctions and disjunctions" (p. 219). Therefore, it is difficult to find out definite answers in social science from only observations or experiments, without a researcher's interpretation. The case study was used as a scientific approach in order to find out accurate data during the research. Gillham (2010) defines a case as an individual, a group, an institution, a community or multiple cases (p.1). Understanding this, the research was conducted in a governmental company as an institution with a small-scale e-mentoring project. The company is also the researcher's workplace, as Blaxter et al. (2006) point out that case studies may also be done in a company where the researcher works. In addition, the research was mostly dependent on qualitative elements regarding the philosophical considerations discussed above. One characteristic of qualitative research is that it generally consists of thoughts, perceptions, and feelings (Gillham 2010). Therefore, the methods were selected in order to deeply understand what the participants think about their mentoring relationship.

Participant Selection and Ethical Procedures

Ethical issues were one of the main considerations underpinning any scientific research. Additionally, all participants in a research were supposed to be fully informed about what they were expected to do—volunteer to be interviewed, contribute to the project, and understand the risks and potential pitfalls of the research (Cohen et al. 2011). That being said, a consent form was prepared in order to gain their consents for the research for the project. Blaxter et al. (2006) also point out the importance of anonymity that the researcher is responsible to conceal the real identities of the participants provided by data in a project.

Having taken into account ethical considerations, six people were selected for this research project. One of the participants was the researcher himself taking on a mentee role and that of a practitioner. The rest of the participants were currently working in the Training Center in the company. Three of them were selected for a mentor role to match with other participants who were novice trainers. All of them were fully informed with information in terms of data collection methods, project schedule and interviews. Furthermore, all participants were asked to fill out participation forms to collect some details about them. In order to give some brief information about the participants while maintaining anonymity, different names were used during the data analysis.

Table 1. Pairs in the mentoring relationships

Pairs
MentorA - is a 48-year-old experienced male trainer. Although he has participated in many training and teaching activities as a trainer, this was his first mentoring experience. He used to work as a trainer for 4 years at the company. He is now a line-manager. **MenteeA – who is 28 years old and a novice trainer, has been working in the company for 1 year, and is experienced, using some software such as Flash and Dreamweaver. This is his first time to join an e-mentoring relationship.**
MentorB - is a 37-year-old trainer in the training center of the company, particularly responsible for public relations and presentation development. He has been working in the company for 7 years. This is his first time as a participant in a mentoring project. **MenteeB - is a 29-year-old novice trainer who has been working in the company for 2 years.**
MentorC - is 36 years old and a line manager, responsible for the management of in-service training activities in the company. He has participated in a coaching course before, but this is his first time being involved in a mentoring project. He has been working in the company for 10 years. **MenteeC(The researcher) - is a 28-year-old sponsored student, and has been studying in the UK for his master degree. He is going to be a novice trainer in the company after graduation.**

Data Collection and Analysis

The question 'Which method is the best?' is not solely about whether, for example, to use interviews, questionnaires or observations. Underpinning these research tools are more generally philosophical questions about how we understand social reality, and what the most appropriate ways of studying it (Blaxter et al. 2006, p.58).

As the researchers point out the complexity of selecting suitable methods, some different instruments and methods were used to collect data during our research. According to Cohen et al. (2011) a case study may include numerical, qualitative, and mixed methods. Therefore, we used numerical and qualitative methods together considering our scientific and philosophical approach.

Table 2. Data Collection Methods and Instruments

Numerical	Qualitative
The number of sent E-mails	E-mail Logs
The number of online meetings	Online Reflective Review Forms
	Semi-structured interview
	The researcher's diary

As can be seen from the table, the number of E-mail posts and E-mail logs are used together to enrich the numerical data with qualitative elements. To do this, a Gmail account was given to each mentee to get them to use the account for communication rather than their personal e-mail addresses in order to keep track of what is going on between mentor and mentee in a particular pair. Similarly, two different online forms for mentees and mentors were created to get participants to reflect about their online meetings as a qualitative method. Even though E-mail logs and Online Review Forms gave meaningful data, a semi-structured interview was also used to validate the reflections and the e-mail logs (Kerlinger 1970, cited in Cohen et al. 2011, p.411), and the interview consisted of in-depth data collection related to research questions at the end of the project. Another instrument that was used to collect data was the researcher's diary. Blaxter et al. (2006) point out that diaries may be used to record opinions, events and thoughts about a particular process in any research regardless of context and methodology differences (p.48). In this respect, the researcher had also a mentee role as a novice trainer in the company, and a practitioner who attempted to implement and reflect an e-mentoring system during the project. Therefore, keeping a diary was useful to get the researcher's perspective during his mentoring relationship and implementation period.

Pope, Ziebland and Mays (2000) state that a qualitative data analysis consists of five states, namely; familiarisation, identifying a thematic framework, indexing, charting, mapping and interpretation. The researcher listen the interviews from recordings and read logs, online forms and the diary in order to immerse the raw data for the first step. Then, main themes and key concepts were determined from the data considering research questions. Following this, the data were marked with themes and key concepts in order to have systematic analysis. After this section, all the marked data was rearranged and rewritten as a chart. Lastly, the chart were used to interpret and define the phenomena for the research context (p. 116).

Implementation Process

Preparation

At the beginning of the implementation, the researcher had a face-to-face meeting with the managers and the line-managers in the company in order to explain the research details. Having taken account of organizational needs, novice trainers working at the Training Centre were chosen for the project. One of the important reasons why the participants were selected from this department was an informal mentoring relationship had already been in progress, because the department had hired some new trainers. This on-going informal mentoring relationship was also a motivational driver for the participants to voluntarily join our e-mentoring project. At the end of this stage, the researcher got an agreement from the organization to start the Structuring Step.

Structuring

Firstly, the project's objectives were determined with the line managers considering the organization and the participants' demands. The objectives covered career development, transmission organizational culture, workplace induction for the participants, strengthening the communication among the staff and a quick adaptation of the new workplace for the organization. The length of the process was two months. Although a mentoring relationship is suggested to be a long term period, such as more than 1 year (Kram 1988), this study had to shorten the duration to finish the project in two months due to time restrictions. In this respect, we planned the e-mentoring relationship with a maximum of 4 online meetings, but 2 online meetings were compulsory in order to promote "online socialization" and "access and motivation", as online learners need to get familiar with online software and each other before starting any online teaching activities (Salmon 2002). In addition, mentors and mentee roles in the project were determined with the possible mentors considering the literature.

Matching

The matching process was conducted by the line-managers in the company, as they were more likely to know the staff's characteristics and their strengths and weaknesses. However, the matching process needed much more attention as skills of mentors are crucial for an e-mentoring relationship. Therefore, using a scale for mentor selection might have been better to make matching much more effective.

Implementation

In this stage, the researchers chose Skype and e-mail for the communication between mentors and mentees as synchronous and asynchronous tools respectively. The researchers also prepared a Handbook, which includes objectives, mentors' and mentees' roles, meetings schedule, and the facilitator contact information, to communicate with the participants easier. In addition, online training sessions were held on Skype for 10-15 minutes with each participant to send them the Handbook, explain them the project's details and answers their questions.

Evaluation

Online forms were created and added in the Handbook for on-going evaluation during the e-mentoring relationship. After finishing an online meeting, participants needed to fill out the online forms (Mentee Review Form, Mentor Review Form) in order to reflect on completed online meetings.

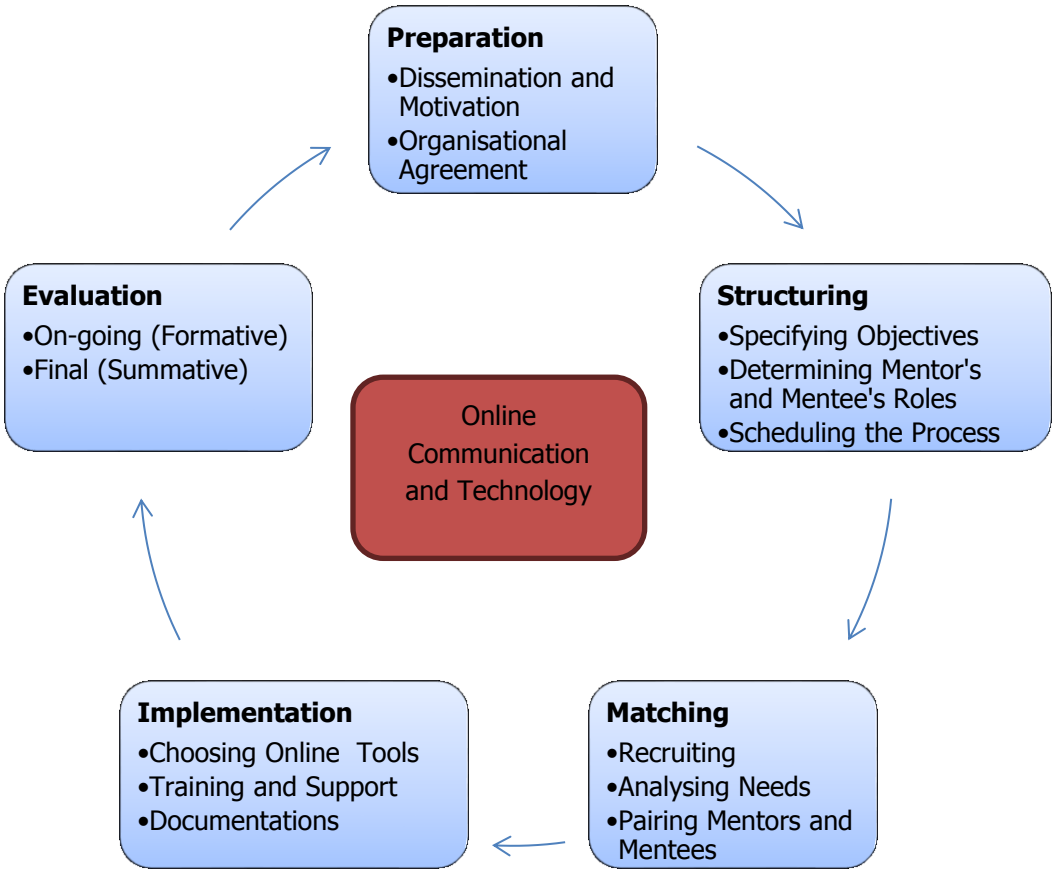

Figure 2. Implementation Process for the Research

FINDINGS AND DISCUSSION

During the two-month time period, three mentor-mentee pairs attempted to achieve the project aims which were given in the Handbook and the expectations defined before the project. Each pair had different numbers of Skype meetings and e-mails.

Table 3. The number of sent e-mails and online meetings by the participants

Pairs	The number of Skype Meetings	The number of sent e-mails	
		by Mentor	by Mentee
Mentor-A Mentee-A	2 online meetings	12	4
Mentor-B Mentee-B	2 online meetings	3	5
Mentor-C Mentee-C (the researcher)	3 online meetings	8	8

The table illustrates the number of e-mails per pair depending on their mentoring relationships. However, only numerical data of sent emails might not give accurate data to interpret the relationships. Therefore, the researcher focuses on the content of sent emails in order to provide the answers for the research questions. Some main themes can be derived from the e-mail logs, semi-structured interviews, reflections on online forms, and researcher's diary as follows:

- **The understanding of the mentoring process**
- **Fostering active learning**
- **Managing the mentoring relationship**
- **The roles of e-mail usage**

Following this Chapter, the data is analyzed considering these themes.

The Understanding of Mentoring Relationship

The researcher of this study has been interested in mentoring literature in the educational perspective since having a mentor in December 2014 to develop the researcher's personal understanding of mentoring. Since then, the researcher has been in two mentoring relationships. One initial thought towards the mentoring definition was similar to the learning process in traditional classrooms. In other words, the researcher used to think that a mentor has similar responsibilities like a teacher; the mentor has to teach his or her mentee during the mentoring relationship depending on the mentee's learning needs. After a short time period and this research project, the researcher's personal thoughts about mentoring have slightly changed. The mentoring process is not only a teaching and learning activity, but also a period of growth for both mentor and mentee through exchanging knowledge and experiences. From this point of view, if the participants can understand the mentoring process properly, the engagement of technological tools and perceptions of roles might be much more effective. Therefore, the rest of this chapter consists of showing how the participants defined a mentoring relationship at the end of their relationships. Despite the many definitions of e-mentoring in the literature, Single and Muller (2001) define electronic mentoring as a relationship that is established between a more senior individual (mentor) and lesser skilled or experienced individual (mentee), primarily using electronic communications, and that is intended to develop and grow the skills, knowledge, confidence, and cultural understanding of the mentee to help him or her succeed, while also assisting in the development of the mentor. (p. 108)

The definition seems simple, but it is a brief definition that illustrates complex characteristics of an electronic mentoring such as skill development, cultural understanding in a company and mutual relationship. Similarly, other definitions in the literature refer to a basic knowledge transmission from an experienced person to less experienced individuals in the workplace context. In this research, three pairs have different degree of mentoring relationships depending on their needs and perspectives towards mentoring. In this regard, the findings indicate that some participants in this project understand mentoring relationship as a one-way knowledge sharing process from a mentor to mentee in the traditional way.

> ***"I did not know what mentoring was before this project. I used to think that someone would teach something to me during this relationship but I realised that it actually depends on questions and answers between mentor and mentee. It is a knowledge transmission from an experienced person to a novice member.*- MenteeA – Interview"**

MenteeA, for instance, defines mentoring as a question-based communication, which allows the mentee to ask questions and get answers. Indeed, asking questions is one of the main parts of a mentoring relationship to foster the growth of mentee, but when looking at the e-mail logs between MenteeA and MentorA, it seems that the questions by the mentee only foster simple knowledge transmission rather than developing the mentee's skills, knowledge, or confidence in the pair.

> ***"I think, mentoring is a relationship to share experiences and knowledge. […]I also think that mentor and mentee influence each other to get benefit from a mentoring relationship.*-MentorC – Interview"**

MentorC, however, defines mentoring based on his e-mentoring experience as a relationship, which enables the participants to share experience and knowledge together. The literature points out that the mentoring process is a "mutually-beneficial relationship" (Homitz and Berge 2008, p.331). That is, not only does a mentee get benefits from a mentoring relationship, but the mentor also benefits in gained skills and knowledge. In this respect, the interview and e-mail logs confirm the literature for this pair; mentors can also benefit from a mentee-centred mentoring relationship. For instance, MentorC and the researcher, as a mentee role, discussed how to implement an innovative in-service system, which can allow the company's staff to learn during playing games. This idea came from a conference and was shared with the mentor at that time. He was also interested in such idea. At the end of the meeting, we decided to implement this kind of system in the company. Although the mentor had some interests on using games for training activities, he did not know the theoretical information in the literature about using games for teaching and training activities. These two different definitions of a mentoring process by the participants – one-way benefit or mutual relationships – would indicate that a mutually beneficial relationship can only emerge if the mentors' professional interests align with the mentees' interests in the company. A mentor might be more experienced and can easily guide his or her mentee, but this does not mean that the mentor will benefit from the process. Having said this, matching process plays a key role in the understanding of a mentoring relationship. A bad matching might cause the participants to misunderstand the relationship and their roles, which might cause an unproductive mentoring process.

Another important point raised by the research findings is that the participants have some confusion in terms of the meanings of consulting, mentoring and coaching.

> ***"I did not know what mentoring was before this project. In my opinion, e-mentoring is an online consulting because there is a knowledge transmission from mentor to mentee by asking questions.*** **– MenteeB – Interview"**

> ***"I used to think that mentoring was similar to coaching which offers professional develop through a foreman in workplaces. Therefore, mentoring and coaching still seem to me similar terms, but e-mentoring is a different aspect of mentoring relationship.*** **– MentorC - Interview"**

While coaching refers to training activities related to a particular skill development, mentoring covers personal issues such as career development as previously discussed in the literature review part. Different definitions have emerged during the research, because the project was conducted in a business company in which the participants are expected to be more productive and diligent; this relates to skill development. E-mail logs among pairs also support this interpretation; the mentoring relationships predominantly aim for skill and knowledge development rather than their personal issues such as career plans. This might have caused some participants to define the mentoring process in a similar way with coaching, which supports skill and knowledge improvement. On the other hand, one participant describes mentoring as a consulting relationship. This may not emerge because of the participants' experiences in the project, but the confusion might be related to language. Although the words of mentoring and coaching do not have any direct translation into Turkish, consulting has been translated into the corresponding Turkish word. As a result of this, consulting is a widely known word by people in Turkey regardless of context differences. The similarities between mentoring and consulting and translation issues might have misled the participants to define the mentoring process as a consulting relationship.

Moreover, the participants could not distinguish between electronic mentoring and traditional mentoring. They define the mentoring process as an electronic mentoring relationship. The possible reason for this might be that the electronic mentoring process is the first mentoring experience for them. Even though this misunderstanding does not affect the relationships' quality, the misperception of the whole process in theory might cause practical problems for future implementations. For instance, Skype or e-mail usage is not a must for a mentoring relationship, but these tools can support and enhance it. Thus, such misunderstanding might affect the participants' creativity related to using different communication tools for their further relationships.

As a conclusion of this phase, the participants define mentoring in many ways. It must be acknowledged that only two months mentoring period is not enough time for the participants to gain a sense of what a mentoring process entails. However, different definitions might indicate that each participant can perceive the process depending on his or her perspective, background and previous knowledge. This might also illustrate that the training sessions before the mentoring project have a key role in explaining basic characteristics and correct some misconceptions.

Fostering Active Learning

Klasen and Clutterbuck (2001) point out a paradigm shift from a behaviourist approach towards training activities to a constructivist point of view considering people's learning needs in their workplaces. In other words, the researchers explain this change in an adult education context in which today's education and training system do not consider an adult learner as a blank paper to fill full of information, but rather that learning should emerge with a dyadic relationship by shaping and adopting shared knowledge in the learner's workplace. Similarly, this learning process has to be creative in that it foster knowledge construction rather than simply competence transmission in a mentoring process (Crow 2012, p.233). In this research, interesting interpretations might emerge by comparing interviews and e-mail logs. Whilst the major parts of mentors and mentees from different pairs agree that a mentor should take an active role to foster transformative learning, this rarely occurs during the mentoring relationships of this study.

> ***"...a mentor should promote active learning. For example, if an engineer starts to work at the company, we can theoretically explain some necessary information related to railways infrastructure, but this person needs practicality in order to use the information for his or her department. At that point, a mentor needs to foster this kind of active learning process rather than only giving information.*** **MenteeC – Interview"**

> ***"In a structured mentoring relationship, there should also be project-based learning. I mean, a mentor can plan a project in order to get mentee to finish it during the relationship.*** **MentorB – Interview"**

There are more likely to be two reasons why an active and transformative learning process does not occur: the first one might be the lack of directive questions from mentors; the second one might be that mentors did not allocate enough time to plan and prepare actions before the relationship encounters. Online reflection forms confirm this interpretation since pairs most often decide on the main topics during their online meetings rather than discussing possible ideas by email as a planning activity for the meetings. Nevertheless, it seems that Skype as a tool has helped and supported the mentors to increase collaboration and knowledge construction. The mentoring relationship of the researcher, for instance, is an example of a knowledge sharing process considering e-mail logs. However, during Skype meetings, the mentor had a strong leading position to promote discussion in terms of future career plans, professional learning needs as well as personal issues. This clearly shows that FtF online

communication and e-mail should be used together to promote active learning by mentors in an electronic mentoring system.

> ***"What I realized is that Skype meeting enabled us to speak more details and communicate in informal way. At that point, Skype had a role to clarify what I asked by email in detail.-*** **The Researcher's Diary"**

This diary entry also clearly indicates that Skype usage takes place when a mentor cannot foster active learning during e-mail communication, and when s/he wants to clarify given answers for mentee's questions. E-mail can only offer a limited communication opportunity, but FtF dialogue makes this communication much more effective (Pachler and Redondo 2012). In this respect, only communication by e-mail is not enough to adopt information into the mentee's workplace. E-mail can only provide a strong writing communication affordance, when FtF communication is used to complement it.

Another finding that emerged from the research is that the majority of e-mentors have a role in sharing necessary sources associated with their mentee's learning process by e-mail. One of the important roles of a mentor is to be considered as a "resource provider" who can share documents or information for scaffolding to learning in a mentoring relationship (Dorner 2012, p.175). Likewise, e-mentors in each pair share documents and information by e-mail related to the mentee's questions throughout the project. It seems that this action not only transfers information to the mentee, it is also a sort of monitoring of their understanding of questions asked. MentorA and MentorC, for instance, most often asked their mentees to write back to them about what their mentees understand and think about of the shared documents in the e-mail logs. Klasen and Clutterbuck (2001) define this mentor's action as "stimulating ongoing review", which helps the mentee reach his or her targets by reviewing the mentee's reaction (p.184). However, as previously mentioned, only sharing documents and giving answers is not enough to promote transformative and meaningful learning. FtF online communication is a must for clarification of written communication and effective discussion between mentor and mentee in an e-mentoring process.

Managing the Mentoring Relationships

A mentor might have a managerial role which can cover planning educational activities, scheduling time period for the relationship and providing guidance and help through suitable online communication tools (Dorner 2012, p.175). However, the research findings indicate that no matter to what extent a mentoring relationship is structured, the balance of the roles in a relationship is determined by mentors and mentees together. In this regard, while one mentor manages all activities such as initiating online meetings, giving feedback and monitoring mentee's progress to some degree in the research project, other mentors and mentees have more balanced roles in controlling the process. There were, for instance, the same number of sent e-mails between the researcher and mentor. Similarly, e-mail logs show that not only did the researcher ask questions to the mentor in terms of personal professional development by email; the researcher also initiates all the online Skype meetings at the mentee role. On the other hand, MentorA mostly shares information for his mentee's questions, and initiates all the online Skype meetings by email. The reason why mentors and mentees behave differently during the process might be based on the mentee's understanding of the relationship. That is, mentors are expected to manage and control all the relationships since they have a leading and guiding position, but this depends on what extent a mentee wants to achieve his or her goals.

> ***"I was mentally ready for the online meeting and I think the meeting went well in terms of what I planned in my mind.*** **MentorA – Reflection form"**

> ***"In my opinion, not only a mentor has some responsibilities for the relationship, a mentee also need to be well prepared to ask good***

questions. A mentor can easily answers to questions but the mentor should be asked effective questions. Therefore, mentee has to come up with good questions to have an effective mentoring relationship. **MentorA – Interview"**

Although Homitz and Berge (2008) point out that a successful mentoring process highly relies on mentors' skills and competences, the findings indicate that mentees also share this responsibility by asking good questions and showing a willingness to continue the mentoring relationship. Indeed, mentors should guide and help mentees to cope with their problems and career plans, but if a mentee is not willing to ask good questions or get help from the mentor, the relationship might be unsuccessful. Therefore, expectations and demands have to be discussed by mentors and mentees before the mentoring process. All participants need to know what they want to achieve at the end of their relationship, and particular responsibilities, such as initiating online meetings, should be outlined before starting any mentoring process. Structuring the process might help the participants determine their mutual expectations and roles. Otherwise, participants might become unwilling to continue the relationship, which leads to failure in terms of mentoring goals.

Another important point in a mentoring relationship is establishing a rapport among participants. In other words, a mentee should trust his or her mentor (Lavin Colky and Young 2006), and a mentor should be honest, respectful and confidential (Lord, Atkinson, Mitchell, 2008). Indeed, a mentor has a big responsibility to develop this kind of environment during any mentoring process. Likewise, all mentors were willingly volunteer to build up such trusting relationships during the research project.

"…I am going to swim now. See you later. **–MentorA**
…Hope you can enjoy the sea **- MenteeA,**
Email logs"

MentorA, for instance, shares personal information when on holiday. Apparently, using e-mail gives him a flexible communication opportunity to contact his mentee while not at work. The interpretation from this log might be that not only is a mentor responsible to share his experience and foster transformative learning, s/he should also make the relationship more relaxed and comfortable for the mentee. Ensher et al. (2003) discuss that the effectiveness of an informal mentoring relationship is higher than a structured mentoring process. Having said this, sharing such personal information can initiate an informal dialogue in order to develop a comfortable relationship between mentors and mentees. This is more likely to develop satisfaction amongst the participants.

"What I realized is that Skype meeting enabled us to speak more details and communicate in informal way. […] Furthermore, I learnt more information about my mentor that I did not know before. For example, we have some similar professional interests such as using games in training activities and expanding our international networks by cooperating international companies- **The Researcher's Diary"**

E-mail might offer written communication in which mentor and mentee can share some informal information. However, the degree of informal communication in FtF interaction is higher than e-mail. The reason is likely that Skype or other online synchronous tools can promote real time dialogue. That is, sharing different feelings and opinions between a mentor and a mentee can be supported by informal body language and gestures. This makes the communication much more comfortable, and facilitates the building up of a rapport between mentor and mentee.

"FtF communication is always effective because of body language. Mentor and mentee can also see the environments where they are living,

which make communication informal and comfortable. **MentorA – Interview"**

" *In my opinion, the effective learning process is depending on what extend you can stimulate the senses of a learner. I mean, you can see my gestures, my face, and listen to me at the same time on Skype. This makes the learning effective.* MentorC - Interview "

The majority of mentors also think that FtF online communication is important for developing trust and effective relationships with their mentees. For instance, looking at the online forms for reflection of Skype meetings, all participants indicate that Skype meetings are successful and beneficial. Even though they do not say specifically why those meetings were beneficial, the reason might be that Skype allows them to discuss some crucial points related to relationships (Circle et al. 2010) and have an effective and rich communication afforded by visual dialogue (Pachler and Redondo 2012).

As a result, despite a mentor's guiding and leading position in a mentoring relationship (Pachler and Redondo 2012), the findings indicate that the mentee might also contribute to the process by asking good questions and initiating online meetings. Indeed, establishing a rapport can facilitate the communication among participants. Using FtF online communication with e-mail can help mentors build up a trusting relationship with their mentees. Even though an informal dialogue might increase participant satisfaction, structuring the whole relationship is a key factor as well for having a successful mentoring process. Therefore, mentors and mentees are suggested to determine their expectations, roles and meetings' schedule before starting the relationship to avoid communication problems such as mental exhaustion or unwillingness to continue the process.

The Role of E-mail Usage

E-mail usage and online meetings on Skype are at the center of this research project since electronic mentoring offers different communication opportunities to participants compared with traditional mentoring. The literature points out that e-mail is a widely available and ubiquitous medium in educational or organizational settings (Khalil 2008, p.9), and people are more familiar to use it in many contexts (Circle et al. 2010; An and Lipscomb 2010; Headlam-Wells et al. 2006). In this respect, communication by e-mail is a significant part of the e-mentoring relationships during the project. The purposes for using e-mail are as follows:

- **Scheduling online meetings**
- **Initiating online meetings**
- **Information storage**
- **An alternative for online meetings**

In this part of the phase, considering the above-mentioned themes, this study analyses e-mail usage as a supporting technology and its relations with online meetings during the process.

Although all steps and levels of the research project, including online Skype meetings and time period, were carefully planned to offer a structured mentoring process for the participants, the mentors and the mentees most often use e-mail for communication in order to schedule the meetings rather than looking at suggested dates for online meetings in the Handbook. In other words, most of the participants do not follow the program schedule; rather they prefer to choose their own available times for the meetings. Similarly, opposite to the suggestion in the Handbook, the length of period between online meetings is also diverse. In this regard, the interpretation might be that email can offer a way in which the participant can slightly bend the structure to have an informal schedule in a mentoring process. According to the earlier discussion on the effectiveness of using formal and informal mentoring process together, e-mail might play

an important role to have such balance in a mentoring relationship in which participants can revise and change the schedule depending on their respective work lives.

The participants also initiate all the online meetings by sending e-mails to each other throughout the process. This might be a foreseeable consequence in an electronic mentoring process, but today, people have used a variety tools and software on the Internet to contact each other. For example, Facebook offers instant message affordance for users to communicate in real time. The main reason why the participants preferred to use e-mail to initiate the online meetings might be that it is a much more formal tool in governmental organizations. In particular, Facebook or Twitter is considered as unserious social tools by some organizations in Turkey. As a result of this, people who work in governmental companies generally prefer to use e-mail for communication. This shows that not only does e-mail promote flexible and independent communication (Khalil 2008), it also is the most suitable tool for participants working at governmental companies in Turkey.

Pachler and Redondo (2012) emphasize another affordance of asynchronous tools as having a reflection role which offers storage facilities to record previous discussions and conversations in order to review and construct new knowledge during the mentoring relationship (p. 472). Similar to this point, most of the participants use e-mail as a storage tool in order to re-think and review what they sent each other.

> ***"I think, e-mail was a storage tool during our relationship in order to turn back our previous e-mails.-*** **MenteeB – Interview"**

Similarly, reflection (Crow 2012) and feedback (Fletcher 2012) are crucial actions of a mentoring relationship. That is, participants should be aware of what they learnt and how they can develop their learning process in a mentoring relationship. The findings from the research also confirm this. Throughout the project, E-mail is used as a facilitator tool, in particular for the mentors in order to monitor the mentees and get them to reflect for themselves.

> ***"After reading the points above, I want you to write me back what you understood*****-MentorA – E-mail Logs"**

MentorA, for instance, uses e-mail in order to evaluate his mentee's understanding after sharing information. Although synchronous tools, such as Skype, provide a rich and enhanced communication opportunity with gestures and body language, e-mail can offer participants extra time in order to think about what they write and send each other. Furthering this, the researcher would often login to email to read previous conversations to further understand the learning process. Therefore, e-mail might offer a flexible way in which mentors can monitor and review their mentee's responses, and participants can reflect on their selves after the conversation.

Table 4. Shared Documents by E-mail (pdf or doc)

MentorA	**2**
MentorB	**0**
MentorC	**1**

This table shows that a major part of the mentors used e-mail in order to share some small sized documents such as pdfs and docs. Indeed, sharing and storing any documents are an easy process through online storage facilities today. Google Drive, Dropbox and other web services can offer high capacity of storage space, but e-mail is still a widely used tool to share and keep the documents by users in many contexts. As discussed in the literature review part that effective technology usage is a must in an electronic mentoring relationship, using e-mail is more likely to require lower level of technological knowledge.

As a result of this, if the participants are not aware of different tools and feel unsecure using them, e-mail might be the best choice for this kind of action.

Lastly, one pair in the research used e-mail as an alternative way for online meetings. MentorA did not have a good enough Internet connection to use online meetings on Skype during the short time period when he was on holiday. At that time, he and his mentee used e-mail to ask their questions and share the necessary information rather than using Skype. Although the literature generally points out the advantages of using e-mail "anytime" and "anywhere" (Single and Single 2005), this affordance is more than independence. Flexibility does not only mean independence of time and place, but also eliminating communication problems in a wide sense. In other words, e-mail can offer a problem-solving opportunity that participants can use it in a variety of ways depending on their needs.

CONCLUSION

This research project has described to what extent participants understand their roles in a mentoring process and how Skype usage is related to this understanding. This study has also identified the roles of e-mail usage as a supporting technology. The most attention-grapping finding is that the majority of the participants have confusion in terms of what coaching, counselling and mentoring mean. However, most participants agree on the role of a mentor whose focus is to foster transformative learning rather than a simple skills transmission during the relationship. In this case, different findings emerge between what the participant understands from a mentoring process in theory and how the participant perceives his or her role in the practice. That is, although a majority of the participants think that mentoring should be transformative and situated, their relationships were not able to achieve this aim. Indeed, the length of this research process, two months, was not enough time to adopt the knowledge into participants' workplace. Another significant finding indicates that a mentoring process is not merely a mentee-centered relationship: it also offers two-way beneficial learning activity for both mentee and mentor. This confirms the literature, which points out that a mentoring relationship is a "mutually-beneficial process". However, such beneficial relationship for mentor and mentee is highly dependent on to what extent the participants have similar interests.

Another important finding is that there is a balance between mentors and mentees in terms of controlling and managing relationships. In other words, although the literature states a mentor should lead and guide the process (Pachler and Redondo 2012; Klasen and Clutterbuck 2001), mentees can also contribute to this mentor's leading position by asking good and robust questions in order to encourage the mentors to guide the relationships. Additionally, mentors have a "source sharing" role related to their mentees' questions. During the research project, not only did the mentors give answers to the questions, they were also attempting to share different sources in order to explain their answers.

Skype, as a synchronous tool, has also played an important role during the project. The most interesting finding is that only using e-mail is not enough for participants to convey detailed information sufficient. Skype has a role for clarification and explanation for some topics discussed during e-mail conversation. Moreover, Skype has a key effect of establishing a trusting rapport between mentor and mentee. Indeed, e-mail is suitable and useful to get participants to trust each other through written communication, however, body language and gestures provided by Skype allow the dialogue to be much more effective in building trust. Overall, as Pachler and Redondo (2012) discuss the effectiveness of using CMC and FtF communication together, e-mail and Skype usage together offers powerful modes of communication to establish a trusting relationship in the project.

Lastly, research project has identified several roles for e-mail in electronic mentoring relationships. One of the interesting findings is that e-mail can be used as an alternative communication tool when the participants face some technical problems such as insufficient Internet connection for online meetings. In this case, the participants can convey what they want to say to each other by e-mail. Additionally, e-mail offers the participant flexibility in order to schedule and initiate online meetings although there is a wide range of communication tools on the Internet. This paper's interpretation here is that e-mail is a formal tool in governmental companies in Turkey.

PRACTICAL IMPLICATIONS

Although theoretical background plays an important role in order to implement a mentoring relationship, some practical inputs might be the backbone in a mentoring system. Therefore, this section discusses the implementation experience in company and recommends some bullet points to help practitioners who want to implement mentoring systems in their organizations.

The motivation of organization and potential participants are the crucial part of an electronic mentoring relationship. Although mentors are considered as a source of motivation for mentees in the literature (Klasen and Clutterbuck 2001), such motivational factors should be, according to this research's experience, gained before starting any mentoring process. The organization or the participants have to be informed of the expectations from them for such mentoring relationships. Although a Handbook was prepared in order to explain the aims of this study, it was observed that such a long written document might affect the participant's motivation in negative way. This paper suggests that perhaps a visual online material might be prepared with a Handbook to inform the participants and the organization the benefits of a mentoring process. For instance, a two or three minute's video might be much more effective to convey important information to the participants. As Christie and Collyer (2008) highlight that a video can make the information interesting for the learners, such a video might be uploaded on YouTube and disseminated. This research study also suggests that practitioners create a simple website on the Internet as an information source to offer effective communication during the implementation process. Today, creating a web site is not a difficult process because of many free web services such as WordPress, Blogger, and Tumblr. These kinds of web services can help practitioners gather all necessary information in one platform and offer easy access for anyone who gets involved in the mentoring system. Other advantages of using a website are flexibility and updatability. With a website, practitioners can always keep participants up-to-date in terms of what is going on in the process, rather than with a handbook, if any information is changed, all participants must receive a revised version.

One other implication is using time wisely. Given the previously acknowledged lack of time for this research project as one of the research limitations, scheduling every step is a crucial aspect of a successful electronic mentoring implementation. In particular, the matching process and training possible participants might take considerable time because of unexpected problems. For example, one of the pairs in this project was unable to join the training sessions on time due to workloads in the company. Therefore, the researcher and participants could not adhere directly the planned schedule. In this case, this paper suggests practitioners allocate enough time for implementation process considering such issues. Otherwise, practitioners would have to shorten time requirements for all steps, in particular for the matching process and training sessions. This is more likely to negatively affect the aims of any mentoring system. Additionally, all online sessions should be planned and scheduled before informing the participants. This is important, because some participants might think to go on holiday during the project. To be aware of such issues can help practitioners better plan mentoring relationships thoroughly. In this research project, for instance, one of the mentors went on holiday and had some technical problems. As the research findings indicate, he used e-mail as an alternative for one of the online sessions. Such problems are supposed to emerge during electronic mentoring

relationships since computer technology never work perfectly. Therefore, effectively planning and preparing the relationships can reduce the technical and practical problems during the implementation.

Lastly, the research project was conducted in a particular company where the mentees and mentors working at. This has some pros and cons related to having an effective mentoring process. Firstly, selecting mentors who are working at the same company with mentees could be beneficial for novice employees as experienced mentors working for many years could easily and effectively transfer organizational culture to their mentees because the organizational culture of the company is strong. Beside this, as selecting and matching steps of mentoring is one the important process to have productive relationships, strengthens and weaknesses of mentors and mentees coming from the same company could easily evaluated by line managers, which provides a cost effective matching process. On the other hand, mentors and mentees selecting from the same company could lead to a limited e-mentoring relationship as they might come together in face to face manner without using communication tools. Therefore, selecting mentors from long distance areas to match with mentees working in different places would be more beneficial because mentees and mentors could learn different characteristics of the workplaces in the company.

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