

e-mentor

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E-mentoring: an effective platform for distance learning

Abstract

The provision of mentoring is essential for learning to take place, and current online technology is changing the nature of mentoring. This study examines the effectiveness of e-mentoring and develops its management practice. This study extensively uses historical reviews to seek a better policy for e-mentoring. It covers the literature on different forms of mentoring, including books, journals, online documents, research reports, and newspaper articles related to e-mentoring. Based on the findings from the literature, this study suggests that e-mentoring compares well to those of other mentoring approaches traditionally used. The study gives an overview of e-mentoring tactics, practices, and strategies. The findings of this will be useful for national and international policymakers and stakeholders, in promulgating effective e-mentoring policies.

Keywords: e-mentoring, knowledge management, online technology, scaffolding, effective learning

Introduction

Effective learning is essential for capacity building, knowledge management, and efficiency. Mentoring, coaching, consultation, counseling, in-depth conversation, and guidance are the major catalysts for effective learning. Generally, all the concepts are used interchangeably, but have different meanings and implications applied. For instance, counseling is a process where trained counselors diagnose and help clients with emotional problems (Batson & Marz, 1979). Coaching is a method of directing, instructing, and training a person or group of people to achieve some goals or develop specific skills (Kaur, 2019). Consultation is a process of discussing something with someone for the purposes of advice or opinion about specific services (Hennig-Thurau et al., 2004). In-depth conversation is offered by qualitative interviews to achieve perfect contextual ideas (Gaskell, 2000). Guidance is service-related work essential for the improvement of learners' learning attitudes, learning habits, and academic achievements (Abid, 2006). Mentoring is a power-free partnership between two individuals who desire to achieve mutual growth, where one of them usually has greater skills, experience, and wisdom (Weinstein, 1998). Firstly, it provides an instrument or career function (e.g. sponsorship or corporate and cultural instruction) and secondly an intrinsic or psychological function (e.g. serving as a model, a confidant, and a friend) (Cunningham, 1999).

Mentoring is a significant approach to a better learning atmosphere. It updates the learners' skills, attitudes, and approaches to learning. Weaker learners obtain more benefits from rigorous mentoring where learning assistance is offered to the mentees by the mentor (Raabe & Beehr, 2003; Tyler, 1998). The concept and significance of mentoring were first highlighted in Homer's *Odyssey* (Gumus, 2019). The teacher of Odysseus's son was treated as an early mentor. He guided, protected, and educated the inexperienced Telemachus (son of Odysseus and Penelope) (Conyers, 2004). With this historical basis and information, a mentor is counted as a wise and patient counselor (Gumus, 2019). Mentoring provides ways and means of learning, where the mentor's role is supportive (Smith, 2007).

Mentoring can be a rewarding experience for the mentee. A mentor can be a tremendous source of advice and information, a sounding board for the mentee's ideas, and can aid the mentee in academic excellence, career development, and professional growth (RWSA Secretariat, 2020). The relationship is essential for establishing effective

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mentoring. Initiation, time frame, formality, intensity, reciprocity, and agenda are all essential elements of mentoring. Under the mentoring process, both parties (mentor and mentee) know their roles and responsibilities. A mentor always supports and encourages mentees, where respect is critical to the success of the mentoring relationship. Constructive feedback from the mentor is an important part of the mentoring relationship. The principal objective of mentoring covers the activities that will support the mentee's academic and professional goals (e.g. practicing skills or tasks, attempting new projects or assignments, continuous learning). Likewise, mentors may also develop leadership skills through the constructive feedback of their mentees and share knowledge. From that viewpoint, mentorship is purely about providing professional guidance and learning from each other.

Mentoring takes two forms: traditional mentoring and online technology-supported mentoring. Traditional mentoring (t-mentoring) is about design, guidance, and support by the institution. Face-to-face mentoring practice at a certain place and time is a typical example of formal mentoring. On the other hand, online technology-supported mentoring has no specific forms or design. Mutual desire and respect, interest, and the understanding between the mentor and mentee can enhance online technology-supported mentoring. It can take place at anytime and anywhere. A popular form of this mentoring is e-mentoring (Risser, 2013), which is a strategy where the mentor can meet the mentee (usually online) to discuss goals, expectations, and interests. The general objectives of e-mentoring include (1) update mentees knowledge through online technology; (2) identify strategies or activities to support the mentee's learning goals (e.g. continuous learning, practicing skills or tasks; and trying new projects or assignments); (3) share information and expertise; and (4) identify the hidden potential for improvement.

E-mentoring has gained momentum in learning and professional development (York-Barr & Duke, 2004). It is essential for purposeful learning over time with the principal goal of helping mentees to acquire essential competencies (Pfund et al., 2016). Professional goals, expectations of the mentor and the mentee, career development, constructive feedback, enthusiasm for the learning opportunity, motivational spirit, learning techniques, and career plans can all achieve an appropriate shape when the mentee is instructed and guided by a mentor. It helps to connect the mentor and mentee in a network and enable them to learn from each other.

This study gives an overview of e-mentoring and its potential benefits. The major areas of contributions of this study are to (1) highlight the influence of e-mentoring as a supplement to t-mentoring in filling gaps in learning and development; (2) enrich related literature; (3) provide further support for career-building, skill-acquisition, and coaching; (4) provide action steps to promote an e-mentoring program in learning; and (5) attempt to provide a specific guideline for

mentoring, not only for school, college, and university education worldwide but also for other sectors which plan to start a mentoring program for effective learning. This study examines the effectiveness of e-mentoring and develops a management strategy. This study has been organized as follows: Section 1 describes the background and motivational aspects under the introduction. Section 2 covers a discussion of the literature in the field of mentoring. Section 3 outlines the methodology. Section 4 delineates the best practices of e-mentoring in learning. Finally, Section 4 gives the concluding remarks and recommendations.

Literature review

This notion of traditional mentoring is obsolete in modern times due to its conservative view of learning, linear transformation of knowledge, and asymmetrical power relations between participants (Angelique et al., 2002; Tynjälä & Heikkinen, 2011). The socio-constructivist theory of learning explains that there are different kinds of mentoring, such as peer collaboration, co-mentoring, e-mentoring, mutual mentoring, collaborative mentoring, critical constructivist mentoring, dialogical mentoring, and reciprocal mentoring (Pennanen et al., 2016). Peer mentoring, mentoring circles, and peer-group mentoring, apprenticeship, and tutoring are also treated as other forms of mentoring (Fyn, 2013). An effective mentoring program should consist of training, success, motivation, advice, direction, support, and coaching. Learning issues should be the subject matter in every mentoring program and should be designed by ontological specificity (Pennanen et al., 2016).

Mentoring is a process where a senior experienced person (mentor) guides another person (mentee) in the development of ideas, learning, concepts, and professional competence (Achinstein & Fogo, 2015; Klinge, 2015). E-mentoring is another form of mentoring, one which is gaining worldwide popularity (McCarthy, 2012). This mentoring practice is associated with a supportive relationship between the mentor and mentee, with a relative advantage for computer self-efficacy and personal interest where age or seniority does not gain weight (Panopoulos & Sarri, 2013). According to Laura Bierema and Sharan Merriam (2002), mentoring is not necessarily based on a wise elder dispensing advice and instruction to a mentee. The mentor may find it difficult to engage in online e-mentoring because it is impersonal. There is a possibility of conflict arising between two generations or age groups when it comes to e-mentoring (Rowland, 2012). It may happen between peers, one-on-one, one mentor as part of a team, or mentors providing mentor support to other mentors. It depends upon the form of guidance and the level of cognitive, social, and emotional developments and attributes (Carpintero, 2015), and generates mutual benefits for them (Akili, 2013; Leão & Ferreira, 2013; Vesilind, 2001).

In recent times, e-mentoring has been associated with career, academic, and psycho-social development, and mitigates the difficulties of the traditional mentoring approach (Bierema & Merriam, 2002). E-mentoring or Tele-mentoring or computer-mediated communication (CMC) is a popular mentoring approach in the information age (Haran & Jeyaraj, 2019). The mentor and mentee can easily communicate with each other to and from anywhere. Bierema and Merriam (2002) argue that e-mentoring has greater potentiality in effective mentoring. It has greater advantages over the traditional mentoring approach. It includes the egalitarian quality of the exchange and has no boundary in the configuration. Raymond Noe (1988) asserts that work-related interpersonal skill is accurately guided by the psychosocial factors of e-mentoring. The success of e-mentoring is dependent on the performance of the mentor, internet and bandwidth facilities, geographical and time constraints, and technology proficiencies. Few studies argue that geographical and time constraints are not responsible for hampering e-mentoring practice. Ritu Arora and Sanjay Goel (2018) argue that the provision of e-mentoring makes the mentoring process easy and convenient, since it is not bound by spatial and temporal differences. Peg Single and Carol Muller (2005) point out that geographical and scheduling constraints are not barriers for effective mentoring because they link the mentors with the mentees independently. The unique qualities of electronic communications can enhance the mentoring relationship, although Kevin Hunt and Glen Atherfold (2004) argue that the mismatch of time between two different geographical locations, improper communication practice, and lack of trust may hamper e-mentoring practice. Likewise, improper facility and mismanagement of online technology may also hamper e-mentoring practice (Schechter, 2014).

E-mentoring is both a career and opportunity tool. Participation in a webinar and summer research school, access to the job market, and online training courses offered by different research institutions or universities are highly associated with e-mentoring practice (Badri et al., 2017). It is a suitable approach to transferring valuable knowledge and skills efficiently to the mentee, and under this approach the protégés gain direction and a motivational link to overcome leadership role barriers, to develop leadership qualities and self-efficiency (Fernandez et al., 2017; Joo et al., 2018). This mentoring practice provides benefits and confidence-building, not only for mentees but also for mentors (Hudson, 2013). Andrea Nolan and Tebeje Molla (2017) argue that confidence-building is a principal component of professionalism for mentor and mentee, human capital (knowledge and skill), social capital (provision collaborative learning), and decision capital (ability to exercise opinion). But it also has a shadow side, which sometimes creates a barrier to reaching the target goal. Lisa Ehrich and Brian Hansford (1999) point out that e-mentoring is considered 'the pain of fractured trust', 'the pain of letting go' and 'the pain of disappointment' when it

functions inappropriately. A lack of punctuality or organizational commitment and breaks in commitment and mismanagement by experienced and qualified mentors may hamper the effectiveness of mentoring so that it loses its merit and gravity (Clawson & Kram, 1984; Hale, 2019).

Technological advancement can reshape mentoring from the traditional approach to the e-mentoring approach for demand-based human resource development. Chandana Sanyal and Chris Rigby (2017) report that e-mentoring can work as a bridge between regional, national, and global mentoring relationships (GMR). The proper use of online technology and English language skill can improve e-mentoring practice worldwide. E-mentoring can promote the empowerment of women. It can successfully remove the so-called glass-ceiling effect and stereotypical profile of women in economic, political, and professional life. Collaborative participation and proper utilization of e-mentoring can eliminate gender inequality and enhance more scope in the use of online or digital technologies (Parmaxi et al., 2017).

E-mentoring is commonly practiced in many educational institutions in upper-, middle- and high-income countries. The impact of e-mentoring in learning has been effectively tested empirically in New Zealand, Portugal, the Netherlands, and the USA (Avalos, 2011). These countries successfully utilize e-mentoring for continued professional development (CPD) in the education, research, hospitality, and service sectors (Ekeroma et al., 2015). For instance, the University of Canterbury (UC), New Zealand has successfully implemented e-mentoring practice for better distance learning (Dabner, 2011). This practice is not properly utilized in the education and other sectors of many lower-income and lower-middle countries due to resource constraints and the acceptance level of e-mentoring (Van Dyk & Meghzifene, 2017).

Based on a case study, Nicki Dabner (2011) investigates how e-mentoring is functioning in a blended online environment. The study by Mehmet Kahraman and Abdullah Kuzu (2016) also depends on a case study and suggests that the e-mentoring approach is essential for every pre-service teacher. Daniel Homitz and Zane Berge (2008) use cost-benefit analyses to show that e-mentoring plays an important role in improving the mentoring or coaching capacity. By a systematic search of an electronic database, Alec Ekeroma et al. (2015) develop strategies to implement e-mentoring in the education sector. Kimberly Rowland (2012) depends on meta-analysis to show the relationship between mentoring, learning, and teaching as mediated by digital techniques. Lew Perren (2003) also depends on a meta-review of academic literature to examine the role of e-mentoring in entrepreneurial education and design policy-based research for e-mentoring.

The status of the current literature on e-mentoring shows many issues, the nature, and the concepts related to distance learning. The study strives to draw a more precise conclusion from e-mentoring and learning. This study may be the first attempt to

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assess the significance of mentoring in learning in the South Asian Countries.

Methodology

A systematic search of electronic databases was performed for relevant articles for the period 1979 to 2020. An attempt was made to provide a comprehensive review of e-mentoring by evaluating its current status and identifying the implementation problems of e-mentoring. All studies related to e-mentoring were selected at random in order to develop its concepts, strategies, and drivers. The most relevant and peer-reviewed literature were read, downloaded, and collated from reputable bibliographic databases, such as PubMed, Google Scholar, Emerald, ScienceDirect, and the repository of the World Bank for suitable evaluation of e-mentoring policy. The reviewed literature was limited to editorials, meta-analysis, reviews, case studies, master's thesis, blogs, comments, comparative studies, evaluation studies, English abstracts, synthesis reports, government reports, journal articles, validation studies, proceedings, newspapers, and edited books. The research protocols combined the effectiveness of e-mentoring, compared the practice of e-mentoring, and contrasted and compared e-mentoring with traditional mentoring.

Best practices for e-mentoring

E-mentoring entails connecting regularly via phone, Skype/WhatsApp/Viber/Messenger, and maintaining communication by e-mail and message (Ladyshefsky & Pettapiece, 2015). In this form, the mentor and mentee can be encouraged to meet online, at the request of the mentee, for guidance through the development of concepts and ideas. The mentee is responsible for setting up the online meetings, making their expectations clear, and documenting the outcomes (Schlager & Fusco, 2003).

Mentoring is a popular learning platform in developed countries (Salleh & Tan, 2013). The educational institutions in these countries can easily implement

a mentoring program for their students because it is the best platform for learning where a learner can enhance their reading, writing, networking, presentation, oral communication, time planning, project management, and problem-solving skills. With the advancement and improvisation of information communication technology (ICT), educational institutions in the modern world now prefer e-mentoring for their students because of its numerous advantages. These are more numerous compared to the traditional face-to-face mentoring approach. Table 1 outlines the comparison of e-mentoring and face-to-face mentoring.

It is clear from Table 1 that e-mentoring has a greater positive magnitude for effective learning. The higher values of the correlation coefficients (r) in e-mentoring suggest that there is a strong relationship between distance learning and e-mentoring, compared to those of traditional mentoring. E-mentoring has had significant effects on distance learning. Based on the numerous benefits of e-mentoring, a mentor can provide guidelines like advice, direction, feedback, support, motivation, and counseling through the online technology. Without online technology, it is very difficult to run e-mentoring smoothly. The following activities are samples and practical ways of improving essential skills through mentoring. A mentor can provide suggestions that can be tailored to meet the specific needs and goals of the mentee or replace other activities as the mentor and mentee see fit. Table 2 illustrates hypothetical mentoring activities with the best-fit online technology.

E-mentoring performs well in weekly blog posts, case reports, and interviews with mentees. However, the performance of this e-mentoring program is influenced by several critical strategies, such as exploring technology affordances and limitations, scaffolding, sharing feedback, communication channels, and connecting online technology (Baran, 2016). For instance, it is a better option to share knowledge and disseminate information about a conference, short courses, seminars, training programs, the publication of professional journals, and the provision of study grant opportunities by Facebook (Ritchie & Genoni,

Table 1. Comparison of e-mentoring and face-to-face mentoring

Scope	Unit	E-mentoring	Traditional mentoring	Evidence-based literature
Spatial benefits of mentoring	Likert scale	Perfectly ($r=0.82$)	Partially ($r=0.13$)	Hamilton & Scandura, 2003
Temporal benefits of mentoring	Likert scale	Perfectly ($r=0.88$)	Partially ($r=0.09$)	Scandura & Pellegrini, 2007
Asynchronous benefits	Likert scale	Perfectly ($r=0.81$)	Partially ($r=0.17$)	Rowland, 2012; Pietsch, 2012
Reduced discrimination by race and gender	Likert scale	Perfectly ($r=0.92$)	Partially ($r=0.21$)	Scandura & Pellegrini, 2007
Proper use of online technology	Likert scale	Perfectly ($r=0.87$)	Partially ($r= 0.07$)	Hamilton & Scandura, 2003
Reduced cross-gender effect	Likert scale	Perfectly ($r=0.82$)	Partially ($r= 0.22$)	Hamilton & Scandura, 2003
Rich diversified cultural practice	Likert scale	Perfectly ($r=0.80$)	Partially ($r= 0.13$)	Hansman, 2017
Developed communication skill	Likert scale	Perfectly ($r=0.83$)	Partially ($r=0.37$)	Tanis & Barker, 2017

Source: adapted from Ahmed, 2019.

Table 2. Online e-mentoring instruments for professional development in teaching

Skills	Activities for mentors and mentees	Effective online instruments
Reading/Writing	Mentor can help to develop mentee's class notes and offer essential training for academic excellence.	E-mail, Skype, Dropbox, and Google Drive
Thematic expertise	Mentor or mentee can share articles and reading documents relevant to their sector.	E-mail, YouTube, Dropbox, Google Drive, WhatsApp, and Viber
Oral communication	Mentor can encourage the mentee to participate in activities that will enhance oral communication.	Skype, Messenger, Viber, and WhatsApp
Networking	Mentor can provide essential tips for improving networking activities.	Facebook, Viber, and WhatsApp
Brainstorming	Mentor advises on higher studies.	Skype, Messenger, Viber, and WhatsApp
Time planning / Project management	Make agenda for one of their meetings where they can review and provide feedback	Dropbox or Google Drive
Problem-solving	Mentor can ask the mentee to talk about a problem they are facing in their studies. Talk about possible solutions and the strengths and weaknesses of each.	Skype or WhatsApp or Viber
Continuous learning	Talk about how the mentee learns best. Encourage the mentee to take advantage of learning opportunities the mentor may be familiar with (online courses, workshops, conferences, webinars, internships, etc.)	Skype or WhatsApp or Viber

Source: Adapted from RWSA Secretariat, 2020.

1999). Dropbox is the best alternative delivery and document sharing option for mentoring in terms of academic development (Evans & Forbes, 2012; Mollenkopf, 2009). A mentor can observe the mentee's performance by uploading a video on messenger and WhatsApp and provide feedback and reflection through Skype (Gregory & Salmon, 2013; Owen, 2015; Reese, 2016). A mentor or mentee can share large volumes of popular books, learning videos, and movies for a better understanding of an event or its consequence by Google Drive or Dropbox (Hicks & McCracken, 2010; Tareef, 2013).

Conclusion and recommendations

Mentoring is a very popular platform for learning and works as a shade tree for the novice mentee. A mentee can improve their academic excellence under the guidance of a knowledge bearing mentor. Mentoring is about a concern for the growth of learning and knowledge. The relationship between mentoring and learning is straightforward. Psycho-social factors, such as feedback, direction, advice, motivation, support, counseling, empathy, friendship, socialization, acceptance, and confirmation are all influential factors of the mentoring process that helps in proper learning.

This study attempts to partially synthesize the concept of e-mentoring to improve learning in the distance mode. A critical review of the concepts of mentoring, effectiveness of mentoring in learning, and the state of affairs about mentoring are investigated and deeply explored in the existing literature. The literature review of the study highlighted that mentoring

holds promise as an induction practice for learners in all sectors. The impact of e-mentoring has been tested in Italy, New Zealand, Portugal, the Netherlands, and the USA. The existing literature suggests that e-mentoring practice is commonly utilized in many middle and high-income counties for continued professional development (CPD). It is important to bear in mind that quality learning always requires effective mentoring practice, with regular participation by the mentor and mentee in the mentoring program through demonstration, trial mode, brainstorming, presentation, learning by doing, and similar activities. E-mentoring is one of the best approaches compared to traditional face-to-face approaches. E-mentoring is commonly practiced in many educational institutions in upper and middle-income as well as high-income countries. Mentoring practice ensures quality learning via online technology and has the potential to address many needs of students from different locations because it offers a flexible tool where the mentor and mentee can be connected, depending on geographical and time constraints. Better management of e-mentoring requires cost-effective equipment and training for the proper handling of online technology (Fransson, 2016). The facility for equipment use and an adequate knowledge of ICT is essential for e-mentoring. It requires response and communication skills from both the mentor and mentee. Mentees from different geographical locations can gain easy access to e-mentoring and interact with a mentor for essential advice, direction, support, and counseling.

Although e-mentoring offers multiple benefits, it is not for everyone, as the degree and magnitude of e-mentoring vary due to generational gaps. In general,

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a junior mentee tends not to prefer a senior mentor. In this particular case, there is a possibility of conflict arising between mentor and mentee from two separate generations. Trust and communication are fundamental elements within a virtual environment and must be obtained in an e-mentoring setting (Rowland, 2012). Without setting a virtual bond and enhancing the interpersonal connections, achieving an e-mentoring program can be difficult. Jill Nemiro (2004) argues that time zones, cultural backgrounds, insufficient internet and bandwidth, and technology proficiencies may hamper learning through e-mentoring.

Based on the existing literature related to mentoring in learning, this study recommends the following to achieve proper e-mentoring in learning: 1) school, college and university administrations should arrange training program for mentors; 2) school, college and university authorities should arrange basic computer training program for mentors and mentees; 3) educational institutions should give priority to their e-mentoring program; 4) educational institutions should provide financial support to buy electronic equipment for all the mentors and mentees; 5) educational institutions should give incentives to mentors for their mentoring activities; and 6) e-mentoring should be compulsory practice in every educational and research institution.

The study is not free from certain lacunas. As a new concept, it is essential to undertake more discussions and in-depth studies related to e-mentoring. To achieve a better assessment, it is essential to conduct further research in the field, including surveys involving questionnaires and interviews. Only literature-based assessments on e-mentoring can narrow down the scope and concept of mentoring practice. Hence, this study recommends further studies to avoid such shortcomings and to formulate a better mentoring-related policy for improved professional development.

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