ONLINE MENTORING: STRATEGIES AND CHALLENGES

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Abstract

The increase in online graduate programs and the mentoring of students at a distance have led to the need to identify the challenges faced by online mentees and successful strategies used by online mentors in online mentoring. This research describes strategies and challenges in the online mentoring of dissertations in a doctoral program that was offered largely online. Data from semi-structured interviews with 19 mentees who graduated and five mentors provided insight into the strategies used by mentors, mentees and small groups and the challenges faced during the process of online mentoring.

Introduction

Supervising or mentoring during the dissertation process plays an important role in students' completion of dissertations (Lee, 2008; Maher, Ford, & Thompson, 2004). In doctoral programs that are offered partly or completely online, the development of research skills and mentoring of dissertations becomes more complex and challenging because mentors and mentees are often not in the same location. In the United States, the number of graduate online programs has increased dramatically since the turn of the century (Allen & Seaman, 2013, 2014). Blended and online doctoral education has also grown because of the increasing number of professionals pursuing terminal degrees and the increased mobility of students. In this paper we describe the mentoring of dissertations in a doctoral program that is largely offered online, but in which students attend an on-campus session each summer. The analysis of data from interviews conducted with 5 faculty members and 19 graduates provides insight into the strategies that can be used during online mentoring by professors and students, the challenges they face and the role of the institution in this process.

Literature review

Research conducted on doctoral mentoring categorizes mentoring activities as (a) educational development, which is content-focused formal and informal teaching, institution-specific program planning and advising, and provides opportunities for academic development; (b) psychosocial development, which is the social and emotional support that helps the mentee to persist, reflect on strengths and weaknesses and develop academically and professionally; and (c) professional development which is institution-, discipline- and individual-specific advice as well as opportunities and resources for becoming an expert in the discipline and integrating into the academy (Burnett, 1999; Crisp & Cruz, 2009; Hayes & Koro-Ljungberg, 2011). In the

online environment, doctoral mentoring includes all of the above, but involves learning, advising, encouraging, promoting and modelling independent of time and distance in the online environment (Bierema & Merriam, 2002). Online doctoral mentors also have to manage "the interface between people," "their learning and developmental processes," and the "supporting technology" (Schichtel, 2010; p.251). They have to use multiple technologies and types of communication; be learner-centred, and be timely and constructive when providing feedback (Schichtel, 2010). However, doctoral supervisors or mentors have been found to be influenced by their own experiences as doctoral students, and by their concept of research supervision (Lee, 2008). Given that most mentors' doctoral experiences were probably not virtual, and that they had a traditional experience, it can be difficult for them to mentor dissertations online. Major challenges to online mentoring have been identified as problems of miscommunication, technical problems, privacy problems, difficulties in developing a relationship online compared to in person, the need for multiple competencies such as the technical, communication (written and spoken in the virtual environment), and managerial skills (Ensher, Heun, & Blanchard, 2003). At the same time, the use of a cohort model has been reported as a valuable model of doctoral supervision that helps students complete their dissertations, overcome research challenges more easily and form relationships in diverse groups (Burnett, 1999; Johnson & Huwe, 2003; Maher et al., 2004). There is a scarcity of literature about online doctoral education, although research on traditional doctoral education abounds. Simultaneously, the goals of a doctoral program, the complexity of academic, research and professional development in the mentor-mentee relationship, and the requirements of a doctoral dissertation make online mentoring in this context very different from a corporate mentor-mentee process, about which much has been written. This research attempts to explore the experiences of online mentors and mentees in a doctoral program in order to identify strategies that might help others embarking on this process.

Context and research methodology

This study took place in a largely online doctoral program in education for adult professionals from various educational environments. The curriculum comprises two years of required online coursework and seminars as a cohort, yearly summer sessions lasting four days, qualifying exams, and the individual dissertation process with a mentor. Compared to other programs where students enter the program working with one mentor from the beginning, students have the opportunity to complete coursework with 4-6 professors so that they are exposed to foundational theory and research in the discipline, various ways of mentoring, and different types of activities and projects. Students live and work in many parts of the United States as well as abroad, therefore the initial coursework is necessary to ensure they are prepared for independent research during the dissertation. During the second year, students work with a faculty member with similar research interests. Students in the program are working professionals, therefore their research is mostly research-relation oriented. Franke and Arvidsson (2011) described doctoral research supervision as either research practice-oriented or research relation-oriented. In the former, the mentor and student participate in a common research practice and the mentor creates opportunities for the student to participate

in the common research. In research relation-oriented supervision, the mentee chooses the research problem that is related to the mentor's research and research interests, but they do not participate in a common research practice. The mentor guides the mentee's activities, learning, research, and dissertation. This latter model was used in the doctoral program that is a focus of this research. Mentors used various technologies and strategies in the online environment to guide students in the conceptualizing and conducting of research, analysis of data and the writing of their dissertations.

This research was guided by a phenomenological framework that focused on capturing the lived experiences of the participants, namely, the mentees and mentors in the program. Phenomenology is appropriate for qualitative research in educational technology because experiences in online environments are an important area of inquiry (Cilesiz, 2011). Following the graduation of the first nine students, interviews were conducted with the five faculty members who mentored the dissertations. Additionally, the dissertation experiences of graduates of the doctoral program were explored using semi-structured interviews. A total of 24 students were contacted after graduation, of whom 19 voluntarily participated in the interviews about their experience with online mentoring during their dissertation and the challenges they had faced. The interview data were analyzed using an inductive analysis method, where the researchers move from "specific to the general" (Hatch, 2002; p.161). After transcribing the interviews, two of the authors coded the data independently and then compared codes for percentage agreement. The data from mentors and mentees were first analyzed as separate datasets and then combined. A constant comparative analysis was utilized to compare data across interviews, looking for similarities and differences (Glaser & Strauss, 1967).

Findings

The analyzed findings from mentor and mentee data are presented here in four areas – mentor strategies, mentee strategies, peer strategies and institutional strategies.

Mentor strategies

The mentors and mentees described the role of the mentor and the strategies used by the mentor in the online environment to be extremely important for both dissertation progress and completion. Mentor strategies fell in the following areas:

Choosing and using appropriate technologies

Both mentors and mentees described the use of multiple synchronous and asynchronous online media by mentors for different purposes such as group meetings, feedback on writing and peer discussions that were valuable and contributed to the process.

Providing structure but being flexible

Online mentors provided deadlines, collaboratively set goals with their mentees, created a timeline, and explained clear expectations (Kumar, Johnson, & Hardemon, 2013). At the same time, both mentors and mentees found it important to communicate if there were changes and flexibility was needed.

Providing feedback

Mentees provided examples of the types of online feedback that they found valuable or not so useful in the online environment from faculty. They preferred timely and candid feedback that pointed out strengths and weaknesses in their research design and writing (Kumar, Johnson, & Hardemon, 2013).

Providing resources

The mentors and mentees did not meet face-to-face, therefore it was important to model writing and research design. Mentors found it important to provide examples of dissertations and literature, and mentees confirmed that these were very useful to them. They also appreciated the additional resources or contact with other researchers due to the mentor.

Providing moral support

Mentees sometimes had problems at the research site or with data collection and analysis. They found it important to find ways to communicate with their mentor online when things did not go as planned. Thus not only research support but sometimes moral support provided by mentors was very valuable, mentors stated that being available and being able to listen online helped the mentees.

Mentee strategies

Although the technologies used by the mentor and structure provided by the mentor were crucial for online mentoring, mentees also needed certain strategies to be successful during the process. Both mentors and mentees discussed the importance of communication, that it is important to *establish an online communication* channel that works for both parties, but that the mentee should take the initiative and contact the mentor, or provide updates to the mentor, and not wait for the mentor to reach out. Similarly, the mentee also has equal responsibility when it comes to *organizing meetings* and *requesting feedback*. Mentees provided several additional suggestions about the management of research and writing that can be useful when completing dissertations at sites that are at a distance from the university (Kumar, Johnson, & Hardemon, 2013).

Group strategies

Peer support and feedback played an important role in the online environment, helping students stay focused, share their research and finish their dissertations. During the first year of the cohort-based program, students were organized into smaller online groups of 3-5 students with similar research interests. During the dissertation, similar online groups

supported each other through the process, read each others' drafts, provided feedback and motivated their peers. In the online environment, these groups acted as *virtual research groups* that mentees found extremely valuable to their progress, especially due to their family and work commitments. Often, these groups were mentored by the same person, in which case the mentor sometimes organized the online meetings and discussions, structured the peer feedback and also provided feedback in a group setting.

Institutional strategies

In an on-campus program, students can go to different offices or meet people who will help them with paperwork, but in an online program, resources and services have to be in place so that online students can also successfully navigate the administrative requirements at the academic institution. Mentees in the program in this study had access to an online advisor who helped them in these areas, but they suggested that more online resources could be made available. Information literacy instruction and guidelines for accessing library resources online were provided and appreciated by mentees in this research. Similarly, workshops are often available on a campus in academic writing or in Institutional Review Board (IRB) procedures that are important for writing a dissertation and conducting ethical research. Mentees in our research stated that online instruction or tutorials in such areas were useful to them and should be available for students writing a dissertation at a distance from the university.

Online mentoring challenges

Although the mentors had experience teaching online (ranging from 2 to 6 years), they were mentoring dissertations online for the first time. The main challenge they faced was to identify the types of communication that would enable them to provide feedback and have discussions that conveyed what they wanted to say and mentor students successfully. For mentees, time management, work-life balance, and the motivation to continue writing their dissertations were the main challenges that were faced (Kumar & Johnson, 2014). These challenges are not unique to the online environment. Five of 19 mentees expressed a need for face-to-face interaction, and that they did not find online communication sufficient during the dissertation process. However, the other mentees were quite satisfied with the online interactions. Mentees also mentioned challenges with implementing research, data collection or analysis, which are also not challenges that are exclusive to the online environment.

Discussion and lessons learned

The dissertation process is challenging for all students, even those who are mentored in an on-campus setting and have the advantage of an apprenticeship model, working alongside their research mentor. In the online environment, the mentoring process becomes even more challenging because mentees cannot just meet with the mentor in their office. Online doctoral programs in the United States constitute online coursework before the dissertation, making it possible to establish certain methods of communication, build relationship between mentors and mentees in a structured environment, and build community that can lead to peer support

networks during the dissertation process. Although this research was conducted in a very specific context and in a doctoral program, we believe that the results have implications for graduate online mentoring and can be adapted by others wishing to engage in the online mentoring of research and projects in an academic institution.

At the beginning of this research, the focus was on the strategies used by online mentors that are successful and can help mentees in the online mentoring process. The results of the first seven interviews with mentees, however, made it apparent that although mentor strategies were important to provide structure, guide research and provide valuable feedback in the online environment, mentees were also using strategies that were essential for a successful process (Kumar, Johnson, & Hardemon, 2013). The results of interviews with the mentors reinforced the mentee results, because mentors believed that despite the strategies that they used, communication in the online environment and the process of research largely depended on the mentee, their research, their organizational skills and their communication of progress. These findings resonate with research on self-regulation (Zimmerman, 2001) and learning presence in the online environment (Shea & Bidjerano, 2010), where learners manage and self-direct their learning. While it is important to provide scaffolds and structure in the online mentoring process, it is a collaborative endeavour with both parties contributing to its progress. Identifying and communicating the roles of both parties in the online mentoring process is important to the success of the process.

In the interviews with mentees that followed, other variables that influenced the online mentoring process emerged. The program that was studied was cohort-based, that is, students completed initial online courses as a group, and the online program was designed to facilitate the building of community among the cohort (Kumar, 2014). Additionally, smaller groups of students with common research interests were encouraged to work together and meet regularly online. These strategies were found to have influenced the dissertation process where groups of students continued to support each other. Mentors also continued to use strategies that structured peer feedback and the sharing of resources. These small group strategies provided an additional layer of support in the online mentoring process. Finally, the online support services and online resources available at the institution were needed both by the mentees as well as mentors for the process to succeed. Often, online mentoring is perceived to be dependent solely on the mentor and the mentee, and the institutional role is taken into account more in structured learning environments such as online courses. While mentor and mentee strategies continue to be of paramount importance in online mentoring, the lack of institutional support can make procedures and the process more tedious and challenging for both the mentor and mentee, especially in academic environments.

Conclusion

In the context of increased online programs and growing prevalence of online mentoring for research and projects, research on strategies that can facilitate this process is necessary in the academic context. Much of the research that exists is in training environments or in the medical field, or focuses on the building of software that supports online mentoring, which,

albeit valuable, do not fulfill the need in institutions of higher education where professors and students engage in online mentoring. The identification of challenges faced, and strategies that succeed or resolve those challenges can be helpful to all those engaged in online mentoring.

References

1. Allen, I. E., & Seaman, J. (2013). Changing Course: Ten Years of Tracking Online Education in the United States. Newburyport, MA.

2. Allen, I. E., & Seaman, J. (2014). Grade Change: Tracking Online Education in the United States.

3. Bierema, L. L., & Merriam, S. B. (2002). E-mentoring: Using Computer Mediated Communication to Enhance the Mentoring Process. Innovative Higher Education, 26(3), 211–227. http://doi.org/10.1023/A:1017921023103

4. Burnett, P. C. (1999). The Supervision of Doctoral Dissertations Using a Collaborative Cohort Model. *Counselor Education and Supervision, 39*(1), 46–52. http://doi.org/10.1002/j.1556-6978.1999.tb01789.x

5. Cilesiz, S. (2011). A phenomenological approach to experiences with technology: Current state, promise, and future directions for research. *Educational Technology Research and Development, 59*(4), 487–510.

6. Crisp, G., & Cruz, I. (2009). Mentoring College Students: A Critical Review of the Literature Between 1990 and 2007. *Research in Higher Education, 50*(6), 525–545. http://doi.org/10.1007/s11162-009-9130-2

7. Ensher, E. A., Heun, C., & Blanchard, A. (2003). Online mentoring and computer-mediated communication: New directions in research. *Journal of Vocational Behavior, 63*(2), 264–288. http://doi.org/10.1016/S0001-8791(03)00044-7

8. Franke, A., & Arvidsson, B. (2011). Research supervisors' different ways of experiencing supervision of doctoral students. *Studies in Higher Education, 36*(1), 7–19. http://doi.org/10.1080/03075070903402151

9. Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine Publishing Co.

10. Hatch, J. A. (2002). *Doing qualitative research in education settings.* Albany, NY: State University of New York Press.

11. Hayes, S., & Koro-Ljungberg, M. (2011). Dialogic Exchanges and the Negotiation of Differences: Female Graduate Students' Experiences of Obstacles Related to Academic Mentoring. *Qualitative Report, 16*(3), 682–710.

12. Johnson, W. B., & Huwe, J. M. (2003). *Getting mentored in graduate school.* Washington, DC: American Psychological Association.

13. Kumar, S. (2014). Signature pedagogy, implementation and evaluation of an online program that impacts educational practice. *The Internet and Higher Education, 21*, 60–67. http://doi.org/10.1016/j.iheduc.2013.11.001

14. Kumar, S., & Johnson, M. (2014). Research and Dissertations: Challenges overcome by online doctoral students. In P.R. Lowenthal, C.S. York & J.C. Richardson (Eds.), *Online Learning: Common misconceptions, benefits, and challenges* (pp. 115–124). Nova Science Publishers.

15. Kumar, S., Johnson, M., & Hardemon, T. (2013). Dissertations at a Distance: Students' Perceptions of Online Mentoring in a Doctoral Program. Journal of Distance Education, 27(1). Retrieved from http://www.ijede.ca/index.php/jde/article/view/835

16. Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education, 33*(3), 267–281. http://doi.org/10.1080/03075070802049202

17. Maher, M. A., Ford, M. E., & Thompson, C. M. (2004). Degree Progress of Women Doctoral Students: Factors that Constrain, Facilitate, and Differentiate. *The Review of Higher Education, 27*(3), 385–408. http://doi.org/10.1353/rhe.2004.0003

18. Schichtel, M. (2010). Core-competence skills in e-mentoring for medical educators: A conceptual exploration. *Medical Teacher, 32*(7), e248–e262. http://doi.org/10.3109/0142159X.2010.489126

19. Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers & Education, 55*(4), 1721–1731. http://doi.org/10.1016/j.compedu.2010.07.017

20. Zimmerman, B. J. (2001). Theories of self-regulated learning and academic achievement: an overview and analysis. In B. J. Zimmerman & D.H. Schunk (Eds.), *Self-regulated learning and academic achievement. Theoretical perspectives.* Marwah, NJ: Lawrence Erlbaum.