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Role of Faculty Development Forums in Virtual Teaching Environment: A Case Study of Marketing Research & Case Group

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Abstract

The online learning has broadened the teaching spectrum from Face-to-Face to virtual environment, and this move has brought traditional teacher-centered instruction to learner-centered instruction. This paradigm shift appears to place demands on faculty to modify faculty's instruction roles that are different from those encountered in Face-to-Face teaching. This study explores the role of faculty development forum in improving the virtual teaching skills of academic staff members in an online university. The study has used single holistic case study approach, and the data from nine respondents have been collected through an interview schedule divided into four sections of 1) Basic Information, 2) Presentation Skills, 3) Subject Knowledge and 4) Research Orientation as per the objectives of the study. It can be theorized from the findings of the study that in virtual environments where faculty members lack the learning opportunities and exposure available in the conventional environments such forums prove to be very effective in capacity building of the faculty.

Keywords: Capacity Building; Virtual Learning; Teaching Skills; Faculty Development

Introduction

The online learning has broadened the teaching spectrum from face-to-face to virtual environment, and this move has brought traditional teacher-centered instruction to learner-centered instruction. This paradigm shift appears to place demands on faculty to modify faculty's instruction roles that are different from those encountered in face-to-face teaching. Whereas the change in delivery of instruction in virtual environment does not allow teachers to put the basics of teaching aside, likewise presentation skills, subject knowledge, and research orientation; all have vigorous importance in virtual environment and faculty must develop these basic teaching catalysts in order to provide the worth learning propositions to the students. From a traditional teaching perspective, it has been viewed that technology plays a huge part in information transfer and that is apparent. It has made information available at the tip of one's fingers. However, there are consequences; while it makes life easier, emphasis on machine reduces the need for teachers and students' interaction; consequently this reduces the role of mentor to student's relationship in education. This will impact culture in the long term because, when demand for teachers goes down, it offers less consolation for the teaching profession and indirectly discourages the new generation of people to take teaching seriously. To counter the traditional teaching perspective, the capacity building forums are developed in educational institutions, which not only provide new instructional roles to teachers but also offer emotional and motivational support to teachers to cope with the teaching skills in virtual environments. Professional development of teachers through capacity building forums is a commitment to continuous thinking about teaching profession; it pays attention to enhancing subject knowledge, research orientation and communication skills of teachers. These capacity building forums also keep the teacher intellectually alive in the learning environment in order to undergo ongoing professional learning process.

It has been observed that most teachers in university use to teach as they themselves were taught and they learn by taking visiting lecturers at college or university level and through training in their respective disciplines (García, Arias, Murri & Serna, 2010). Teaching in online mode of education is the big challenge for those teachers who are not having the experience of traditional teaching. To cater to this challenge, many universities are introducing faculty development programs, and these are designed to enhance teaching skills among teachers by adding up technological orientation towards their teaching portfolio, as technology is the embedded feature of online teaching environment in current teaching climate. In face-to-face teaching the adequate subject knowledge and effective presentation skills are the core ingredients that glorify the tutoring (Beetham & Sharpe, 2013). These two core skills persist strong standing even in online mode of education in addition to the momentous transformation in teaching methodology from teacher-centered instruction to learner-centered instruction.

Virtual learning environments always demand teaching brilliance in terms of subject expertise and effective presentation skills from the novice teachers to deliver high quality education to students. Many universities are addressing this concern by introducing their own faculty development programs (Armellini & Jones, 2008; Salmon, 2013). It has become contemporary for the institutions to articulate supportive development programs for the faculty to foster the paradigm shift of teaching in virtual environment. On-the-job training method is considered to be the most cost-effective method for faculty development in different educational institutions that allows teachers to strengthen their subject knowledge and enhance presentation skills. In 21st century the role of teacher has changed from distributor of information to facilitator, coach and orchestrator of knowledge and guiding students to turn knowledge into wisdom. This unique role of teachers initiates knowledge generation in learning and fosters the paradigm to create a culture of inquiry in spite of just sticking on the delivery of information. To ensure the absorption of learning into practice, these initiatives of faculty development should work within their true contexts to achieve the desirable results (Bell, Maeng & Binns, 2013).

Apart from developing subject expertise and delivery skills among faculty, institutions should pay attention towards the technological development of the faculty to cope with the new learning environment prevailing in academia (Laurillard, 2012). Salmon (2011) explains the experience of faculty as a learner with the advancement of technology; it is proved to be an entrenched method of development of knowledge and skills among teachers that contemplate substantial impact on their teaching practices. McQuiggan (2012) highlights that teachers and students are newly exposed to online learning environment and online teaching is yet an under explored phenomenon which entails different challenges and risks taking on faculty's end. It is compulsory for teachers to explore their beliefs and practices in online environment in order to equip themselves with contemporary teaching skills of 21st century (Åkerlind, 2011). McQuiggan (2012) argues the emerging teaching skills of 21st century excite teachers to develop new teaching ideas and delivery of means to ensure academic effectiveness towards knowledge construction (Salmon, 2011).

Research-driven approach has become a necessity for university teachers—both new and experienced academic staff (Barajas & Gannaway, 2007; Smet, van Keer & Valcke, 2008). Faculty development programs attract teachers to engage in continuous learning processes, which result in applying their experience and theory into practice (Gregory & Salmon, 2013).

So, learning and development are important for teachers because, we believe, teachers should be leading by example. They should embrace continuous learning on a personal level and inevitably, if they do this, they will be more productive, motivated and successful. If this *ethos* is shared with other faculty members and supported by university, then it really has the potential to cascade throughout the organization and hopefully instigate some professional change and generate some

significant improvements in quality of teaching. Continuous faculty learning will inevitably involve some departmental effort to strengthen the skills of teachers while working in an online environment. Any learning activity designed to enhance the skills of teachers, their knowledge and competence represents a learning milieu in any organization. It also complements the spirit of cost-effectiveness and peer-to-peer learning through platforms like Marketing Research & Case Group (MRCG). Through these platforms, faculty can do a quick self-assessment and this could be a personal SWOT analysis, or it could be a more complex diagnostic tool for faculty to identify areas where they need professional development in order to strengthen their teaching skills.

Marketing Research & Case Group (MRCG)

MRCG was a unique initiative taken by the faculty of Marketing under the aegis of the Department of Management Sciences, of a public sector e-learning based university of Pakistan. This capacity building forum was established in October 2013; it was designed to cater to the needs of faculty professional development, explicitly to address the area of subject knowledge, presentation skills, research orientation and pedagogy in an efficient and effective way. On faculty side, this group (MRCG) was tailored to meet the prerequisites of in-service teachers with a new set of experiences: presentation skills, research orientation and subject knowledge in accordance with virtual environment. Apart from this, MRCG is also a knowledge-centered forum for the faculty, which includes planning, strategic thinking, transfer of knowledge and expert opinion on contents of the courses taught at university. Members of MRCG often found eager to participate in their respective area of interest, though novice teachers are not often seen acquaintance with research exposure. MRCG organizes its sessions on weekly basis in which one faculty member presents its prepared topic to the other members of the forum. Twenty-two members of the forum are stationed in three locations: Lahore, Islamabad and Karachi. Presentation schedule for 22 weeks is communicated to all members in advance with clear mention of the turn of each member.

Aim and objectives of the study

The aim of this study is to explore the efficacy of capacity building forums for faculty of Distance Education/Online University through case study research method.
    The objectives are:

- Explore the development of presentation skills as a result of the capacity building forum MRCG
- Explore the enhancement of subject knowledge as a result of the capacity building forum MRCG
- Explore the orientation on research skills as a result of the capacity building forum MRCG
- Explore the overall efficacy of the forum as a result of the capacity building forum MRCG

Methodology

Single case study method is selected as a research approach for this study. This method provides a holistic and vibrant view of the research that is being studied (Yin, 2003). In a case study the researcher has less control over occurrence, and the focus remains on contemporary phenomenon in line with real-life context. Hyde (2000) explained that qualitative methods seek to recognize the core notions and effort to find the associations between variables. The qualitative data method comprehends the transcripts of interviews or observation. A case study method gives deeper inside of the phenomenon through interviews. Data collection plays a very important role by providing

empirical evidences in order to support the research findings. Therefore, in order to explore the impact of MRCG on teachers' professional development and the factors those contribute to the enhancement of teaching skills among the members of MRCG. This study followed the principles of data collection for case study specified by Yin (2003), which are in-depth interviews with permanent members of MRCG. Purposive sampling was used for this study, which is also known as judgmental sampling, or criterion-based sampling. In depth interviews in a case study approach are used to explore the in depth understanding of the phenomenon (Merriam, 1988).

Data from 9 respondents have been collected through an interview schedule divided into four sections: 1) Basic Information, 2) Presentation Skills, 3) Subject Knowledge and 4) Research Orientation, as per the objectives of the study. In each section different questions were asked covering the dimensions of different themes of the study. In each question respondents were required to describe their response in words.

Selection Criteria for Respondents & Ethical Consideration

The selected respondent should be permanent members of the Marketing Research and Case Group (MRCG) for at least one year, and should be faculty members of the Department of Management Sciences of the university and teach courses related to business and management. In order to complete this study with appropriate research guidelines, research ethics have been followed with utmost care. Sufficient time was given to the respondents of the study to come up with their true views about the research questions asked. Consent of the respondents and their permission to use the data has been taken. In addition, confidentiality of the responses has also been strictly maintained to ensure the privacy of their data.

Data Analysis

Content analysis is an appropriate approach for this research by keeping in view the primary themes of the study and their relationship with the underlying phenomenon. According to Bryman (2004), content analysis is an established approach to analyze qualitative data under the given themes. He further defines content analysis in the following way:

> "An approach to documents that emphasizes the role of the investigator in the construction of the meaning of and in texts. There is an emphasis on allowing categories to emerge out of data and on recognizing the significance for understanding the meaning of the context in which an item being analyzed (and the categories derived from it) appeared" (Bryman, 2004, p. 542)

For the analysis of the collected data following steps were taken:

1. First responses of all the respondents were arranged question wise in each section
2. Contents of all the responses in each theme were separately analyzed
3. Analysis for each theme was then recorded below it in the concerned section
4. In this section only analysis against each question has been reported by omitting the original responses to avoid unnecessary length
5. Where it was important in the analysis, the original response of one respondent has been reproduced as evidence

Results

The findings regarding the objectives of the study are presented in this section. The findings are presented in four headings that correspond to each objective.

A. Basic Information

Content analysis of responses of most of the respondents clearly showed that members joined the forum with the main motivation and primary purpose of improving their communication & presentation skills, subject knowledge, understanding of case studies and research related understanding & skills, such as reading and writing research papers. One respondent who joined the forum because it was mandatory must also have developed the same purpose in mind after joining the forum.

Responses have clearly depicted that all respondents, except one, have strongly agreed to the point that MRCG being a capacity building forum has resulted into the development of teaching skills for an online distance-learning environment. They have explained that the forum, by helping improve on the front of presentation skills, subject knowledge and research, has developed in them contemporary teaching skills. It is widely understood that teaching skill is the combination of presentation, research and subject knowledge. The one respondent who did not agree to this might not have carried development of teaching skills as purpose of the forum. On the point that whether joining the forum has resulted in any improvement, all the respondents have overwhelmingly agreed to the point. Respondents have clearly described that the forum has made a significant positive change in their learning, especially in areas of confidence during presentations and understanding of research tools.

From the contents of the responses it has been learned that all the respondents have unanimously accepted the fact that they have benefited from MRCG. Main mentioned benefits of the forum are same as already described in the responses of above questions. These benefits are: enhanced confidence during presentations, better understanding on how to read and present a research paper and more awareness of contemporary research tools and techniques. Responses are evident of the fact that MRCG as capacity building forum has resulted in capacity building of its members.

On the question of limitation of MRCG as a learning forum, responses were split into two categories: those who felt limitations in the way presentations were held on the forum and those who felt that there was no limitation as far as the format of the forum was concerned. Some members confirmed that the forum was not only open but also allowed equal opportunity to all its members. One respondent has considered the forum to be not clear as whether all members presented on pure marketing topics or research topics.

B. Presentation Skills

Data showed that respondents were of the opinion that MRCG had improved their presentation skills by enhancing their confidence to face people, enabling them to craft their topic well, allowing them to manage time and making them build and defend arguments. Most of the respondents have considered enhanced confidence to present as the main improvement as presenter. One of the respondents said:

> *"Yes, because I feel more confident. Before MRCG whenever I presented something in front of audience my mind went blank and feet used to be trembling."*

On this question—how did MRCG help put their point of view in a proper manner—respondents have elaborated that, since it was a forum where every participant could freely ask questions and share comments on presentation and presenter, over the time presenters learnt from critique to present their point of view in a proper manner. Logically speaking this is critique that let a presenter put his/her point of view in a manner. The respondents in case of MRCG have confirmed the same. One respondent put it this way:

"As I am a research scholar, the timing of such activity is no doubt to be the perfect and facilitating my concepts and ideas about the research. There is no doubt that the platform is helpful. I always welcome the substantial critique provided by my colleagues and seniors that really help me in rectification of crude work and produces more refined and error free work."

Pressure of the audience, anticipation of questions and limited time of sessions are reported to be the main factors that contributed to the personal organization of members as presenters. What can be read between the lines is the factor of managing personal image before colleagues, which might also have contributed to better personal organization for presentations. Analysis of responses made it clear that three factors helped respondents learn to well manage presentation time in MRCG. These factors are the past experience of own presentation, observation of other's presentations and fixed given time. One respondent described it as

"By observing other participant presentation next presenter can easily manage presentation timing."

According to the responses, three factors have made the members of MRCG learning to better use various resources for presentation. (1) Format of MRCG sessions, since members of the forum were situated in three locations (Lahore, Islamabad and Karachi) therefore in each session all the three locations were connected through video conferencing, (2) Ready and free availability of resources and (3) Requirement and encouragement to use audio-video aids to make presentations more effective. Among the three, the first one must have played a most critical role in this regard as maintaining quality of presentation through video conferencing asks for more careful use of resources and extra struggle to be put in.

Multiple presentations by a member, ideas from presentations of peers, urge to present dry research topics in acceptable ways were the factors which have led to the development of creative ways of presentation in members as reported by most of respondents.

All respondents have agreed and confirmed the role of MRCG in improving presentation skills of its members from faculty development perspective. Effective presentation skill has now become a necessary condition for effective faculty in virtual learning environments. Introduction of Skype, TeamViewer and other technologies have now made it very much possible for the teachers and learners to have real time live interaction. This interaction mode certainly demands faculty of virtual environments to develop presentation skills at par with the faculty of conventional learning environments. Keeping this in view MRCG has contributed in this regard.

Only three respondents have responded to this question. Out of three one respondent has disagreed to consider MRCG as the right forum for faculty development while other two have considered MRCG as the right forum. The respondent who disagreed to the point elaborated it as

"In my opinion this is not the way for faculty skill development. For faculty skill development those activities should be pursue which are above the level of faculty and help in teaching students. They should do something regarding teaching software's, how to publish your paper, how to draft your paper etc."

Responses of the previous question indirectly support the point that MRCG is a right forum for Faculty development.

C. Subject Knowledge

It has been identified from the analysis of responses that MRCG has enhanced the subject knowledge of its members in three ways. First way was the preparation process everyone had to undergo for his presentation; second way was listening to other presentations on a weekly basis, and third was the discussion during the session that followed every presentation. The first way also enhanced the habit of improving subject knowledge through self-discovery.

On this point—how subject related learning at MRCG was transformed into student's learning—the respondents had mixed opinions. Some have mentioned that it influenced the mentoring practices of faculty, but others have pointed out any such transformation only in the future. From the content analysis of responses it can comfortably be stated that subject related learning of faculty has only indirect bearing on their practices of mentoring their students. Logically speaking when faculty is exposed to such forums their acquired knowledge does get transferred to their students.

It is quite evident from the responses that the members do get ideas and encouragement from the activities of MRCG for developing course related activities such as GDBs/Assignments/Quizzes. Responses to this question should be considered in addition to the previous question. One respondent narrated this as

"The presentation at MRCG helped to share new ideas that I applied on while making assignment and GDBs."

All respondents, except respondent 9, have informed that joining of MRCG has developed and improved their reading and searching habit. Raised subject knowledge has been considered the natural result of improved reading habit by most of the respondents.

Only five respondents have responded to this question. Low response on this question might be because of its being connected with previous questions in which respondents had already highlighted the advantages of the forum with reference to enhancement of their subject knowledge. Among given responses most of the respondents have confirmed the advantages of the forum without any disadvantage. Logically arguing such forums generally do not result into any disadvantage and the same has been confirmed by the responses.

D. Research Orientation

Almost all respondents have confirmed that MRCG has not only met their research needs but has also positively affected their work life in shaping their aptitude for research. One of the respondents has mentioned that critique during MRCG sessions has helped him refine his research topic. One respondent informed it as

"It helps a lot because in MRCG we try to remove error or give suggestions of a presenter's presentation. For example I presented an article there, members suggested me some changes and after proper implementation of that changes my article has been published."

Analysis showed that respondents have not categorically explained the "how" part of the question but they have overwhelmingly confirmed the role of MRCG in help shaping goals for learning and professional development. This response also confirmed the achievement of one of the objectives of MRCG that was about making its members to think of personal and professional development.

Content analysis of responses again confirmed that reading of research papers and discussion during sessions helped refine the research topic and other components of research project under consideration. In the words of a respondent,

"Discussion helps in this regard and we come to know what this particular research is about and why it is conducted."

Responses were not very clear on the asked aspect but on the surface it seemed that the activities of MRCG were leading members in the desired dimension. One respondent statement can give idea on this; he explained it as

"The session is scheduled well before its actual presentation and all its members are bound to present on their given time slots. Every presenter has to send an email to all the group members regarding the basic topic and theme of his/her presentation. Such activities have increased the sense of responsibility in all its members to deliver well on time."

Interestingly respondents have once again mentioned that this was the discussion on the presented topic and feedback received from members—especially senior members—resulted into the conceptual clarity of different aspects of the research topics. Help from other members has been mentioned as key in this regard. It seemed from the responses that most of the respondents could not get the spirit of the question.

Discussion & Conclusion

Main objectives of the study are to explore efficacy of MRCG as capacity building forum for faculty in the areas of presentation skills, subject knowledge and research orientation. On the basis of the results in first section it can be argued that members of MRCG were clear about the objectives of the forum and their own objectives to join the forum. Clarity of the participants of an activity about its objectives can be taken as the first indicator of being effective and efficient. From the results it seems true for MRCG as well.

Second section of the Interview Schedule was to explore the efficacy of MRCG in the area of helping its members developing presentation skills. Results of all the eight questions in this section clearly show that MRCG has proved to be efficient and effective in developing presentation skills in its members. Results have shown that those who were not comfortable at all in presenting things publicly developed the required confidence and those were to polish their skills managed to achieve the milestone.

The findings made new contribution towards the theory that in virtual teaching environment not only the technology but also the faculty development forums can create substantial impact on teaching practices of the faculty. This finding differs from Salmon's (2011), who argued that the advancement of technology is proved to be a entrenched method of development of knowledge and skills among the teachers which contemplate substantial impact on their teaching practices. In order to measure the substantial impact, members were evaluated through their semester activities that they have to perform again and again throughout the semesters, and these activities are development of student's assignment, development of exam questions and replying subject related queries of the students. It was found that members of MRCG improved their write up and they have become more critical towards developing student's assignment and exam questions. It was also noticed that members of MRCG have started taking interest to write research papers in order to strengthen their research skills. Their participation in local research conferences has also increased.

Third section was to seek insight on the aspect of members of MRCG enhancing subject knowledge in result of activities organized through the forum, in order to strengthen their tutoring skills. This finding supports the view point of Beetham & Sharpe (2013) who explained that the adequate subject knowledge and effective presentation skills are the core ingredients that glorify the tutoring.

Results have shown that members have managed to enhance their subject knowledge in result of the activities of MRCG, as every member was not only to present but also to attend the presentations of other members and take part in discussions. These factors resulted into the enhanced subject knowledge of the members. The forum also developed and strengthened the reading habit of its members, which further contributed to the enhancement of subject knowledge. Forum has not only enhanced the subject knowledge but has also enabled its members to better mentor their students. The forum has served as a source of ideas for faculty members to develop sessional activities for students. This also confirms the efficacy of MRCG in the area of subject knowledge enhancement.

Fourth section was aimed at noticing the role of MRCG in providing orientation on research and its related tools and techniques to its members. Finding of the study as contained in data analysis obviously communicate that MRCG has provided both research orientation and orientation on

research to its members. When MRCG started it had two types of members; those who had no background in research and those who had primary knowledge and exposure on it. MRCG has provided basics to the former and refinement to the latter. This can also be extracted from results that on this front MRCG is successful but not as it is on the front of developing presentation skills and enhancing subject knowledge.

Another major contribution of the study is to avoid high cost of faculty development programs. In a developing country context, it is very difficult for universities to allocate huge budget for the faculty development programs. This finding supports the argument of Elliott, Rhoades, Jackson & Mandernach (2015): that limited funding is available for faculty development initiatives. This finding also gives new dimension to the view point of Meyer (2014) who argued that institutional budget for faculty development is declining due to the limited state funding.

Conclusively it can be remarked that the study has explored and shown that MRCG as a capacity building forum has proved to be efficient, effective and useful. It can also be theorized that in virtual environments where faculty members lack the learning opportunities and exposure available in conventional environments, such forum like MRCG can prove to be very effective in the capacity building of the faculty. As an argument such forums can serve as a useful starter in the area of faculty development.

Mostly in virtual teaching environment teachers are more active on learning management systems (LMS) rather than standing in a traditional classroom to deliver the lectures. However, teachers in the university of context use Skype/Adobe Connect applications to have few live sessions with the students in order to solve their assignment related queries and overview of the important lectures. These live sessions are designed to facilitate the students by using modern technology, and provide them a bit sense of traditional learning environment in which they feel interactive with their teachers. Teaching in 21st century has become big challenge for traditional and novice teachers. Traditional teachers are still unfamiliar with the latest use of modern technology in developing countries. Such capacity building forums are one gateway for them to acquire the latest teaching skills by creating such forums in their educational institutions. Moreover, such forums are very cost-effective for those educational institutions that are eager to provide professional development trainings to their teacher on regular basis. Faculty requires continuous professional development in virtual teaching environment by keeping in view rapid technological disruption in education, which has brought traditional teacher-centered instruction to learner-centered instruction. There is a need to develop new forums for faculty development in virtual teaching environment.

Implications and Future research

Finding of this research highlights the importance of capacity building forms in virtual teaching environment where teachers seldom get chance to interact with their students face-to-face. As the extent of online courses keeps on expanding, so does the requirement for capacity building forums. The growing body of examination on this point reflects institutional difficulties in recognizing effective measures to provide continuous professional development to the faculty in virtual teaching environment. The needs of staff instructing exclusively online changes significantly from their face-to-face equivalents; universities should come up with new strategies to develop cost-effective forums where faculty can be trained on a regular basis. On a strategic level, the top management of educational institutions can frame the faculty development strategies by establishing different capacity building forums in each department of their respective university/institute.

Despite the contribution to the body of knowledge of capacity building forums in Online/Distance learning university, this research has suggestions for future research. Future research is needed to

discourse the limitations of the current study. A primary limitation includes the small sample size of the members of MRCG, which make this study difficult to generalize; with a large sample, a quantitative study can be conducted to explore the efficacy of capacity building forums for faculty of Distance Education/Online University. Second, further research is thus needed to gain a greater understanding of the accumulated role of different faculty development forums in a single online/ Distance learning university. Third, future research is needed to explore the research contribution of members of capacity building forums in terms of publishing their research papers and winning research grants—local & international. In addition, future research should compare the research inputs of the faculty members who are not involved in any faculty development forums in virtual teaching environment.

Acknowledgement

References

Åkerlind, G. S. (2011). Separating the 'teaching' from the 'academic': Possible unintended consequences. *Teaching in Higher Education, 16*(2), 183–195. http://dx.doi.org/10.1080/13562 517.2010.507310

Armellini, A., & Jones, S. (2008). Carpe diem: Seizing each day to foster change in e-learning design. *Reflecting Education, 4*, 17–29. Retrieved from http://www.reflectingeducation.net/index. php/reflecting/index

Barajas, M., & Gannaway, G. J. (2007). Implementing e-learning in the traditional higher education institutions. *Higher Education in Europe, 32*(2), 111–119.

Beetham, H., & Sharpe, R. (Eds.). (2013). *Rethinking pedagogy for a digital age: Designing for 21st century learning* (2nd ed.). New York, NY: Routledge.

Bell, R. L., Maeng, J. L., & Binns, I. C. (2013). Learning in context: Technology integration in a teacher preparation program informed by situated learning theory. *Journal of Research in Science Teaching, 50*(3), 348–379. http://dx.doi.org/10.1002/tea.21075

Bryman, A. (2004). *Social research methods* (2nd ed.). New York: Oxford University Press.

Elliott, M., Rhoades, N., Jackson, C. M., & Mandernach, B. J. (2015). Professional Development: Designing Initiatives to Meet the Needs of Online Faculty. *Journal of Educators Online, 12*(1).

García, E., Arias, M. B., Murri, N. J. H., & Serna, C. (2010). Developing responsive teachers: A challenge for a demographic reality. *Journal of Teacher Education, 61*(1–2), 132–142. http://dx.doi.org/10.1177/0022487109347878

Gregory, J. & Salmon, G. (2013). Professional development for online university teaching. *Distance Education, 34*(3), 256–270. http://dx.doi.org/10.1080/01587919.2013.835771

Hyde, K. F. (2000). Recognizing deductive process in qualitative research. *Qualitative Market Research: An International Journal, 3*(2), 82–89. http://dx.doi.org/10.1108/13522750010322089

Laurillard, D. (2012). *Teaching as a design science: Building pedagogical patterns for learning and technology*. New York, NY: Routledge.

Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. Jossey-Bass.

Meyer, K. A. (2013). An analysis of the research on faculty development for online teaching and identification of new directions. *Online Learning Journal, 17*(4).

McQuiggan, C. A. (2012). Faculty development for online teaching as a catalyst for change. *Journal of Asynchronous Learning Networks, 16*, 27–61. Retrieved from http://sloanconsortium.org/publications/jaln_main

Salmon, G. (2011*). E-moderating: The key to teaching and learning online* (3rd ed.). New York, NY: Routledge.

Salmon, G. (2013). *E-tivities: The key to active online learning* (2nd ed.). New York, NY: Routledge.

Smet, M., van Keer, H., & Valcke, M. (2008). Blending asynchronous discussion groups and peer tutoring in higher education: An exploratory study of online peer tutoring behaviour. *Computers & Education, 50*(1), 207–223. http://dx.doi.org/10.1016/j.compedu.2006.05.001

Yin, R. (2003). *Case Study Research – Design and Methods* (3rd ed.). Thousand Oaks: Sage Publications, Inc.