

New Communication Media Challenges for Supervisors and External Doctoral Students

Ronel Erwee
Faculty of Business, University of Southern Queensland
Australia
Ronel.Erwee@usq.edu.au

Peter R Albion
Faculty of Education, University of Southern Queensland
Australia
Peter.Albion@usq.edu.au

Abstract: This study investigated perceptions of doctoral students and supervisors in an Australian university about communication challenges in doctoral distance education, frequency of communication between candidate and supervisors, satisfaction with meetings or communication, use of communication media and use of new types of personal media of communication. Forty-one doctoral students and nine supervisors confirmed their reliance on email communication via responses on a communications survey. Subtle differences emerged between the perceptions of doctoral students and their supervisors with reference to the adaptation of distance learning materials, the mix of synchronous and asynchronous interaction, and the use of new media of communication in the university. There was a less than positive perception of the use of discussion boards or online communities as learning tools.

Introduction

Many supervisors take an interest in the ways in which effective communication systems can facilitate contact between supervisors and their external or online students and their university systems. Supervisors aim to understand the doctoral candidate's communication needs and expand their use of innovative approaches to communication with and teaching of doctoral students to meet their learning needs. Early in 2005, a Doctoral Studies Community site was created to support 80 students and 20 supervisors in the Faculty of Education, University of Southern Queensland (USQ). A social chat section on a 2009 Moodle metacourse was included for USQ Faculty of Business DBA students to establish a peer network, and supervisors were requested to post useful tips regarding aspects of the program. However, neither the FoE or FoB external doctoral students nor their supervisors are using the discussion boards effectively for asynchronous discussion, or to share information or for building networks.

During a 2010 project we asked FoB and FoE doctoral students about the communication media that they and their supervisors use to communicate. The Communications survey include sections on the perceptions of doctoral students and supervisors about communication challenges in doctoral distance education, frequency of communication between candidate and supervisors, satisfaction with meetings or communication, use of communication media in USQ and use of new types of personal media of communication. The aim of the paper is to investigate their statements and some discrepancies between the doctoral students and supervisors' perspectives use of resources such as the use of 'high presence' communication technologies.

Communication with External Doctoral Students

Erwee, Albion and Van der Laan (2010) confirmed that the centrality of the relationship with supervisors is dominant for external doctoral students. Watts (2008) confirms that supervisors should be careful to maintain a balance in their communication with their external doctoral students. If supervisors use a high frequency contact approach, it creates pressure for continuous measurable process on a mature age student who has other life or managerial responsibilities. However such an approach may be appropriate at the beginning or final stages of the dissertation process. She advises that email contact or phone contact every month may be more viable to assist external doctoral students to integrate their studies with their life priorities. Another contention (Watts 2008) is that

the supervisor should take responsibility to initiate contact and that there should be a formal contracting phase to clarify expectations of roles and responsibilities of each party.

Albion (2009) cited research noting distinct features of interaction that enhance learning. Of relevance to doctoral programs are the value of interactions with peers as well as supervisors and of a balance between asynchronous and synchronous interaction with inclusion of modes that approach the levels of presence possible in face-to-face interaction. Learning at all levels implies a change in the learner that results from interaction with the environment (Albion 2010). That interaction may be with content conveyed in books and other media, with a teacher such as a doctoral supervisor, and with other people including fellow students. The focus here is on the interaction of doctoral students with supervisors, and how that can be facilitated at a distance. Doctoral students on campus have opportunities for direct face-to-face interaction with the supervisor as well as through the exchange of written material such as drafts. The direct interactions can assist with building mutual understanding that informs the exchange of written materials.

For distance students the primary mode of communication with the supervisor is through written text. Traditionally this would have occurred through the post, leading to considerable delays between reciprocal messages (Albion 2010). Email and similar methods have shortened the cycle but are still subject to the loss of cues such as tone of voice and body language that are available in face-to-face interaction. For many purposes associated with supervision written communications are adequate, and sometimes better than alternatives, but there is value in considering what might be gained by using technologies that provide for a higher sense of presence than simple text. In Curtin university all staff involved in the DBA program travel to Hong Kong on a semi-regular basis to meet with their doctoral students, students are encouraged to visit their supervisors in Perth and real-time audio and video links via broadband were trialed. Curtin had to secure library and software access for their doctoral students (Whitely 2004). Curtin insists on some face to face components in their DBA program as it is not appropriate for supervisors to provide only written comments on doctoral students work as the sole medium of interaction for the length of the entire program (Galvin 2004). Erwee (2004) concluded that universities such as University of Southern Queensland, Charles Sturt, Newcastle, Canberra and Southern Cross universities provide a DBA online with local support for the foreign-delivery students. Other universities such as South Australia provided face-to-face teaching at local centres and remote support for thesis/dissertation supervision. Sarros, Willis and Hardie (2004) cautioned that claims of 'substantial face-to-face contact' can be misleading as the control for foreign DBAs comes from the Australian campus supplemented by supervisory visits to the Asian partners.

Deakin FoE uses intensive residential schools, telephone tutoring and online collaborative learning in their doctoral program to involve a 'mix' of interaction and independence, face-to-face and through communications media (Evans 2005). A range of listservs, web pages, research issues seminars and an online seminar program are used to promote communication between candidates and supervisors, in both social and academic forums. These resources are 'located' within the discussion or tutorial 'spaces' of normal forms of online education software and are asynchronous discussions facilitated by a staff member over a six-week period.

Both the USQ Faculties of Business and Education make resources available on metacourses to assist supervisors in guiding students on dissertation writing. Such online repositories ameliorate the discontinuity of access to supervisors (Love, 2001). Watts (2008, p.371) anticipate that more use will be made of 'E spaces' to communicate with external and on campus students simultaneously. Although USQ has doctoral metacourses, access to Wimba and other learning systems, resource repositories for doctoral students within Faculties and on the PhD site, these initiatives are not as coordinated as in the Graduate Virtual Research Environment (GVRE - Thomson & Allan, 2010). One element of the GVRE example that has emerged in USQ is the use of videos, but incorporating knowledge transfer from successful researchers via video clips has not yet been implemented.

The Communications survey as noted in the Method section is designed to clarify Faculty of Business and Faculty of Education doctoral students' expectations of learning support and the importance of characteristics of distance education in their program.

Method

Process - perspectives of external doctoral students: The authors designed a *Communications survey* to investigate the challenges experienced by external doctoral students. The initial Communications survey including the *Doctoral*

Student Connectedness Scale was presented to a university Community of Practice for supervisors. Some of the supervisors commented on this draft and a second draft was designed based on their feedback. The second Communications survey for doctoral students was presented to a focus group of researchers and supervisors of the School of Management and Marketing to further enhance its face validity and content validity. The scaling of sections of the Communications survey was critiqued, specific questions were revised and clarified and a question on students' phase in the doctoral program was added. A LTSU survey designer commented on the third draft of the Communications survey. Question Pro was selected as a survey delivery mechanism and the final Communications survey was placed online in January 2010. The sections in the *Communications survey* for doctoral students are a) what learning support did doctoral students expect when they enrolled in USQ, b) what are important characteristics of distance education in their program, c) what communication challenges emerge in doctoral distance education, d) what is the frequency of communication between candidate and supervisors, e) what is their satisfaction with meetings and frequency of communication, f) what is the most frequently used USQ communication media, g) what is the use of new USQ media of communication, h) what is their use of personal media of communication, i) doctoral students' need for connectedness and j) demographic characteristics : age, gender, Faculty (FoB, FoE), phase in the doctoral program.

Three hypotheses were tested namely that there are no significant differences between the students based on gender, faculty and phase in the doctoral program on any of the sections of the Communications survey.

Sample selection: The Deans of the Faculties of Business and Education gave approval to the authors to contact supervisors and doctoral students and USQ Ethics approval was obtained. The authors contacted the research managers in the Faculties of Business and Education and requested them to forward the invitation to participate to external doctoral students. The invitation stated the aims, the benefits of Communications survey completion to students and supervisors, assured participants that participation was voluntary and that their responses are kept confidential. The invitation to doctoral students to participate was sent out at the start of February 2010 and there was a gradual response after reminders were sent.

Process - perspectives of supervisors: The second sample consisted of supervisors from two faculties. Supervisors from one Faculty advised that there were sensitivities about survey completion and ethics approval and the invitation was again adapted to emphasize the required information. We designed an initial draft interview protocol to focus on issues of relevance to supervisors. More emphasis was placed on sourcing information from supervisors about resources and approaches to teaching and learning suitable to external doctoral students. We decided to select experienced supervisors who had supervised external doctoral students in Faculty of Business (FoB) and Faculty of Education (FoE). Due to work pressure we could only secure 14 interviews with a) seven FoB supervisors and b) seven FoE supervisors. We also requested supervisors to complete the Communications survey after it had been adapted for supervisors. The response rate from the supervisors have been disappointing (19 started the survey, 9 completed the survey – 47% response rate) despite requests and reminders.

Results

Sixty-two students started the *Communications survey* and 41 completed it (66% response rate). Fifty-eight percent of the respondents (N=41) were male and 42 percent female. Fifty-eight percent were from the Faculty of Business and 40 percent from the Faculty of Education (one student was from Engineering). Seventy-five percent were studying by distance, but the 25 percent who were studying on campus were retained. More than half (56%) were students studying from an international location (a few were international on campus students), whereas the rest were Australian external students (44%). The predominant age groups were 40 to 49 years (40%) or 30 – 39 years (36%) with the age group of 50 to 59 years also well represented (18%). There was only one young student (below 29 years) and one older student (above 60 years). One cohort of students was in their first year of study (32%), another cohort was already confirmed and writing their chapters (43%) and the rest had either submitted their dissertation or were making changes requested by examiners or had been admitted for graduation (25%).

The independent groups *t-tests* indicated that no significant differences were found in expectations of learning support, importance of characteristics of distance education in their program, communication challenges in doctoral distance education, frequency of communication between candidate and supervisors, satisfaction with meetings or

communication, use of communication media in USQ or use of personal media of communication. There are no significant differences between male and female students, or between the students of the two faculties. Therefore the null hypothesis of no gender, faculty or phase related differences in this cohort could be accepted. Thereafter a frequency analysis was conducted to search for subtle nuances in the perceptions of external doctoral students (see Tables 1 to 5). The responses in the ‘more important’ and ‘very important’ categories namely 4 and 5 on a five point scale will be addressed. Although there are only 9 supervisory responses, their responses in the same categories have been placed in the tables. Such results enable us to speculate about trends of possible differences in perspectives between doctoral students and supervisors, but cannot be generalized.

Incorporation of distance education technologies for learning support

In Table 1 the incorporation of typical distance education technologies as well as learning and teaching support by supervisors in the doctoral program are presented. Both agree that flexible access to learning materials as a core characteristic of distance programs is very important for external doctoral students (Dstudents 80%; supervisors 78%). However subtle differences emerge between the perceptions of doctoral students and their supervisors when the doctoral students seem to argue that dissertation materials and resources should be structured to be flexible to meet their individual learner needs (61%), whereas only 41 percent of these supervisors regard this as very important. In contrast the small cohort of supervisors seems to regard two other learning technology issues namely a mix of synchronous (e.g. Skype) and asynchronous (e.g. email) interaction with supervisors and/or peers and the right mixture of human and technology with inclusion of some face-to-face interaction as more important (78%) than the doctoral students (56% to 61%).

In my doctoral program ... is not important at all (1) to very important (5)	1	2	3	4	5	NA	Students 4 & 5	Supervisors 4 & 5
flexible access to study materials	0	2	7	7	73	10	80	78
face-to-face interaction with supervisors	15	12	22	15	22	15	37	56
a mix of synchronous (e.g. Skype) and asynchronous (e.g. email) interaction with supervisors and/or peers	2	7	22	39	17	12	56	78
the right mixture of human and technology with inclusion of some face-to-face interaction	5	10	12	34	27	12	61	78
dialogue between supervisors and doctoral students via electronic means	2	0	7	27	51	12	78	89
dissertation writing materials and resources that are more or less flexible to meet my individual learner needs	2	0	17	39	27	15	61	44
autonomy to determine my goals, learning experiences and evaluation of the doctoral experience	0	0	22	34	37	7	71	78
continued interest from the dissertation course leaders to motivate me to participate in discussions	2	7	17	27	34	12	61	78
audio and video content or applications via dissertation courses	2	15	37	15	9	27	24	22
direct interaction with dissertation course leaders or supervisors	5	0	17	22	39	17	61	89
opportunities to learn from or guide other dissertation students via online media	2	5	29	24	17	22	41	56
challenges to change my mindsets and to increase cognitive complexity	2	5	7	42	29	15	71	44
Access to a supervisor in my country of origin appointed by USQ	7	5	10	20	24	37	44	33

Table 1. Importance of characteristics of distance education in the doctoral programs (%)

With regard to contact with supervisors as learning support, there are more subtle differences. These supervisors regard direct interaction with supervisors and dissertation course leaders and dialogue with supervisors via electronic means (both at 89%) as more important than the doctoral students (61% and 78% respectively). A related

issue is that supervisors expect dissertation course leaders to engage doctoral students via discussions on the relevant discussion boards (78%) whereas fewer doctoral students expect this (61%). However, both doctoral students and supervisors expect that external doctoral students will have the autonomy to determine their goals and learning experiences in the doctoral program (71% and 78% respectively). Neither sample placed much importance on opportunities to learn from or guide other dissertations students via online media, incorporating audio and video content via dissertation courses or for the external doctoral students having access to a supervisor in their country of origin. A final difference is that the doctoral students expect to a greater extent than the supervisors that their mindsets will be challenged and to increase their cognitive complexity (71% and 44% respectively).

Experimentation with general and new communication media

In Table 2 the frequency of use of the general range of communication media available in the university is depicted. Both doctoral students and supervisors indicate that they most often use emails to communicate with each other. Both acknowledge that personal visits are used to maintain contact (Dstudents 34%; supervisors 22%). There is a difference between the doctoral students and these supervisors' perspectives about the use of phone calls (Dstudents 20%; supervisors 67%) and teleconferences (Dstudents 7%; supervisors 34%). There is a low use of dissertation study desks, dissertation workshops (Faculty of Business) and faculty online conferences (Faculty of Education).

Frequency (1 = not used at all to 5 = used very often)	1	2	3	4	5	NA	Students 4 & 5	Supervisors 4 & 5
emails	2	0	5	10	81	2	91	100
teleconferences	39	7	20	2	5	27	7	34
Phone calls	22	17	20	10	10	22	20	67
Personal visits	37	7	10	5	29	12	34	22
Dissertation study desk	46	15	7	0	2	29	2	11
Dissertation workshops	49	12	5	5	2	27	7	0
Faculty online conference	56	7	0	0	0	37	0	22
Other (please specify)	22	0	7	5	0	66	5	0

Table 2: The most frequently used communication methods used by doctoral students and supervisors (%)

Both sets of respondents were asked to what extent they experiment with new media of communication in the university (Table 3) during the doctoral program. The small cohort of supervisors indicates that they often use Skype (56%), communities of practice (22%) and Wimba (11%). In contrast the majority of doctoral students indicate that they have not encountered the use of such media by their supervisors.

Frequency (1 = not much to 5 = most often)	1	2	3	4	5	NA	Students 4 & 5	Supervisors 4 & 5
Wimba	46	2	2	0	0	49	0	11
Skype	46	5	5	0	2	42	2	56
Dissertation study desk	34	7	12	5	2	39	7	0
Faculty online conferences	39	5	7	0	0	49	0	0
Communities of practice	34	10	7	2	2	44	4	22
Second Life	42	5	2	0	0	52	0	0

Table 3: Experimentation with new media of communication (%)

There are also some differences in perception between doctoral students and these supervisors about the extent to which doctoral students use new types of personal media of communication. Doctoral students note that they often use Facebook (34%), YouTube (22%) and online communities (20%), while the supervisors believe that there is a much lower usage (Table 4).

Frequency (1 = not much to 5 = most often)	1	2	3	4	5	NA	Students 4 & 5	Supervisors 4 & 5
--	---	---	---	---	---	----	-------------------	----------------------

You Tube	32	7	10	15	10	27	25	22
Facebook	29	7	5	12	22	34	34	11
LinkedIn	44	12	5	7	5	27	12	22
Twitter	51	7	5	0	2	34	2	11
Online Communities	37	20	5	10	10	20	20	22

Table 4: Students' personal use of new communication media (%)

In contrast when the groups are asked if the new media of communication can be used in the doctoral program, most supervisors believe that all the new media of communication can be implemented, for example LinkedIn and online communities (67%) and YouTube (56%). In contrast many of the doctoral students noted that there was “not much” use or that it was not applicable (Table 5).

Frequency (1 = not much to 5 = most often)	1	2	3	4	5	NA	Students 4 & 5	Supervisors 4 & 5
You Tube	34	0	22	12	12	20	24	56
Facebook	37	5	10	15	12	22	27	44
LinkedIn	44	7	7	12	10	20	22	67
Twitter	46	7	12	5	7	22	12	44
Online Communities	20	5	17	32	10	17	42	67

Table 5: Perceived potential for new communication media use in doctoral program (%)

Subtle differences emerge between the perceptions of doctoral students and their supervisors with reference to the adaptation of distance learning materials, the mix of synchronous and asynchronous interaction, and the use of new media of communication in the university.

Transitioning between general and new communication media

The findings reflect the students' and supervisors' differing preferences for traditional communication media such as email as well as their diverse exposure to technologies such as Wimba and Skype. Watson (2009) concluded that a continuum exists of students who not only wish to have greater asynchronous text-based interaction but also more synchronous audio-visual interaction via for example Skype to those students who believe that synchronous audiovisual interaction should be not be part of distance education.

One interpretation for the differences could be that USQ supervisors have become reliant on standard asynchronous types of contact with their doctoral students such as email. Galvin (2004) and Harbon and England (2006) concluded that email will remain as standard communication media, but others indicate that more supervisors are experimenting with webcams or Skype (Watson 2009) for face-to face online interaction.

In this study there were subtle differences in perception about the use of phone contact and teleconferences with these supervisors indicating a higher frequency of use than what the doctoral students experienced. Watts (2008) confirm that supervisors should be careful to maintain a balance in their communication with their external doctoral students. If supervisors use a high frequency contact approach, it creates pressure for continuous measurable process on a mature age student who has other life or managerial responsibilities. However such an approach may be appropriate at the beginning or final stages of the dissertation process. She advises that email contact or phone contact every month may be more viable to assist external doctoral students to integrate their studies with their life priorities. Another contention (Watts 2008) is that the supervisor should take responsibility to initiate contact and that there should be a formal contracting phase to clarify expectations of roles and responsibilities of each party.

Supervisors expect dissertation course leaders to engage doctoral students via discussions on the relevant discussion boards, yet did expect such discussion boards or dissertation courses to incorporate audio and video content or provide opportunities for students to learn from each other. Both Albion (2006) and Watson (2009) recognize that the minimal discussion that occurs on e-communities or discussion boards occur mainly between student and

supervisors and occur relatively less between students. Albion (2006) recognized that USQ could configure an online community space to meet the learning needs for doctoral students but that both students and supervisors need to be taught how to effectively manage their communication through such spaces.

There is a contrast between supervisors' belief that new media of communication such as LinkedIn or YouTube can be used in the doctoral program, versus the view from doctoral students of less applicability. This could be a function of the students separating their doctoral studies from their social networks. Another explanation could be of supervisors and university not sufficiently demonstrating the relevance of such media for building research networks or dissemination of research.

Conclusion

As universities rely on more electronic communication and a diversity of new communication media to communicate with their students, research into the more effective use of such media in doctoral programs should be expanded. This study contributed by investigating the perspectives of external part-time doctoral students supplemented by the views of a small cohort of supervisors about their expectations and use of communication media in two Faculties.

The discrepancy in perception of current and future use of new media such as Facebook, YouTube, LinkedIn and online communities between supervisors and doctoral students needs to be addressed in further research. The university should investigate designing an effective online community space to meet the learning needs for doctoral students and supervisors. Both students and supervisors need to be taught how to effectively manage their communication through such spaces. More effective use of discussion boards, online communities of practice, research teams need to be created.

References

- Albion, P. R. (2006). Building momentum in an online doctoral studies community. In M. Kiley & G. Mullins (Eds.), *Quality in Postgraduate Research 2006: Knowledge Creation in Testing Times* (pp. 87-96). Adelaide: The Centre for Educational Development and Academic Methods, The Australian National University.
- Albion, P. R. (2009). Virtual Spaces for Teaching and Learning. In D. Gibson & Y. K. Baek (Eds.), *Digital Simulations for Improving Education: Learning Through Artificial Teaching Environments* (pp. 52-67). Hershey, PA: IGI Publishing.
- Albion, P.R. (2010). Higher presence communication technologies for doctoral supervision. LTSU Teaching Tips and presentation to supervisors' workshop, University of Southern Queensland, 21 July.
- Erwee, R., Albion, P. and Van der Laan, L. (2011). Connectedness needs of external doctoral students. Submitted for review to "Education 2011-2021: Global challenges and perspectives of blended and distance learning" ODLAA Summit at Darling Harbour, Sydney, 15-18 February, 2011.
- Erwee, R. (2004). Professional Doctorates and DBAs in Australia: Dilemmas and Opportunities to Innovate. *International Journal of Organisational Behaviour*, 7(8), 394-400.
- Evans, T. (2005). Crossing boundaries between learning and research: doctoral programs at a distance. Proceedings of the ODLAA conference, 1-7.
- Galvin, P. (2004). Success with off-shore DBAs: experiences with Hong Kong and Thailand. *International Journal of Organisational Behaviour*, 7(8), 431-439.
- Harbon, L., & England, N. (2006). The cultural practice of research higher degrees supervision over distance: a case in progress. *University of Sydney papers in TESOL*, 1, 87-107.
- Love, T. (2001). New directions in PhDs: online considerations.
- Sarros, J.C., Willis, R.J., & Hardie, T.T. (2004). The DBA in Australia and the Asia Pacific: Opportunities and challenges. *International Journal of Organisational Behaviour*, 7(8), 440-455.
- Thomson, C., & Allan, B. (2010). Supporting the learning and networked experiences of doctoral students. In Dirckinck-Holmfeld L, Hodgson V, Jones C, (Eds). Proceedings of the 7th International Conference on Networked Learning.

- Watson, S. (2009). Distance education students' attitudes towards increased online interaction : desired change or unwanted imposition? In *The Student Experience*, proceedings of the 32nd HERDSA annual conference, Darwin 6-9 July, 453-462.
- Watts, J.H. (2008). Challenges toward supervising part-time PhD students: towards student centred practice. *Teaching in Higher Education*, 13 (3), 369-373.
- Whitely, G. (2004). Preparing the supervisor and student for cross cultural supervision. *International Journal of Organisational Behaviour*, 7(6), 422-430.