13

Distance supervision

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Introduction

Supervising students is all about communicating feedback and mentoring the student during his/her study. This involves guidance and feedback on matters of personal, professional and educational development' in a specific context (Kilminster et al. 2007).

As a former PhD student and later postdoc who traveled and worked in several places worldwide while still being affiliated to the "mother university" in Copenhagen, I am interested in exploring the drawbacks and/or advantages of distance supervising. This study draws on my own experience, as researcher who has been the supervised and advised on distance in many circumstances. My reflections and considerations in relation to my personal long distance student-supervisor experience (including the time zone differences, ways of communicating) will be debated. I will also discuss the relation and distance supervising of a PhD student being located in Belgium, at the University of Antwerp, whom I have supervised in the years 2009 and 2010.

Overall, the project explores why and how should the students be encouraged to involve themselves in the project they work with, even when their supervisor is not physically close by. In this study, I follow several recommendations regarding to the deadlines deliveries, motivation of the student, and ways of interacting and social relations development. E-mail or spontaneous telephone meeting, live meetings, their length and outcomes are some of the means of communication that have been evaluated.

Project background and aim

During my PhD studies as well as later on I lived and worked in four other countries than Denmark (Canada, Switzerland, United States and Australia), where I have been affiliated to various research institutions. During this time, either as part of my PhD studies or part of my postdoctoral studies, I have been in contact with my PhD supervisor (later collaborator) for most of the time. Although in each of these places I had a "local supervisor" with whom I collaborated for specific aspects of the problems of interest, I and my supervisor in Denmark have always tried to be in close connection and to reciprocally update on the progress of research in order to attain the most effective outcome. This communication sends the updates both ways so we reach the most effective outcome. It was also meant to ensure that we both know the course of the project and the actions we will be taking further.

In the same note, during the last year I also engaged one of my former students from Denmark and current PhD student in Belgium in a side project of mine, which put myself in the position of "long distance supervisor". In this context I have analyzed what exactly should be followed when distance supervising, how to motivate and engage the student into a project run in parallel with his main PhD project and particularly how efficient and effective our professional relations have been.

Given this double experience, the aim of this project is to provide a reflection on my own experience and on the way I have adapted teaching/supervising methods to a long-distance situation.

Project rationale

In the long and maybe difficult path of a project development there is always need for a leading light as a reliable source of guidance. It is therefore needed to make sure that both the supervisor and the supervised have an understanding and common sense of how to approach all this guidance. It is true that the supervision can be exploited and can expand in several dimensions modeling a sort of deeper understanding and sense of orientation, but for all this to happen openness, flexibility and adjustments are needed. What are then the key points for improvement and the evaluation criteria in the whole process? Either as a student who maybe feels a relief or a disconnection when not being closely supervised, or as a supervisor who tries to

make the best out of his student's project, both parts deserve to be reflected upon.

In sum, based on the personal experience of being distance supervised and comparing it to the supervisor position, this project explores which are the general and the particular elements of distance supervision and which are the tools of maintaining such a relation to the best of it?

Material and methods

The following section distinguishes among five study/research periods. The first four involve the relationship between me and my supervisor when I was a PhD student in Copenhagen and postdoc in other research institutes, while the latter focuses on the supervision relation I between me and a PhD student in Antwerpen. Each period is briefly presented in terms of duration and communication patterns. A short discussion of the supervision relationship follows.

1. I, R.A., PhD student in the first year of studies. My supervisor, who initiated the PhD project. A group of two professors in Canada who proposed me to work in an overlapping project at their location in Truro, Nova Scotia.
   - Year: 2004
   - Time distance: 5 hours
   - Physical distance 5500 km
   - Duration: 6 weeks
2. I, R.A., freshly PhD graduate. My PhD supervisor, now collaborating in a new project. A professor at the University of Bern, Switzerland who accepted to work in a common project in his lab.
   - Year: 2007
   - Physical distance 1035 km
   - Duration: 4 months
3. I, R.A., recently awarded a postdoctoral grant. My PhD supervisor, now collaborating in my project. Supervised work at Oakland Children's Hospital, California, USA.
   - Year: 2009/2010
   - Time distance: 9 hours
   - Physical distance 8780 km
   - Duration: 7 months

4. I, R.A., second year of the main postdoctoral period. My PhD supervisor, collaborating in my project. Inspirational stay at University of Sydney, NSW, Australia.
   - Year: 2010/2011
   - Time distance: 10 hours
   - Physical distance 16000 km
   - Duration: 3 months
5. M.N.M., former student in Denmark, now PhD student at the University of Antwerpen, Belgium. I, R.A.,supervisor.
   - Year: 2010/2011
   - Time distance: none (when in Copenhagen), 10 hours (when in Sydney)
   - Physical distance: 730 km (when in CPH) and 16000 km (when in Sydney)
   - Duration: over 12 months

Methods: E-mail, telephone communication, online instant message tools (Skype)

Results

The results will be briefly summarized for each of the above mentioned cases.

1. In year 2004, the availability of affordable telephone communication was limited; therefore most of the communication was based on e-mails. The ideas I was sharing with the local supervisors in Canada was later transmitted to and discussed with my supervisor via e-mail. The frequency of emails was roughly once a week with an average of half a page. As I have all the communication archived, I was able to evaluate the main elements of the discussions. The main focus was on the progress of the project and its status. Given that it was the first year of my PhD, the email discussions were very formal and very little of private life was shared with the supervisor.

2. My stay in Switzerland in 2007 was longer and therefore more went on. As a newly PhD graduate I was full of enthusiasm both for the new projects I involved into and for the fact that I was working with a new supervisor in a new place. The affordable landline rates enabled an easy communication with the supervisor in Denmark, whom I was calling any

time there were news in the project. Checking the archives reveals that only nine e-mails over a period of 4 months are recorded and they all contain attachments and paper documents which had to be shared. VOIP landline to landline system was most frequently used both within working hours, and outside them, when contacting my supervisor home.

3. My stay in California, at a non-academic institution was of a different texture and my supervisor here has become a collaborator whose contributions have been listened to and respected. The time difference in this situation made the telephone meetings more organized and in most of the cases I was calling him (via Skype) on his local number at home. Archive indicates 10 e-mails over 7 months and all of them have attachments and discussions over papers or analysis of sequences in my project.

4. Australia has been a challenge by default as the time difference proved to be the most inconvenient from all points of view and communication was rather scarce and limited to very important aspects and problems. Summarizing the experiences derived from the described situations I could say that I have learned a lot about how distance supervising works and how could be optimized further. It had been extremely helpful to have my supervisor on the other side of the world as much as I always enjoyed telling him good news about the development of the project. Less good news was also updated and I always felt supported and encouraged in case of partial failures. Although the project was supervised locally, I always tended to consider the input from the distant supervisor in a very realistic manner.

5. As a supervisor, I indicated and gave the free feeling of being addressed at any time in all sorts of issues. The student in Belgium, former student in Denmark was very familiar with all the online communication tools and in this respect I confess that I learned a lot from him. Nevertheless, we became socially very communicative and close. He has visited my department for a week and worked together with me, and was accommodated at my house. Later on, as the project evolved I paid a visit to his institute not only to discuss closely the project, but also to realize and picture better the environment he is working in. He could call me freely at any time, both on my work and private numbers and we could develop and discuss without any difficulties all the aspects of the project. I always tried to motivate him by putting in perspective the publications we shall produce together and the rewarding elements of working together in a completely different field than his (animal genetics vs plant physiology). The relation evolved very positively and we still work close together to anything in our common interest. As resulting from the questionnaire (Appendix A) to which

I asked him to honestly answer, all the aspects were fairly satisfactory in this distance supervision. Together with my personal thoughts from both perspectives I should resume that the answers in my student's evaluation (Appendix 1) are very much in the line with my personal thoughts. It is indeed rewarding rather than disturbing to be available for the student most of the time and give him the freedom of freely contacting and addressing you as in these cases. There can be practically no differences between local supervision and distance supervision as most if not all of the issues, discussions, constructions can be reliably and easily addressed via telephone or e-mail.

Tools for online supervision

When supervision of students becomes more difficult because of distance it can easily decrease the quality of supervision. Supervising and following students working abroad for can be a difficult task. Especially with time differences at hand, supervision can be delicate. It is very probable that students studying abroad are in a sense forgotten. They are in the hands of teachers in other educational institutes or internship organizations and just need to make sure they come home with enough credits to resume their study program. Therefore, to be involved with your student and maintain a high quality supervising standard, there are options to supervise your students learning process with online tools.

There are many advisory tools online nowadays, and they can be consulted when deciding (needing) to supervise from distance (e.g. http://supervising-distance-learning.wikispaces.com/Home+%28overview%29). In function of their main role, the tools can be grouped in three categories:

1. Communication
2. Collaborative Knowledge Building
3. Document Sharing

Figure 13.1 below presents different tools and their use in specific settings, adapted specially for distance supervision.

Using teleconference makes is possible to synchronically supervise and communicate with the student in real time online using headphones or a telephone connected via a VOIP service (e.g. Nonoh Voip). In contrast with e-mail, you can feel and hear how much the student understand, and is less subjected to misinterpretation. It benefits the teacher as much as the student.

Using instant messages, which slightly overlap with the teleconference tool, is the best possible way to have the student ask instant questions and have teachers answer them, without elaborating. I consider that is a tool which is helpful supervising students who study or do an internship. This method would be available in almost all virtual learning environments.

Educational setting	Method	Tool
1.Communication - Student abroad - Instant answering student questions	Teleconference	VOIP and other online tools (e.g. Skype)
2. Knowledge Building - Student discussion or debate - Providing feed-back on questions	Instant messages	Skype Window Live Messenger
3. Document Sharing - Student supervision during projects and assignments - Documents sharing	Document sharing & collaboration	E-mail, webtransfer Several online document sharing applications are available, for example (e.g. Webshare. Dropbox)

Fig. 13.1. Tools for distance supervision. Source: http://supervising-distance-learning.wikispaces.com/Home+%28overview%29.

Document Sharing could be divided in large documents sharing and small documents sharing. In exchanging basic data and results e-mail can easily be accessed and read. The way the data is presented is a free choice of the student/supervisor. The most common way is where the student shares information via e-mail caring a power point file. Of course this cannot supply large data transfer such sequenced data (larger than 15 Mb) or large pictures, which are better served by tools such as described in Figure 13.2.

As stated above, a visit to the student's work environment is a good way to get a real feel for what the student does and the challenges he may face.

It also gives the supervisor an opportunity to get to know the student on a more significant level, to meet the colleagues with whom he interacts.

If possible, it is also important to develop a personal connection, socialize and try to know and understand him as a person.

In my particular case, we shared things about ourselves, which enabled us establishing a connection between the two of us. What I did was to let my student know that I want to keep the lines of communication open. He could call or e-mail me at any time with questions, concerns or just news and updates about what is going on with the project. I also found out his preferred means of communication – telephone, rarely e-mail. So, I always tried to respect his preference when communicating with him. I also think that is important to communicate with the student often- about the project but also other matters that you could share with the student around the water cooler if he were located in your office. The supervisor should stay approachable and invite the student to reciprocate if he is comfortable in doing so. He can also call just to ask how things are going from time to time and to ask the student if he has any concerns. My communication with the student was set following some elementary and not necessarily professional methodology but it aimed at gaining some information in relation to what and how can be improved in distance supervising approaches. My interpretation was maybe subjective and not really following some standards but I incline to believe that the outcome has been very informative and very effective.

When the need to share documents (large documents, pictures, manuscripts, which cannot be sent as attachments) arises, one can choose among the available free tools, which have different features to satisfy various needs elated to privacy, speed, interactivity. Figure 13.2 reviews the most common such tools.

Conclusions

In my particular case, we shared things about ourselves, which allowed us to connect easily. What I did was to let my student know that I want to keep the lines of communication open. He could call or e-mail me at any time with questions, concerns or just news and updates about what is going on with the project. I also found out his preferred means of communication – telephone, rarely e-mail. So, I always tried to respect his preference when communicating with him. I also think that is important to communicate with the student often- about the project but also other matters that you

Tool	Features	Fits following needs
Google Docs	- basic tools for creating documents and spreadsheets - Platform independent	- small projects - good internet connection needed - students use computers with different platforms
Dropbox	- Online storage space	- able to share all possible types of files
	- possibility to share folder - instant synchronization of changed documents - documents can also be accessed via the web	- all files need to be stored in one folder

Fig. 13.2. Tools for document transmission. Source: http://supervising-distance-learning.wikispaces.com/Home+%28overview%29.

could share with the student around the water cooler if he were located in your office. The supervisor should stay approachable and invite the student to reciprocate, if he is comfortable in doing so. He can also call just to ask how things are going from time to time and to ask the student if he has any concerns. My communication with the student was set following some elementary and not necessarily professional methodology but it aimed at gaining some information in relation to what and how can be improved in distance supervising approaches. My interpretation was maybe subjective and not really following some standards but I incline to believe that the outcome has been very informative and very effective.

Students' involvement in a distance supervision model is related to the relevance of the topic with regard to his studies, science field or future job and career. Contributions to his curriculum vitae are also an important aspect in generating enthusiasm and motivating further the in-time deliveries of the data.

In the same line, the most motivating aspect for a student is to see the utility of the project he is engaged in and the appreciation he gets from his "distance supervisor". As method, when a basic course is being interspersed with practical examples, the students react in a much more participatory way. This is obviously expressed by the students when talking about their current bachelor project and courses with their practical approaches and implications. Thus motivation itself is related to the relevance of the material in relation to their studies/field/future career. In this sense, distance supervision should be geared in such a way as to maintain focus not only

on the success of the project per se, but also on the motivation of student involved in the project.

A Questionnaire

Supervisor (R.A.) / supervised (M.M.)

1. R.A. What drove you into running in parallel a project supervised from Denmark?

M.M. The trust I had in the people from the university in Denmark in which more than 10 years ago I had the chance to meet. So when the opportunity rose I had no hesitation to run a parallel project.

2. R.A. Which are the most motivating factors in involving yourself in such a project, given that is not on your regular PhD program.

M.M. Mainly the opportunity to work in the different filed than my own and possibilities to participate in publications, other than in my field is good motivation factors for collaboration

3. R.A. Which are the most challenging situations when working on a project supervised from the distance?

M.M. The difficulties to adapt to the project when knowledge is limited, but other than that maybe the distance between the two institutions could be challenging.

4. R.A. How easy or difficult did you find the communication over the telephone?

M.M. I found not real problem in communication over the telephone or other means such as Skype or email. In fact, I believe this is one of the factors that made this collaboration possible.

5. R.A. Which way of communicating you find the most difficult way of communication: E-mail, instant messaging, or telephone?

M.M. I believe is the e-mail, due to the fact that does not allow live conversations

6. R.A. When delivering data to me, how stressful is a certain deadline or an excessive pressure from me?

M.M. The true though is that there is a degree of stress in any deadline even with colloquia next door or with the supervisor from Denmark.

7. R.A. Would physically closer supervision and discussions give you more insight compared to distance supervision?

M.M. Not really, since any question or any problems one may face during the running of the project can be simply solved by picking up the phone and calling over, or even chatting through Skype. Sometimes was even easier, as I had the liberty to call anytime.

8. R.A. How quick do you feel the need to deliver obtained data and how do you tend to do this?

M.M. Sometimes is important to have the data delivered as soon as it comes out. However, I was not under pressure to deliver the data, since one has to take care and ensure the quality of the final product. This involves different levels of thinking or troubleshooting.

9. R.A. Would you prefer your main PhD supervisor to be out of office and supervise you from the distance?

M.M. To be honest I will neither prefer nor dislike if he had supervised me from the distance.

10. R.A. What improvements would you make in the distance communication?

M.M. At the given moment I don't think is any particular aspect to be improved.