Peer reflection within the doctoral student process:
A community of practice perspective

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Abstract

This research study uses the notion of public reflection as a means of understanding relationships among doctoral students within academic departments. The aim of this study was to explore how PhD student interactions evolve through time, and how they help them to cope with their study-related obligations. Five doctoral students were researched for a period of seventeen months through an ethnographic study and longitudinal in-depth interviews. I played a dual role in this study, as a researcher and as a complete participant. The findings suggested that the participating PhD students created their own community of practice, which through time was bringing these individuals closer to each other. The PhD students went through a process during which they progressively shaped the spaces of their interaction and established strong relationships and trust between them. This process led to a transformation in the communication between them. While initially they were reserved, limiting their communication around daily life matters, they gradually entered a stage that were discussing common PhD issues in-depth, exchanging important information regarding their studies. The PhD students eventually entered a stage of peer reflection, being ready to criticise each other, for the purpose of offering substantial help around PhD work and personal matters.

Key words: Peer relationships, communities of practice, public reflection, peer communication, peer reflection.
Introduction

Studies in the field of higher education that focus on doctoral students tend to research mainly the supervisory relationship (Kam, 1997; Delamont, Atkinson and Parry, 1997; 2000) and formal doctoral student activities, such as PhD vivas (Jackson and Tinkler, 2001; Park, 2003) and academic activities (McAlpine, Jazvac-Martek and Hopwood, 2009; Hopwood, 2010). They tend to disregard, though, the effect that peer relationships have on PhD students’ learning experience (Lewis, 1984; Jacobi, 1991; Erickson et al. 2009; Jazvac-Martek, 2009) whilst carrying out their studies.

The focus of my study is doctoral student relationships that are created in departmental communities. I use the notion of public reflection (Raelin, 2001; Nicolini et al. 2004) that acknowledges the collective and critical character of reflection. This notion is used as a means of viewing peer relationships among doctoral students, which may be a potential source of learning and development throughout the PhD process. The aim of the present study is to understand how PhD student interactions evolve through time, and how do they help PhD students to cope with their study-related obligations.

Terms used in this research study

In this research study I use the term peer relationships among PhD students, to denote interactions, activities and events among doctoral students which take place naturally and are not formally organised by an educational institution. The notion of communities of practice refers to groups of people (in this case doctoral students) who share the same practice and learn how to conduct their PhD studies more effectively through regular interaction (Lave and Wenger, 1991). In the context of this study, a community of practice refers to a departmental community of practice. This community represents a space where PhD students establish and expand, negotiate and share their own beliefs, ideas, problems, dilemmas and ways of understanding the world. Peer communication denotes discussions among PhD students around issues related to PhD work. Peer reflection is a “vehicle” that allows a group of PhD
students to reflect and openly discuss matters related to their PhD journey, often in a critical manner. This reflection may tackle issues relevant to their PhD work and everyday personal problems. Peer reflection is viewed under the notion of public reflection, which has a public character and allows group members to reflect critically in the presence of their colleagues on a range of issues relevant to everyday practice (Raelin, 2001; Nicolini et al. 2004).

**Literature review: Community of practice and doctoral student learning**

Literature in higher education encompasses several studies around the notion of community of practice. Researchers draw upon the notion of community of practice which was developed by Lave and Wenger (1991) and Wenger (1998). Green (2005) built on Wenger's (1998) community of practice and introduced the notion of ‘spaces of influence’. ‘Spaces of influence’ are essential as they refer to opportunities in which the influence of other individual makes possible learning (Green, 2005). Ladyshewsky and Gardner (2008), in turn, studied novice practitioners. The community of practice created by the researchers allowed investigating how these novices developed their professionalism through peer assisted learning using information communication technology. McDonald et al. (2008) described experiences of faculty members through this notion shedding light on the way they shared their stories about collegial support, fellowship, inspirations and problem-solving. Boud and Lee (2005) underlined that peer learning within community of practice is a way how to view research in education. The aforementioned studies are vital as they refer to higher education field and they provide understanding of how the notion of communities of practice (Lave and Wenger, 1991; Wenger, 1998) takes place within the doctoral studies.

Research in the field provides also links between the notion of community of practice and doctoral student learning. The notion of community of practice stems from the work of Lave and Wenger (1991) and their conceptualisation of learning as a situated activity. In explaining this, Lave and Wenger (1991), introduced a process they called legitimate peripheral participation (LPP). LPP
signifies the participation of a learner in a community of practitioners, where the mastery of knowledge and skills involve a newcomer moving towards full participation in the socio cultural practices of a community. LPP encompasses relations between newcomers and old-comers, and activities, identities, and artefacts of a community of knowledge and practice. It involves a process by which a newcomer progressively becomes part of a community of practice (Lave and Wenger, 1991).

Kiley (2005) argued that one of the very essential communities in universities is the doctoral student research community. Boud and Lee (2005) explained that research students’ learning can be developed through community of practice where peer learning represents a tool. This tool assists in describing and developing awareness of the leaning capital available to these students. The authors argued that even wealthy surroundings around research students are not enough; hence a new dialogue is needed as these students can exploit opportunities that are accessible.

Brooks et al. (2004), revealed the importance of online communities of practice among doctoral students. Rosenbaum et al. (2007), in a study among medical doctoral students, argued that learning communities of doctoral students are important within the PhD process since they facilitate a positive learning atmosphere and build stronger interaction among doctoral students. The doctoral research community helps doctoral students to learn through socialisation and enculturement (into the specific community), and such an engagement facilitates the growth of necessary skills, knowledge and performance (Kiley, 2005). Members of doctoral research communities have higher possibilities to complete their doctoral degrees on time because they are actively engaged with other researchers within their community (Kiley, 2005). Using this perspective, doctoral student communities within universities (Kiley, 2005) are seen as critical in helping doctoral students to form their academic/ scholar identities, through social interaction (Jazvac-Martek, 2009).

Overall, community of practice is an essential space as it provides professional support, communication and ongoing dialogue, trust, professional
development, strategic thinking and action towards its members (Ladyshewsky and Gardner, 2008). At the same time, it offers likelihood for insight which supports uniqueness and variations among members’s practices (Green, 2005).

Public reflection within doctoral student communities

The sense of reflection is often limited within a private space. It often refers to the introspection of an individual, characterised by personal problem solving. This individualistic practice of reflection, works against reflection’s ability to produce major learning and change, and one that goes beyond the individual (Raelin, 2001; Vince, 2002; Reynolds & Vince, 2004). For this purpose, researchers recognise the need to study reflection at the group level and focus on collective reflection of people in groups (Vince, 2002; Reynolds & Vince, 2004). Reflection can have this collective character in the case that it becomes public (Raelin, 2001).

Public reflection, according to Raelin (2001), has a critical character and occurs in a group of individuals who are dedicated to the experience in questioning and challenging each other. Public reflection goes hand-to-hand with learning dialogues apparent in a group of individuals, such as a peer group (Raelin, 2001).

Researchers in the educational field tend to use the notion of reflection, as part of an educator’s practice. Thus, studies tend to produce insight as to how practitioners can use reflection to improve their teaching practice. Many books have prescriptive character and focus on suggestions towards educators for the effective use of reflection during teaching (Boud and Walker, 1993).

The notion of public reflection was never studied within the context of higher education. This would potentially explain the collective reflection that takes place as part of everyday student interaction. Acknowledging this gap, this study draws upon the notion of community of practice to explain how public reflection in the course of PhD student interaction can potentially foster
collective learning of doctoral students. Little is known as to how doctoral students’ relationships generate learning among peers. Public reflection and its capacity to bring doctoral student members, of the same community of practice, at a stage that they reflect in the presence of others and question existing practices, can be a way forward in explaining the occurrence of learning within a doctoral students’ community of practice. A peer group that is common within higher education is one composed by doctoral students. Public reflection can potentially help explaining how PhD student relationships can help individual students and their community as a whole to acquire knowledge that is essential for coping effectively with their activities.

**Research methods:**

I generated data through a qualitative longitudinal research and the use of multiple methods, such as ethnographic study via observation and field notes and in-depth interviews. My aim was to see how PhD student relationships change through time and how students reflect upon these relationships.

The research study took place at the Faculty of Arts and Social Sciences (FASS). The social science departments belong to soft disciplines (Becher and Trowler, 2001), which makes the PhD often an isolated and individual process. Doctoral students from soft social science disciplines work on their PhD thesis alone and they carry out their research study by themselves which may often make them feel isolated or depressed (Phillips and Pugh, 2005; Churchill and Sanders, 2007). The lack of these formally organised activities in social science disciplines that can bring students closer to each other creates a challenging environment for the study of relationships among PhD students that occur naturally and can support PhD students throughout their studies.

The unit of analysis was a specific academic community at Lancaster University, UK, which involves full-time doctoral students (traditional route). An academic department, in this case, was an appropriate context for the
generation and analysis of data under the perspective of communities of practice.

The research study took place between November 2009 and March 2011 (in total 17 months) and I conducted in-depth interviews at the beginning, middle and end of the research period. In total, I carried out 15 in-depth interviews with five female PhD students (see table 1). One of the research participants was from the UK, one from Europe and three were overseas PhD students. I played a dual role in this study, as a researcher and complete participant. I was also a PhD student, engaged in the particular peer group that was researched in the context of this study.

Table 1. Research participants’s pseudonyms and short description

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myria</td>
<td>In the beginning of the research study she just entered her second year. In the end of the research study she was ready to submit her thesis.</td>
</tr>
<tr>
<td>Zina</td>
<td>In the beginning of the research study she just entered her second year. In the end of the research study she was already a doctorate.</td>
</tr>
<tr>
<td>Athina</td>
<td>In the beginning of the research study she just entered her first year. In the end of the research study she was at the end of her second year.</td>
</tr>
<tr>
<td>Hara</td>
<td>In the beginning of the research study she just entered her second year. In the end of the research study she was at the end of her second year.</td>
</tr>
<tr>
<td>Helen</td>
<td>A researcher and complete participant. In the beginning of the research study she just entered her first year. In the end of the research study she was at the end of her second year.</td>
</tr>
</tbody>
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I used an interpretive approach (Storey, 2007) to data analysis. I attempted to present data in a meaningful manner, looking for relevant patterns in the data generated.

Given my researcher-participant role, I have attempted to analyse my data in a pertinent manner. In the analysis, I am using first person plural (i.e. ‘we’ and ‘us’) instead of referring to the participating PhD students and myself in the third person. Although this may introduce more subjectivity in data analysis, this was done for giving a better sense of the dynamism that was evident in the interactions among PhD students. However in the discussion part I am
using a third person, referring to the ‘participating PhD students’ as a means of helping readers to comprehend the findings.

Findings:

Reflection within the Community: A process

Peer Communication: The start of interaction

The findings from my research study suggest that the spaces where PhD students work on a daily basis seem to be vital as they foster discussion among them. Our spaces were our offices, corridor, meeting rooms and departmental open places. At the very beginning our discussions were related to daily life only. After some time we understood that we have many common things to talk about and we were often sitting in one of our offices and loudly talked about different issues. We were discussing with other PhD colleagues basic and simple matters from our PhD work. We used to communicate the progress of our work, the number of words that we wrote, the way we managed to work with atlas.ti or endnote, and the books we had been reading at that time.

Athina was coming to her office every day usually from nine o’clock morning. She could work until late if she did not need to pick her children from school. She was sharing an office with her two mates Zina and myself. For Athina her office was the space where she could talk and share things related to her PhD, since at home she was a mother and did not have time to think about her work. During our interview Athina expressed: “We discuss about our work together with my PhD colleagues. For example, Hara and Myria are already in a stage of analysing their data and I am still struggling how to organise my data. Talking to them also helps me to understand that this is the way how to organise my data. Sometimes talking about the research with my PhD colleagues can be very helpful when you exchange references, like this is the book you have to read, this is the journal you have to get.”
The observations let me understand that the spaces actually brought us together and we established through time strong relationships among each other. As we were feeling more and more familiar with each other we were engaging ourselves in every day “information transfer”. Our relationships created an unusual indebtedness among us and we were more than willing to share our knowledge and experiences. We were treating each other as best friends, blending our learning together, and drawing upon our experience to help one other another in dealing with known problems and complexities. One day while all of us were sitting in an office, Hara was talking about a special programme called atlas.ti. She learned to work with this programme alone as she was following online courses. Zina asked Hara whether she could teach her how to work with this programme and Hara said: “I will do this with my pleasure my friend.” Hara was feeling committed to her PhD colleagues and gladly offered her knowledge.

Further, while Myria was preparing her chapter about ethical issues she decided that she would like to do a presentation for her PhD colleagues. She wanted to share information about this specific matter, since she knew that it was difficult to struggle with ethics while doing a research study. Myria said about this: “It makes me happy if I can help. If I can impact any of my knowledge that I have learned in past three years to my colleagues, if I can save them a bit of time that makes me happy I guess.”

Zina was not a talkative person around people she did not know well. For example among other PhD students she was very careful what to say about her PhD work and her self. For her was essential distributing her knowledge and skills among precious people. These precious people were Myria, Hara, Athina and myself as she spent some time with us and became familiar with us. Zina expressed: “I like sharing too much and when I feel that something is very important and everybody that I value needs to know this specific thing, so I want to share. My personality is like that, when I learn that people around me
that I value need to know something I just want to share my knowledge with them. I say, look, look you need to be careful about this.”

The observations and interviews let me understand that the more our relationships were developed through time the more were encouraged to get engage into deeper public talk. Through daily interactions and doing things together we learned each other better. We understood that we could offer to the precious friends our precious knowledge and information we had acquired. It looked like we assigned high significance and value to each other. Therefore we had the need to publicly share between us what we had “collected” (e.g. knowledge and skills) while doing our PhDs. We wanted to present, inform, suggest and contribute to each others’ knowledge.

Moving towards Peer Reflection

The interviews and observations helped me to understand that trust among us was fostered mostly by the relationships that were moving beyond our PhD related interactions. We were not only passing PhD-related information to each other but we were also communicating our personal matters. Our relationships had a reach beyond the PhD and we built strong ties between us. Hara expressed: “We also talk about other personal things, like our family and children. I talk a lot about my family and my children. I think that this is very important in order to remind us that there are other things in our life not only the PhD.”

It was just before my confirmation panel, I was worried and afraid and I was talking about my feelings to my PhD colleagues. Myria tried to support me and she unveiled to me a secret about her own “confirmation panel trauma”. Myria acted in that way, thus I could feel better about my confirmation panel and erase all my worries. Myria told to me: “I talked to you last week about my confirmation panel. I told you my experience because I had really bad experience.” Myria revealed what happened during her confirmation panel not only to me but she talked about this in front of all her PhD colleagues (Zina, Hara, Athina and me). She trusted us and she was sure that we will not say
anything to anybody about this specific issue. The research study suggests that trust spread among us nurtured us into taboo-free open discussions within our peer group. In the presence of our precious PhD colleagues we were ready to reflect on various issues relevant to our everyday PhD life.

It seems that the trust that was developed among us allowed us to share different problems and offer suggestions to each other. We were ready, more than ever, to discuss our fears and concerns openly in our group. We were feeling ready to go beyond the mere exchange of information. We arrived at a stage that we felt that we should be more critical to each other, for the purpose of helping each other tackle a range of complexities and challenges that could even have a reach beyond the PhD. Below is a part from observation notes that exemplifies this:

“One day Athina wanted to discuss with us her research proposal, especially research questions. Zina and Hara were the one who tried to help with Athina’s problem, since they were more experienced PhD students than me and Athina. They suggested to Athina how to change her research questions, so the reader could understand what she wants to achieve through her research questions. Zina argued that Athina has two almost the same questions and she has to change them. Zina is very strict during our meetings. She is asking all the time questions like: ‘clarify’, ‘what do you mean?’, ‘you did not explain’, etc. Hara, also played significant role today, because, Hara’s and Athina’s research topics are very similar. Hara even said to Athina: ‘My dear, I strictly do not agree with your opinion and if I would not try to understand your stand point we could have a very strong disagreement here’. Today, Myria joined us and Athina wanted her to explain psychological aspect of childhood. Athina was writing everything down, so she could rework her paper and submit to her supervisor. She was very happy that we came up with many different suggestions for her research questions. (08.06.2010, Wednesday)”

Athina trusted us and she was sure that we would not sit quietly and say: ‘O, Athina, your paper is a perfect and you do not need to change anything.’ We
were sometimes reacting in an opposite direction and building critics, offering suggestions and trying to understand her way of thinking. Athina during our second interview which took place after this meeting expressed: “Our critiques are very well constructed and helpful for a colleague who needs feedback.”

Discussion: Conceptualising Reflection as a Process

The findings from this research study bring to light a process of how peer reflection occurs in every day activities, events and interaction among PhD students (see Figure 1). The PhD students as they were practicing their PhD work in their spaces (e.g. offices, meeting rooms, corridor and departmental open place) developed their own community of practice. Thought time as they learned each other they established relationships and trust among each other. Spaces, human relationships and trust, therefore, were important prerequisites in fostering peer reflection. The PhD students, before reaching the stage where they practiced peer reflection, went through a transformation process. This transformation process allowed them to experience peer communication and deep public talk.

The findings of the present research suggest that peer communication is the first stage towards peer reflection and includes discussions among PhD students around PhD related issues. The PhD students as they followed their PhD process developed their own community. The five PhD students did not know that they could become members of a community. They had their own families, friends and different personal problems. They had, though, one matter in common, which was the fact that all were embedded in a PhD process. Research in the field acknowledges that individuals become members of communities of practice without planning to do it and their membership, most of the time, occurs unexpectedly (Wenger, 1998). While the PhD students were shaping their community they were also creating their spaces. The PhD students started constructing different practices as they communicated the progress of their work, the number of words that they wrote, the way they managed to work with atlas.ti or endnote, and the books they had been reading at that time. These were the spaces that were
constructed by members of this community, which were stemming from the diversity of various practices that students themselves were engaged within (Wenger, 2006).

The development of a community and the “creation” of the spaces allowed the PhD students to shake hands and begin with peer communication. As PhD students were developing their respective community, it seems that they had progressively entered a stage of shared understanding, recognising what is appropriate and important to communicate and how to communicate it in a practical manner (Wenger, 1998). Communication had been the initial form of interchange of different ideas and thoughts between these students (Hoben, 1954), allowing them to share valuable information (Berelson and Steiner, 1964). At the beginning, the PhD students used to discuss issues relevant to daily life only. As they spent more time together they recognised that they shared a common understanding of the PhD process. It was throughout peer communication that the PhD students transformed their abstract discussions discovering common understanding and interests around the PhD process. Existing literature does not refer to PhD students’s communication in a considerable extent, ignoring the evolutionary aspects of communication between PhD students in the course of the PhD process.

As the PhD students became familiar with each other they developed closer personal relationships between them. They have managed to transform the relationships that they established within the academic context into strong friendship. The field of higher education facilitates an explicit differentiation between relationships that PhD students establish between them within the academic arena (e.g. relationship that relate to research, thesis, etc.) and the personal arena (e.g. relationships surrounded by family, friends, etc.) (Hopwood, 2010). The findings suggest that these contexts may be interlinked, since PhD students may eventually become good friends with some of their PhD colleagues. The environment where PhD students are surrounded by their colleagues is one of the most essential factors influencing the successful completion of the PhD process and positive doctoral experience (Lowitts, 2005). Understanding this dimension in the presence
also of close personal relations, such as friendship ties, between PhD students may add more in terms of understanding the dynamics of PhD student interaction and communication.

The strong personal relationships among the PhD students eventually led in intensive public talk between them, which was the second stage of their peer reflection. During public talks the PhD students encouraged “information transfer” between them and acted as “supportive engines” in the course of their PhD process. The PhD students were not acting only as information resources but they also provided support to each other when facing personal problems. Peer support is essential in the PhD process since it influences completion rates and time to degree (Pauley, Cunningham and Toth, 1999; Ferrer de Valero, 2001). This (informal) interaction that was observed among PhD students was seen as an important platform, not only for the exchange of valuable information between students but also the encouragement that they were capable of providing to each other (Gardner, 2007).

Progressively, the PhD students built trust as their relationships reached beyond the PhD process and they developed strong ties between them. The PhD students did not enter this state of mutual trust during the peer communication or deep public talk. It was after cultivating their interaction and communication for a period of time that they eventually reach this stage (Dwyer, 2007). Trust among the PhD students was, therefore, built much later from their initial communication. Trust took place when the PhD students developed confidence and certainty among each other’s reliability and honesty (Nicholson, Compeau and Sethi, 2001). Thus, the PhD students eventually entered a stage of peer reflection where they felt ready to discuss their fears, concerns and different problems and become critical to each other (Reynolds, 1998; Raelin, 2001; Vince, 2002; Nicolini et al, 2004). This evolved, again, as a need to support each other. Peer reflection seems to be a “vehicle” that allows a group of PhD students to reflect and openly discuss matters related to their PhD journey, which may tackle issues relevant to their PhD work and every day personal problems.
Figure 1. Timeline of Peer Reflection

- **Start of peer group**
  - Developing a community
    - Creation of spaces
  - Cultivation of Human relationships

- **Peer communication**
  - Discussions relevant to daily life only
  - Acknowledgement of common understanding/interests around the PhD process

- **Deep Public Talk**
  - Relationships become "Information Transfer" and "Supportive Engines" in the course of the PhD process
  - Trust is built

- **Peer reflection**
  - Relationships have a reach beyond the PhD – Strong ties are built
  - Peer members feel ready to discuss their fears/concerns openly in the group

**17 months of observations and in-depth interviews**
Conclusion:

The focus of this research study was relationships within a particular community of doctoral students from a UK-based academic institution. The aim of this study was to understand how PhD student interactions evolve through time, and how they help PhD students to cope with their study-related obligations.

The findings from this research study unveiled a process of how peer reflection takes place in the course of every day activities, events and interactions among PhD students (see Figure 1). The participating PhD students created their own community of practice and thought time they established relationships and trust among each other. The spaces, in which they tended to interact, as well as the positive relationships and trust that were nurtured amongst them were important prerequisites in fostering peer reflection.

PhD students before accessing the stage where they could practice peer reflection, went through a transformation process which allowed them to experience peer communication and deep public talk. The research study suggests that peer communication is the initial stage towards the peer reflection. During this stage the PhD students started to learn each other, explored the spaces of their interaction and initiated discussions on everyday life and simple matters around PhD work. Through time, and as they kept their interaction, they came closer to each other, acknowledged their spaces, and familiarised themselves with one another. This was the stage where the PhD students engaged themselves in deep public talk, facilitating the sharing of important information around PhD work and providing personal support to each other. Progressively and as they interacted more, the PhD students built trust among each other, and entered a stage of peer reflection. Peer reflection allowed these students to reflect and openly and discuss matters related to their PhD journey, often in a critical manner. This reflection was helping them tackle critically not only issues relevant to their PhD work, but also every day personal problems.

This study touches a hidden dimension of the doctoral student process, since it explains how peer communication emerges and evolves in every day PhD
students’ activities, events and interactions. It pursues contributions to the field of educational research by shedding light on the way that peer interactions nurture a climate where doctoral students feel safe to reflect critically on their PhD work. The findings emphasise the importance of this criticality in helping students to cope effectively with their PhD journey.

Through this research study I would like to inform PhD students about the importance of peer communication in helping them cope with their everyday PhD life. Such interactions can help them exchange important knowledge around PhD work. Doctoral students need to understand the need to interact with their colleagues and develop relationships with them. This process can bring along trust and criticality in their relationships, which may be important in helping them making important leaps in their PhD journey. Further, the findings from the research study can potentially help educational institutions to improve PhD development and success rates. The study suggests that peer relationships can help doctoral students deal effectively with work-related and personal issues in the course of their PhD studies. It offers insight that can help policy makers understand the importance of peer relationships in education, and thus encourage and fund programs within institutions that can bring students closer to each other.

I carried out my research study in the presence of a number of limitations. Firstly, I conducted a research among five PhD students in a single academic department in a UK-based University. As a result, I understand that my data can be hardly generalised beyond the particular context. Generalisations across academic departments are very risky, since every academic department is culturally, socially and historically different from others. Secondly, my role as researcher-participant, could introduce more subjectivity into the research findings, and thus limit further the validity of the research data.

This research study calls for more research in the field of higher education that may help shed light into the process of peer communication and reflection within PhD studies. There is still very limited insight regarding the significance of PhD student participation in peer relationships and the ways in which these interactions contribute to their learning and development (Jacobi, 1991; Erickson et al. 2009).
Qualitative longitudinal studies, such as ethnographic studies and longitudinal in-depth interviews are still needed for building a more thorough understanding of the process and evolutionary nature of PhD interactions. This may be the key for understanding the prerequisites of effective PhD learning within the PhD student process.
References:


