



FACULTY OF LIFE SCIENCES
UNIVERSITY OF COPENHAGEN

The PhD Introduction Course at LIFE

Sine Penthin Grumløse, Sofie Kobayashi and Brian Grout

A qualitative study investigating the lasting impacts provided by the Introduction Course* offered to new PhD students in the Faculty of Life Sciences, University of Copenhagen

The study was undertaken between November 2009 and January 2010, and gathered the reflections of participants from an Introduction Course held in 2007.

* A 5-day residential programme

CONTENTS

The empowerment of the PhD students at LIFE	3
Qualitative research into the impacts of the Introduction Course	4
The informants in the study	4
Themes	Fejl! Bogmærke er ikke defineret.5
Coming from outside Denmark.....	5
Danish PhD Students	9
Tools gained at the Course.....	11
Being met in an acknowledging way creating identity	11
Meeting other PhD students – mirroring and creating networks.....	12
Personal Development Plan	15
Stress and avoiding its impacts.....	19
Being in charge or not.....	23
Conclusion and perspectives	25
Literature:	26

The empowerment of PhD students at LIFE

Since 2007 the Graduate School at LIFE has offered new PhD students an optional, 5-day residential Introduction Course. Two courses were held in 2007 and growing interest has resulted in six courses scheduled in 2010.

The overall aim of the course is to begin the development of the participants as self-organising agents, able to manage their own PhD education to ensure, as far as is possible, that they have a rewarding and successful PhD experience at LIFE. The process is to introduce and work with tools for self-management, including personal development, and to encourage ownership of the role as the manager of their personal education project. A contributing goal is to minimise any negative connotations of being “just a PhD student” and to encourage the students to see themselves as early-stage researchers, with a high level of responsibility for their personal development, as well as for their project.

Typically, the participants are at the very beginning of their PhD programme when they join the Introduction Course and very few consider themselves as being in a position to take a managerial role in their education. The intent of the teaching team is to convince these PhD students that they have the ability to be the masters of their own project even though they have just begun the process

In recruitment terms the Introduction Course is clearly successful, as the maximum number of twenty participants is easily reached for each course, and there an ongoing waiting list. However, despite very positive evaluations made at the closure of each course little is known about its lasting effects. We did not know if the students ever went on to use, successfully or otherwise, what they learnt on the course during the remainder of their study, and we did not know if they retained the feelings of ownership and empowerment that the teaching team hoped for.

To attempt to answer such questions we interviewed participants from one of the 2007 courses who are now well into the second half of their PhD education and have had time to reflect upon the different elements of the Introduction Course. We asked if they had, or still, used any of the tools that the course introduced, and if they saw themselves as being in charge of their own education, or not? We also wanted to know if they saw themselves as people with a high level of management control with regard to their time at LIFE – had any feeling of empowerment that the course provided been sustained??

Qualitative research into the impacts of the Introduction Course

Twelve PhD students who participated in an Introduction Course in 2007 took part in semi-structured interviews, with ten being conducted face-to-face and two online. The interviews were conducted somewhat like an ordinary conversation, but with a clear purpose and structure controlled by the interviewer in order to achieve central and relevant information (Kvale 1999). During such interviews it is crucial that the interviewer understands fully any further meaning that might underlie the answers being provided, and follows up on statements and concepts that emerge that are relevant to the research. Thus there is a continuous condensation of meaning during the interview, and this condensation continues in analyzing the material.

This study indicates that the PhD students, despite being from the same Faculty and, perhaps, even the same section, belong mentally to different narratives and, consequently, find their explanations in different social/cultural frames. Like most people, the individual PhD students make sense of their experiences by turning individual events into episodes of a narrative with a conclusion that makes sense to them in their social context (Lawler 2003). The interviews reveal something about the person behind the words and their understanding and interpretation of their world, including the Introduction Course. Asking not just how, but why, is a fundamental part of the ground this research is built upon.

The participants agreed to participate in the qualitative research, to allow the study team to gain knowledge about the Introduction Course at LIFE and they were willing to be interviewed about their experiences as PhD students at LIFE. The interviews have taken place in relatively informal surroundings in various rooms in the students' home Department and lasted from 45 to 85 minutes. In addition to questions about the students' professional life and the Introduction Course, the interviews included topics concerning structure in their private lives and issues such as work-life balance. The interviews were all recorded and transcribed.

The overview reported in the following sections is founded in the condensation of meaning that developed from the interviews and is divided into themes that reflect the core elements of the analysis. It should be noted that responses in Danish have been translated into English by the authors.

The informants in the study

The informants were a varied group in age, gender, family situation, work experiences, preferred work pattern and nationality. All were at the beginning of their PhD education (1-6 months from registration) when they enrolled in the course, with varying amounts of work experience following their Masters degree.

Table 1 An overview of the in informants that took part in this study

Participant	Origin	Age	Family	Work h/week
Woman 1	Africa	33	C	37-45
* Woman 2	Denmark	30	A	37-45
* Woman 3	Denmark	25-29	C	37-45
* Woman 4	Denmark	27	F	37-45
* Woman 5	Denmark	28	F	50-75
* Man 1	Europe	35-40	F	37-45
* Man 2	Asia	35-40	C	50-75
* Man 3	Asia	30-35	A	50-75
Man 4	Africa	35-40	C	37-45
* Man 5	Denmark	30-35	F	37-45
* Man 6	Denmark	32	F	50-75
Man 7	Asia	25-29	A	50-75

* indicates previous work experience in a European setting

A; living alone, F; living in a family unit, no children, C; as F but with children

Themes

A number of themes emerged from the interviews, cutting across the responses of individual informants. When considering the background and process of adapting to research studies at LIFE, it quickly became evident that there were two groups of perception that divided into international and Danish PhD students . These two themes are developed below.

Coming from outside Denmark

Half of the informants were not Danish, and moved to Denmark from another country to undertake their PhD study. As indicated in the Table above, these six PhD students have different backgrounds and experiences in life, but common to them all was the view that the Introduction Course has given them fundamental insights into the workings of PhD education at LIFE.

(...) I was in Denmark before, so I did not get a real culture shock, but of course I did not know so much about the PhD education as such.

The organizational things and about money etc. All the things we discussed at the Introduction course, that I did not know from the beginning (Man 1)

This student came to the Introduction Course two months after beginning his PhD education and it was during the course that he became familiar with the structures, possibilities and rules within the PhD education. This was echoed by the other informants who were concerned that it was in an optional course they received, for them, new and basic information about the organization of their PhD education. Two informants had been at LIFE for almost half a year and felt that this information should have been given to them much earlier. The Introduction Course provides detailed information about the organization of a PhD study that is clearly valued by international students, who may have not have gathered this information elsewhere. As Man 7 puts it:

I think I have learned some basic things, how to finish and how to complete our PhD program and which things you need to apply for (...) for example you have to have a numbers of ECTS (...)I did not have this information before. I learned a lot of things about how to complete my program. (Man 7)

In terms of empowering the students and making them capable of being in charge of their personal development during the PhD process, this element of the course seems to be very important for the international PhD students. If they lack fundamental information about the formal structures of the education, they have a weak point of departure into their research programme. Six of the informants in this study asked for standardized information to be given to all PhD students, and five of these came from outside Denmark. However, information about the structure of the PhD education is not in itself a key to empower the students but is part of the foundation necessary for empowerment to begin.

It may be that Danish students recognise key information better than the newly arrived, international ones, and that they already have a basic understanding of the educational process in Denmark, and this was investigated in interviews with the Danish students and is reported below.

The view of the non-Danish informants was that beginning as an international PhD student at LIFE can be difficult for, in addition to the lack of formal information there is the problem of establishing the feeling of being “at home” at LIFE, as well as in Denmark.

Q: How did you manage with your study [in the first months]?

A: *I did not do anything with my study. The good thing for me was that I arrived the first of April and then I got to the Introduction Course in May. So it was not that bad for me (...) I did those things [like participating in the Introduction Course] so that I had something that*

forced me to do something. If I did not have this course I would probably have done nothing for the first two months. Just wasting a lot of money calling home! (Woman 1)

It was also clear from our informants that being given a desk and an office is far from enough to get the feeling of being established at LIFE, and mentally ready to begin the research process:

Coming here – I was completely shocked. For one long month I was not sure if I was going to stay here (...) My supervisor came by and said: This is your office and this is the project. (...) I was completely alone sitting at my desk knowing not what to do. (...) I was not really introduced to any of the campus' forms or any of the scientists working here so I started working and I read some literature. I was immediately lost and I did not know what to do. It was a horrible time. I was missing my family and more than anything else: I was missing people. There were people here but they were in their offices only coming out in coffee breaks talking with their colleagues in Danish. That was hard!

This course is very much a turning point to me. I was lost; I was missing all kind of life staying here. (...) The course was useful for me. (...)I got knowledge about structure and possibilities and rights through this course and this was new for me. I learned how to manage! (Man 2)

Using Lawler's concept of "social narrative" (2003) the n "coming from outside of Denmark" is related to some identical experiences and the six international students talked with a similar understanding of themselves as PhD students, and of the research environment at LIFE. In this social frame they define themselves as strangers in relation to the Danish University. They were, at the time they participated in the Introduction Course, not feeling entirely "at home". After their participation in the course they tried to get the feeling of being at home at LIFE by using tools gained at the Introduction Course and most of them succeeded within a short period of time. They got a map so to speak. The students saw the Introduction Course as a catalyst to their integration at LIFE.

However, different experiences occurred in different parts of the Faculty and two of the international PhD students recalled being adopted in their section immediately, and that the feeling of being a stranger disappeared quickly – a case of good practice:

When I arrived here he [the supervisor] took me and introduced me to the other groups and we all knew each other from that day. (...)Our group consists of people from different countries. My supervisor is from

Germany, my colleague is from Syria. There is one from India. We are communicating in English so I did not feel isolated. That was at the University. Outside I was very well... I was in good hands. The time where I arrived, someone came to meet me at the airport and she actually showed me everywhere. Where to buy food and everything and around where I was staying. I did not experience it as a hard time when I came here. (Man 4)

We have a very nice group. We help each other and are very friendly with each other. So I like the environment. We are coming from different countries. Actually we have one from India, Italia, America, Slovaki and other countries. (...) We have to speak English and help each other. (Man 7)

The interviews indicate that, for international students, the feeling of being integrated at LIFE has little to do with how long the students have been in Denmark but more with their successful inclusion by others and how they were received. All of them believed that new PhD students coming from outside of Denmark should participate in the Introduction course, or something similar.:

All new PhD students should join this course. It is just nice to have this in the beginning of your PhD. I mean especially for people who come from outside. Then Danes might think: 'I have got my friends, I know what to do, I have been in the system before' but I think it is good even for the Danes that already know the system. Just to get introduced to the PhD and get knowledge about the PhD network and so on. (Woman 1)

The fact that international students can gain valuable tools from this Introduction Course might be the reason why previous participants eagerly recommend the course to new PhD entrants, leading to its evident. Word of mouth seems to be very strong among the former participants:

I do tell them that this is helping them to be introduced to their supervisor (...) knowing each other planning together and knowing what to do and you are introduced to other tools like the one with stress and so on.(...) I would like other students to gain from this. (Man 4)

The international informants underlined the importance of the Introduction Course. In their opinion every new PhD student coming from another country should enroll for a course like this as a significant step towards reaching the point of capability as a self-organising agent.

Danish PhD Students

The Danish PhD students are using somewhat less expansive terms about the Introduction Course than the students coming from outside Denmark. The general opinion among the Danish PhD students was that the Introduction Course had given them very useful information, tools and networks. But none of these PhD Students considered the course a “turning point” or a “lifeboat”, but rather as a toolbox:

I use it [the Introduction Course] mainly as a back-pack. If I want to know something about scientific writing, then I know that there are courses and where to find them and the same goes for presentation technique and I am generally more aware of the workshops that LMC offers for example (Woman 3)

Most of the Danish students mentioned the course as an important part of their start up as PhD students for many reasons. As Man 6 puts it:

It [the Introduction Course] was really good. (...) As a new PhD student it is fine to get to know from early on that you are not the only one who experiences that feeling. Almost everyone has it. So in that sense I think that the course prepares you for what you can expect and at the same time you can use it as a reference, and you make some friendships (Man 6)

It is valuable to learn that new PhD students often struggle with the same feeling of being on unknown ground. At the same time useful knowledge and tools are acquired through the course activities, and as Woman 5 describes it, this introduction to the PhD education may not be offered anywhere else:

The PhD education is very different from your previous studies, primarily because you start individually and therefore you are not part of a class with people in the same situation. You do also not have structured teaching and therefore not natural daily contact with other PhD students unless you are lucky that there are others in your group. You also do not get an introduction to the practicalities of the study, so it depends 100 % on the supervisor whether you will be introduced to the formal content of the education. Since I continued at the same department as I had just completed my one year's masters' thesis I don't think people had the perception that I started anything new. When you know people already it becomes too odd to give a formal introduction (Woman 5)

This problem of a missing, coherent introduction to PhD education among the Danish students is backed by Woman 3: While some supervisors are very aware of bringing the

students relevant information about the degree procedures, PhD networks and so on, other supervisors fail to introduce the new PhD student to these issues. This may happen because the new, Danish PhD students are not really considered newcomers, but more often as students continuing their education and, perhaps, already familiar with LIFE because of their former studies. More than half of the Danish PhD students have been employed for a couple of months at LIFE before they started at their PhD education and five out of six are candidates from LIFE. Thus they do not have narratives about themselves feeling integrated or not, unlike the international PhD students .

The social framework exhibited by the Danish students appears not to be defined by concepts of inclusion/exclusion, which influences the way they perceive the Introduction Course. Whilst the Danish PhD students think of themselves as integrated from the very beginning, this does not mean that they get less out of the course. They are still at the beginning of something new and:

You get to talk about a lot of things concerning this huge project that confronts you. (...) you need to reflect on what you want to get out of these three years, and how you wish to get through them (Woman 2)

Four of the Danish PhD students have recommended the Introduction Course to others and the reason is the same as mentioned by the foreign students. As Woman 3 puts it:

I recommend the course because it covers some good topics and you get to meet other students and the teaching was really well planned (Woman 3)

Two of the Danish students who have not recommended the course to other students (Man 5 and Woman 4) seem to view the course as common sense. As Man 5 puts it:

I can say that at that point in time I did not have very many frustrations and I actually still don't, so I do not feel that I needed many of the tools available to manage the situations, and it is probably because I do it by myself (Man 5)

If participants are, unusually, already behaving as a self-organising agent then the tools are considered as common sense. But according to Woman 4 they are still useful:

I definitely got some knowledge with me! But exactly what it was I have trouble putting words on. Because a lot of what was presented I knew already, Gantt charts, presentation technique, planning projects, English language skills etc (Woman 4)

There appear to be two ways of evaluating the course, depending on the different social narratives of the participants. Typically, international students say: “*The Introduction Course was essential to me and made me feel integrated at LIFE*” whereas the Danish

students more often point out concrete elements and say *“This part was useful to me”*. These two positions are very different. The domestic students work from a basis of integration and can concentrate immediately on academic issues, whereas a first, and essential, task for the international group is to achieve integration. This might be a constructive explanation to understand why international students often find it more difficult to start up at LIFE than their Danish counterparts, regardless of their scientific abilities. This difference is also likely to affect the acquisition of empowerment differently for the two groups, as they have different starting points within the research environment at LIFE.

Tools introduced during the Course

This section of the study deals with the components of the course that offer tools for self-organising. According to the informants highly significant elements were the opportunity to meet other PhD students and to build social networks, an opportunity to build a Personal Development Plan and an introduction to stress management. The importance of the communication that went on between participants, and the teaching team, during the Introduction Course was commented on positively and a number of students mentioned the importance of being met as a ‘researcher in charge’ by the teachers of the course, for this was the first time they felt recognised as more than “just a PhD student”.

Being met in an acknowledging way creating identity

The teaching team had not considered this topic as “a tool” when the Introduction Course was planned. Nevertheless, during this study some of the students asked the interviewer to pay attention to the subject of acknowledging communication. The students experienced this as an important part of the course and saw it as a part of their empowerment. Participating in the Introduction Course is a part of something new and is a time where the new identity as “PhD student” is created, or significantly strengthened. The social frame for each participant will influence the constitution of this identity, which is produced using the narratives that individuals use to explain and understand their lives (Lawler 2003). As the course participants are trying to become self-organising agents, empowered to manage their project and to feel in charge of their lives, the way they are met by other people will necessarily influence their success. Being told that you are a self-organising agent, but being treated as someone without any agency, will probably not lead to success. However, if you are told that you are a powerful agent without contradiction, then it is possible to construct narratives about you that reflect this. During the Introduction Course the participants have the option to begin to make such narratives. As Woman 1 describes it:

These guys are lecturers and they supervise PhD students so if they know that I am not [just] a PhD student but that I am a person then it

actually make it better for you as a student. This guy knows that I am a person! It is good that he knows that I am a person then I also see myself as a person. These folks work with PhD students every day and they recognize that PhD students are people that need personal time, private time (...). (Woman 1)

As Woman 1 describes it, part of the acknowledgment has to do with the fact that the PhD students are recognized as persons with different interests in life and not “just a PhD student”. Depending on how the students defined themselves before the Introduction Course, this part is considered as more or less important. To Woman 1 it was a very important part of her being a self organising agent and therefore a tool to help get empowered. This seems to be the same conclusion most of the informants reach. Man 5 defines himself as in charge from the very beginning of the PhD education but he still mentions the importance of this part:

It was very much about legitimizing that you yourself take responsibility for your own time and that it is important to have a life beyond. But then I don't know if I am unique. I don't think that I get a great salary. It is just a job I must consider, so naturally I should also take time off. Maybe that is unique. And in any case I think that it has helped some to be told that it is OK to say: First of all you should be mother and then you should be a good girlfriend or wife, and then you should be a PhD student. During the course you get to put some words on that and it is legitimized by people who represent the university. It is important. That part is good, it is important to have a balance, but not for me who doesn't have children, than I do not feel as pressured. So many can perhaps avoid the feeling that they misuse the money they are given. (Man 5)

Therefore, being acknowledged as someone in charge of a personal project seems to be important in creating the empowered PhD student and the students still recall positively this aspect of communication two years after the course.

Meeting other PhD students: Mirroring and creating networks

The concept of culture will be used to show the importance of interaction with other PhD students in the course and at the same time to get an understanding of the differences among the PhD students. In this context culture should be seen as ways of meaningful acting combining the present and the past as introduced by Jerome Bruner in *Acts of Meaning* (1990) and *'The Culture of Education'* (1996). In his words:

Culture in this sense is superorganic. But it shapes the minds of individuals as well. Its individual expression inheres in meaning

making, assigning meaning to things in different settings on particular occasions. Meaning making involves situating encounters with the world in their appropriate cultural contexts in order to know “what they are about”. Although meanings are “in the mind”, they have their origins and their significance in the culture in which they are created.

(Bruner 1996)

In the context of this study culture is created by the acts of each student. The different ways of making meaning through action in a particular situation depends on different ideals and perspectives on “what we (people where I come from) used to do” and “how I (we) expect one another to act right here”. Therefore, behaving like a PhD students at LIFE cannot be a single way of acting but can be one of different ways depending on the cultural frame(s) of the student. In this study it became clear that different informants had different cultural frames and, consequently, reacted differently from other students for ‘cultural reasons’. As an example: a particular cultural frame was evident when two Asian men, each independently from the other, explained that they were very ambitious and therefore had to work twice the hours of most of the other PhD students. The cultural frame for the European students, for example would be very unlikely to support or legitimise such behaviour.

Different approaches within a mixed group of students can be valuable for, as the participants are brought together, they mirror themselves in each other and reflect on their own making of meaning. This broadening of understanding was also commented on by informants as part of the process that strengthened their empowerment.

We had one specific PhD student....., she had a very different way to approach things and I remember that with many of the things I definitely did not agree with her, but it means that when you enter into discussion with someone like that, then you need to think about why, so that you can argue against her, then it leads to new thoughts when you are together and then for some days (Woman 2)

In the Introduction Course the diversity of behaviour, attitude and approach among the PhD students is emphasized as a strength. After the one week course, where the residential element is a key factor, the participants have met others who may perform or think differently from themselves, and have gained some insight into the implications these differences may have:

The course has shed light on how we work differently, and that there are ways to reduce the risk of e.g. get bugged down with stress (Man 6)

The course team takes care to point out that PhD education at LIFE can accommodate these different working cultures, which are an essential element of individual PhD students. They do not have to act in one, conformist way but are recognized as different persons performing in different ways. Thus it makes sense work positively with the diversity among the PhD students and it often makes them reflect like Woman 2 above.

The course develops the idea that understanding each other should be seen as an awareness of the link between the collective and the individual, and between the present and the past. By reacting to other participant's ways of making meaning the students are forced to relate to both the collective and the individual and to try to understand their differences. Inevitably, there will be different perception of work culture (for some, linked to their recent past) but all of the participants are trying to be included in, and accepted by, the present research environment at LIFE Only one informant claimed that he has no intentions of being included in this way (Man 3). He chooses to work alone and does not interact much with his colleagues and that is fine by him.

Through the Introduction Course, new PhD students can become more aware of the cultural differences among them, and the work related implications of "culture". Subsequently, they can react more inclusively, and tolerantly, towards different work cultures they might meet among their colleagues during their PhD and beyond. Woman 1 describes this:

It has taught me a lot and it is the first time in my life that I have been in a totally – I mean I have been to different places – but it is the first time that I have been in a totally different culture. So in that way you learn to accept and tolerate different things. You get to have more patience and more tolerance and stuff like that. (Woman 1)

Meeting different PhD students is also seen as a platform on which to create and build intercultural networks. As Woman 3 explains:

I think that apart from the actual content of the course, which I was quite satisfied with, that the nicest part was to talk with the other PhD students in the breaks and outside and get a feel that there was some network to build on. (...) But that, I think, is quite striking to think about, that at the course it was really great to meet other PhD students, and I wanted to use that a lot, and that I now, one and a half year later and without having used it, I know that it is there and that it is a possibility, it was the best thing about the course, to meet the others (Woman 3)

A majority of the informants mentioned the process of networking with other students as central to the benefits of the course. However, even when they mentioned the network as

important they defined it in different terms. To some the network is a potential one that can be activated when needed/wanted, while others are part of an active network in the sense of having contact with some of the other students on a regular basis. :

I can say something about network because we got to know each other and there were many participants from different departments(...) I got a network [at the Introduction Course] and I am still exchanging e-mails and some (...) I still have this network. (Man 4)

This study indicates that networks are important for PhD students and that having a network is part of inclusivity, even when it is little used.

Personal Development Plan

The Personal Development Plan (PDP) is a central part of the Introduction Course. The objective is to provide the PhD students with a tool that will enable them to take charge of their learning process during the PhD education and beyond. It is a tool to empower by facilitating self-appraisal of skills and competences in relation to goals and is also a way to begin to plan a life-long personal learning programme. It can be used to improve learning habits, to develop and improve personal and strategic skills, and to expand social and interpersonal skills. The PDP encourages those who adopt it to consider their professional and their private lives as linked and in tandem, and sees the individual, in this case, as more than 'just' a PhD student. The student has to take charge and to have a clear view of themselves as a capable and skilled person faced by many opportunities.

Typically, course participants also use the PDP in their private lives, to varying degrees that reflect their different ways of thinking of themselves. The PDP was mentioned as an important and useful tool by most of the informants and it appears they used it in different ways. For some it was, first and foremost, of help at the beginning of their education while for others it was still a very helpful tool. The majority of the informants mentioned that the PDP has created for them an overview of their upcoming project and helped empower them to take charge. As a male student put it:

Whatever problems I had I could put into that PDP. First column: What are your problems? What are you missing? Second column: The solution. Third column: Where do you find it? So I started to fill in. (...) I was forced to think and look for ideas. Who should I meet? What do I do? So then I got to know my problems and at the same time I got to know the sources where I can get the answers. (...) So in that course I found the PDP most interesting. And when I got back I began working at my PDP and that was the time where I really got the time to put everything down in white and black. (Man 2)

Two of the participants made a PDP with some skepticism (Man 3 and Man 6). These informants pointed out that they felt worked differently and that the PDP could not accommodate this difference. These appear to be students who prefer to work in a loose structure, without timetables and plans. Therefore:

It (PDP) was a challenge. I have never done it before. I have never sat down and said: where do I want to be in two years' time or in five years or ten years. It also had some professional and private elements, so it was a challenge to complete it. (...) I am totally intuitive, and it becomes last-minute-solutions or just coincidences. I could only fill the form under an obligation, but I can't follow it afterwards, so I seldom do it very well (Man6)

Alternatively, they may believe that the project requires all their time and the progress of creating the structure is within their project and cannot, therefore, be planned from outside:

That Personal development Plan...we had to plan our time. But the thing is that already then I was thinking that it will not help because of all the problems. I really have to priorities time. I gave up everything [when the experiments started failing] I like to listen to music and now I do not have the time to listen to music and I would also learning something...It is very difficult now when I want to put on all the time at the experiments. Because we only have 3 years and I want to have something nice and...so I already had this feeling then – it probably will not work – although I wrote everything there [laughing]. (Man 3)

The approaches of Man 3 and Man 6 to PDP are different from the rest of the informants, and they are not the same as each other. While Man 6 prefers working within a loose structure and being in charge, Man 3 feels he has to work within a structure decided by the project. When Man 3 wrote in his PDP that he would like to listen to music and watch movies, but he also believed this would not be possible because of his work process:

I made plans, I wanted to listen to more music and learn some languages. Also academic goals but this did not work out. I would say that this PDP works put more for people that have more fixed....even though they have very important experiments they will not do it if they have to go home. So this plan only works for them. I will not work for us that are flexible and we who priorities our time on experiences and lab work. (Man 3)

The remainder of the participants had completed the PDP with no skepticism and most of them feel they have gained an important tool. They are talking about the PDP as one of the

tools that made it possible to structure the PhD process, when reflecting on the learning goals of their education and through the awareness of their competences and deficiencies and, not least, through the focus on the actions needed to reach their goals as a researcher and a person. These informants considered the PDP to be useful and recognised it as a part of the empowering process.

However, in the few months following the course it appeared that the PDP is either included as a tool or is being shelved. Half of the informants continue to use the PDP as a tool either by linking the PDP directly to the PhD plan, just as Woman 1:

We were told to discuss it [the PDP] with our supervisors so I did. I wrote exactly what I wanted to do. So what I did was that I looked at it [the PDP] when I started at my PhD plan and what I have in my PhD plan are somehow reflected in my PDP. (Woman 1)

Or as a separate tool used whenever needed:

I still use it, I think it is a good way to think about the process. In the PhD plan you just write: I will write these five papers or so. But in the PDP you write more about your skills and also other things, which are not related to your PhD so therefore I think that it is a good way to keep it to write on, that there are some professional things and theories I need to know about. (...) I update my PDP every six months and I have added new points (Man 1)

The students who are using their PDP on a regular basis have often been encouraged to work in this way by their supervisor. The continuing use of the PDP is helping these students to focus on both their project and on themselves as a researcher and as a private person:

The personal development plan. It is a good opportunity to set some goals that go beyond the professional. That is something I definitely would not get done at home. It makes it easier to balance work and private life because there are goals for both – otherwise you easily put your efforts into work only. (...) My PDP has shaped the basis for my MUS conversations afterwards, and this was ensured that the conversation does not end up as a conversation about how the project progresses (Woman 5)

The half of the informants that are still using their PDP believe in the tool because of its ability to strengthen them in role in charge as “a whole person”. These regular users are more likely to refer to themselves as ‘in charge’ than those who have shelved the PDP.

There are different explanations as to why some participants shelved the PDP as a tool. They all underlined its value and used it at the beginning of their PhD programme before as putting it aside. As Woman 3 describes it:

Interviewer: What about your PDP; Have you used it afterwards?

I have discussed it with my supervisor and it was well received and then we talked about that the issues in my PDP were important to me, so we decided to include them in our MUS conversations, which are annual. But when I retrieved it for the following MUS then I thought it seemed rather ridiculous, or I did not want to bring it forward myself. It was kind of - I don't know - even though I was happy about it in the first place, then it seemed quite school-like in its appearance when I retrieved it. (...)

Interviewer: What had happened in relation to you finding it good when you made it?

Well, it was because what is important in relation to it, is that it was important to formulate some thoughts about what you wanted to do and get some goals, and as they were defined in my mind, then I think that they have been included - at least to some extent - in my further work in one way or the other... so they no longer appear as individual goals, but as goals I attain in a much more complex way than it is described in that PDP. (...) it has to do with me getting more experience. I am further in the process and I can see other things (Woman 3)

The students who no longer use the PDP describe the PDP describe it useful but an occasional, not continuing, tool. They are using it in a different way than to that envisaged at the Introduction Course (where it is seen as part of life-long learning) but they still gain something positive from it.. For half the participants it has become an enduring tool to help them take charge, and to the other half it empowered their start up as a PhD student at LIFE.

Whether using a PDP is sustained, or not, is related to the individuals view of how they would like to work during their PhD study, but it also appears to be linked to whether it is perceived as an asset by the supervisor. Participants in the Introduction Course are required to discuss at least the professional part of their PDP with their supervisor, and the formants made it clear that supervisors look upon it in very different ways. While some supervisors include the PDP actively in the supervision and make it the basis for the establishment of guidance, other supervisors will neglect or ignore it. The PDP has been the key to an improved relationship with the supervisor and has helped to establish a useful communication about mutual expectations :

The communication was really highly improved. Because suddenly he knew at what state I was (...) Actually that was the outcome of that course. After that we made the plan and I discussed it with my supervisor and that is really flexible. It is not rigid. In the timeframe we can change and we did it well. We sat together and discussed it. (Man 4)

And in other cases the PDP has been neglected by the supervisor and subsequently shelved by the PhD student:

(...) I had a talk with him... but I actually think that it became a very brief talk because he said 'I do not know you well enough. You need to take that out to [company's name]. They know you better'. I think. Well, we had a talk about it, but it wasn't very long (...) I think it was that I was forced to get back to it again. When I had that talk with him (thesupervisor) then it was done. (Woman 2)

If more PhD students are to use the PDP for a longer period of time then it seems to be crucial that the supervisors recognize it as a tool to empower the PhD students. In the cases where the PDP is actively used during the PhD study it provides a continuing overview of the project and a reinforced dialogue between the student and the supervisor.

Stress and avoiding its impacts

Included in the Introduction Course is a session aimed at understanding stress and how to cope with its negative impacts. The concept of stress as a part of everyday life that has to be dealt with is discussed, as the consequences of doing this ineffectively are considered, and particularly the link between excessive stress and poor performance at work. Within the framework of becoming an effective self-organising agent, the contributions of being aware of personal stress, feeling capable of managing it and establishing an appropriate work-life balance are also dealt with.

A number of PhD students are likely to experience negative stress during their education at LIFE, as in other university settings, and the aim of the course is to reduce the frequency among the students by giving them tools they can activate as a part of the individual "taking charge process". The expectation is that fewer PhD students will experience negative stress when they have the feeling of being in charge and having personal control, which can be seen as another element of the empowerment process.

One tool to avoid negative stress is to be aware of which kind of person you are. Thus the participants complete a questionnaire in order to find out what kind of behavior pattern they have. According to this awareness of behavior patterns the students are becoming familiar with different techniques, for example how to give priority to assignments in order

to simplify planning, how to balance work life and family life/private life, and how to structure and not the less restructure the processes. But also the education in problem solving is a part of the same aim.

By helping to develop reflective ability by asking questions of yourself such as 'How do you feel?' and 'What can you do?', the course looks to enable participants to distinguish negative stress from being busy and the interviews confirmed that this distinction remained with the participants. As Woman 3 puts it:

His [the teacher] appearance is in itself very relaxing, and he told about some small cases like work styles and such things. I think it was so nicely described, so I took that in. (...) take things as they come, there is no reason to work ten hours if you think you did what you should in six hours. You should look at it from your own perspective, and you should not let others stress you and so forth. (...) It's clear that you think 'If he, in his position, can do like that, then I can as well'. So it is not quite wrong that I also let go once in a while. (Woman 3)

As with most of the other PhD students Woman 3 has been able to avoid negative stress by being aware of staying in control and keep her project balanced in proportion to other parts of her life. In the interviews the PhD students often referred to specific tools e.g planning and finding solutions to structure the project, as helping them avoid negative stress. As one informant put it:

Now I have no stress only work pressure and that is not stress. I work and as long it does not eat my head it is only work pressure. When I had only questions and no answerers I was confused. I learned how to manage and now I do sports and so on. I feel fine now and horrible in the beginning. (Man 2)

A graphic to tool to aid priority setting was seen as similarly useful:

I remember that the teacher made four boxes and talked about priority. You should put your tasks in different boxes and then worked from there. I am structured in my work and I am aware of what I have in the different boxes. Maybe I don't always follow it, but I am aware of the prioritizing. (...) I think I am in control. (Man 1)

A graphic representation of stimulus, challenge and stress and how these feelings might change during a typical PhD education also helped one informant, after the course, to better understand her situation, and regain a feeling of control.

I do remember at a time I took the graph that I told you about earlier and looked at it. I was at a time when I thought: 'am I going crazy?' And I just looked at it [the graph] and said: 'no I am just here [she points]. Sometimes you need some things to help you not being hard on yourself and being able to deal with yourself and one tool is the graph.
(Woman 1)

Analyzing the interviews it was evident that some informants, notably Man 1, Man 2, Man 4 and Woman 1 have used the PDP in tandem with the tools related to stress management in a very positive way to set priorities and avoid negative stress. Other students are using the tools to avoid negative stress without using the PDP. Even though they do not use the PDP they are successful in structuring their working process and are often evaluating both working process and goals. As Woman 3 explains it:

I think a lot about it [stress] in the sense that I am very aware not to get it. I spend a lot of time judging whether I am realistic and whether, when I feel stressed, whether it is local – is it just now that I am busy or is it something that could delay the whole project. And the latter I am very wary of, that's where I choose to be stressed or take it very seriously. (...) Interviewer: Do you distinguish between stress and work pressure? Yes. There is a difference between being busy and still be in control, and to feel that everything is chaos. (Woman 3)

Woman 4 notes:

Whether I have felt stressed... well... I have definitely often been busy! I usually manage by making a plan for what I want to accomplish when, and in this way I can cross tasks off the list and see that 'something happens' even if there are still many unsolved tasks left (Woman 4)

It would appear that tools to avoid negative stress by planning and, particularly, by setting priorities are a valued part of the Introduction Course and, whether used in combination with the PDP or not, are an aid to empowering the PhD students.

Three of the informants mentioned they have experienced negative stress during their PhD education, but in different ways. One reported that unhealthy/negative stress occurring a few months after the Introduction Course negatively influenced her ability to perform at work for some time. She did not feel in charge of her project and did not have much belief in herself as a self-organising person:

I guess I felt a bit lost, because I was in a new place, but I thought 'You've tried it so many times before, you'll get through it', but as I still after half a year did not feel on my own ground, then I got stressed, but then, it's only an education.
Interviewer: Some of what the Introduction course aims for is, that you as PhD

students should take charge, be the one to tell the story that the PhD study is. It sounds like you didn't quite get there?

No [very firmly] (Woman 2)

She was unhappy and confused and she began to forget things:

I couldn't remember if I had talked to a person (...) It was friends who told me 'shouldn't you take care now?' Then I talked with them and then I think I relaxed a bit and tried to distance the project a bit in daily life, and else I just talked with them and managed that way.

(Woman 2)

The difficult conditions experienced by this informant were not helped by the refusal of the supervisor to engage in the PDP process by taking part in an interview, on the grounds that "... I do not know you well enough". This informant also has difficulties in seeing herself an effective manager of her PhD as her project is part of a much larger study and she sees a lot of her work as fulfilling a function where she can have little, or no, control.

The others who mentioned negative stress were Man 3 and Man 7. The latter experienced a period with negative stress that influenced his ability to work, because of difficulties communicating expectations with his supervisor. This did change when they discussed and resolved this situation and he can now work with his project feeling pressure but not negative stress. He now describes himself as the master of his project and he is confident about direction and content.

The experience of Man 3 is very different, for he often feels stressed because the project is 'driving him crazy'. He does not feel in charge, the project is.

The fact that some experiments refuse to work makes me stressed.

Interviewer: But not the working pressure?

"No, no" (...) I do not get pressure from my supervisor. I just feel very bad when the experiments will not work even though I did everything correct and followed the protocol and the appropriate controls (Man 3)

He is affected by the feeling of being stressed, but he describes this as necessary and natural. He can remember the information about stress introduced at the Introduction Course, but believes that the project does not allow him to act differently. He explains himself as extremely busy (working 70 hours a week) and believes he has to be because of his perception of a meaningful project.

I have several situations where I have to do all this kind of trouble shooting to find out reasons and I still do not work till now. I think I have to work and I am not forced to do this I am just doing this myself.

(Man 3)

A PhD project without stress might not live up to this informant's ideals about the right approach to work and ambition within his cultural frame. He highlighted his own cultural perspective:

Those belong to masculine cultures and people have usually high expectations and are sometimes quite ambitious. I will not say that I am ambitious but I still have some expectations. I want to have good data. I want to have good publications (Man 3)

The physical and mental consequences of extended exposure to negative stress are well known and the course would appear to be successful in helping separate 'very busy' from 'stressed', and in dealing with the latter. However, the interviews with Man 3 and Man 7 indicated a different understanding of stress, which appeared to be largely culturally based. The Introduction Course is constructed within cultural frame, where stress is something obviously negative that we try to remove or control. The alternate view of these two male informants was that stress indicates that you are working hard enough and that reaching the goal (in this case successful PhD completion) is the only way to relieve the pressure. Under such an acceptance of stressful it is questionable whether the provision of tools to enable empowerment and a role as self-organising agent are likely to be particularly successful.

Being in charge, or not

The interviews indicated that nine of the twelve informants (all but Woman 2, Man 3 and Man 6) saw themselves as capable of being in charge of their PhD project as well as in other parts of their life. They described the situation of getting in charge as successfully integrating different parts of their life into a PhD project that they can describe as their own. For these informants the process had been going on for a number of months and they felt they had reached the goal about halfway through their PhD study. They described the feeling of ownership as established, and some had the feeling of being in charge the whole period of time:

Interviewer: If it was all defined, who had ownership over the project then? *I have; because it is my PhD. I had co-ownership the whole way through. It's because my supervisor put it out that way; so even if the project description says this and that then I should also have influence. We made a good clarification of expectations in relation to what I wanted to get out of it. (Woman 3)*

and:

I am definitely responsible for my project. (...) I think I've had ownership from the beginning. It was of course a topic, but there

weren't many details in the description. Research questions and those things came from me, so it has been my project all the time. (Man 1)

For Woman 3 it was the attitude of the supervisor that helped creating the “PhD student in charge” and even though the structure of the project was described before the PhD student was appointed, she was able to be the master of her project from the very beginning, being acknowledged as the owner and responsible for project within her research community. For Man 1 it is the fact that he has formulated essential parts and questions of his project that makes him feel in charge. Man 2, Man 5 and Man 7 give similar explanations. They have all designed their own project and can therefore be the master from the beginning (Man 7 lost the feeling when he experienced stress but got back as in charge as he solved his problems). Man 5 perceived ‘mastery’ as leading to becoming ‘the expert’:

Here you are respected for your professional expertise. (...) Within my research area, I am regarded an expert in this area. Of course it wasn't like that from the outset, but half way into the study period it changed. Then I had the competence. (Man 5)

The feeling of being in charge of the project requires that the PhD student has belief in themselves as a self-organising agent (empowerment) and that they use the practical tools developed during the Introduction Course to organize and manage the various aspects of their lives, at work and elsewhere. In two instances where informants felt they had not become the master of the project. (Woman 2 and Man 6) it was because both had PhD projects that were a part of larger projects, limiting choices and the ability to make individual decisions.

It is primarily mine, but it is not mine. There are times when I think that the others can't replace me here and now. But [hesitates] it's not my project. I would actually like it to be... what I miss in my PhD project is more joint ownership of the project. Even though we are many involved in the project, then it is primarily me who runs these things, but I would like that more backed the project and were passionate in the same way. (Woman 2)

As Man 6 describes it:

(...) As I said I applied for a position, so it was steered in many ways and I still feel that I struggle with the ownership, and I still think that I am told to do things where I don't feel for it. (...) I sometimes think that there is too much breadth and too little depth, and sometimes I think that I am too far out compared to my core competences. That is on expense of a scientific depth which I could reach if it had been within my own field. (Man 6)

A third informant (Man 3) did not acknowledge the need to be in control as he saw his project, and the demands he perceived within it, as being the organising agents, and not him.

Conclusion and perspectives

The Introduction Course is regarded as a resource by most of the PhD students who participated in this course almost two years ago. Most of them have used the tools introduced to them at the course and many are still referring to the Introduction Course when they explain how they act in different situations and which tools they use in order to be in charge.

There seems to be differences between the international PhD students and the Danish PhD students. Among the international PhD students the Introduction Course is regarded as a part of their very first integration at LIFE while it among the Danish PhD students is seen as much more as a practical toolbox.

The teaching team believes it is critically important that the Introduction Course remains multicultural. The informants in this study were also agreed that the course should include both Danish and international students, to allow them to share the different experiences related to their backgrounds and to understand the differing needs that they have when trying to get established in the research environment at LIFE. Meeting people from other countries creates the opportunity to get insights into different work cultures and meeting other PhD students who understand and act differently from oneself leads to mirroring and reflection about one's own behaviour. The study makes it clear that interacting with Danish PhD students is essential for the integration of the international PhD students. In this report, diversity of origin has been related to themes such as culture and identity and the ability to create intercultural networks, and these aspects appears to be important in initiating the development of empowerment in the PhD students.

Evidence from the study leaves no doubt that beginning to construct Personal Development Plan (PDP) is particularly valuable at the beginning of the PhD education. The participants all completed a PDP as a course requirement, which was discussed with their supervisor and most of them found this exercise important. Two years later half of the PhD students still use this tool and describe it as a part of their ability to be in charge. Working consistently with a PDP gives the students a concrete and innovative way of working with their project and engenders the feeling of 'getting a grip' on their PhD education. The fact that the other half of the participants have shelved the PDP does not indicate that the PDP has not been useful to them. Five of these informants described the PDP as useful in the beginning when they were trying to capture and understand the PhD process. In fact the different ways of using the PDP can be seen as an asset, for it works well

as an occasional tool and also when used as a continuing tool. Unfortunately, shelving the PDP sometimes has much to do with the supervisor not encouraging the students to use the plan, leading to the thought that it would be beneficial for the PhD community if supervisors were better aware of the value of Personal Development Plans.

When working with tools to cope with stress and be able to avoid negative stress the Introduction Course is challenged by different concepts of stress among the PhD students. To some stress is the indicator of working hard enough while to most it is undesirable and something to cope with. These different understandings of stress have been analyzed in order to understand why some students define stress in a different way and it can be argued that it is to do with differences in individual cultural frames.

This study also shows that it is not uncommon for PhD students to be lacking in information about the formalities of the PhD education some several months after they start out as a PhD student at LIFE. This difficulty was mentioned by most of the informants, and was emphasized as an issue that the Graduate School ought to deal with.

Clearly, the Introduction Course considered here is not the only way to empower PhD students as self organising agents, and not all PhD students need a course like this to be able take charge of their PhD education. However, from the information uncovered in the interviews we can conclude that participants in the Introduction Course still see it as being of significant value some two years into their PhD programme. It is felt that the combination of the tools explored and the attitudes they are met with during course are a strong recipe to encourage the growth of self-organisation and the feeling of being in charge of your own, educational outcomes

Literature:

Bruner, J.(1990) *Acts of meaning (The Jerusalem Harvard Lectures)*. Harvard University Press. pp 221.

Bruner, J. (1996) *The Culture of Education*, Harvard University Press. pp 224

Kvale, S (1997). *InterView. En introduktion til det kvalitative forskningsinterview*. Hans Reitzels Forlag. København.

Lawler, S (2002) *Narrative in Social Research*. In: *Qualitative Research in Action*. Ed. T. May. Sage Publications, London, 242-258.