ANNIE AARUP JENSEN

4. HOW DOES IT FEEL TO BECOME A MASTER'S STUDENT?

Boundary Crossing and Emotions Related to Understanding a New Educational Context

ABSTRACT

This chapter examines, from a student perspective in Higher Education, the emotions and feelings that students may experience in a new educational context. Through a specific case – a master's programme with a diverse student population – students' emotions are analysed and interpreted from a socio-cultural perspective and categorised according to Pekrun's (2014) four types of academic emotions. The findings show that boundary crossing, i.e. from one educational context to another, triggers in particular negative epistemic emotions (cognitive problems related to understanding the institutional logic and discourse) and related negative achievement emotions (fear of failure) during the first semester. A higher degree of explicitation and negotiation of meaning is suggested as a pedagogical solution to this problem.

INTRODUCTION

Entering a study programme at master's level in Denmark means that you are not fresh out of school, but have a variety of experiences from the bachelor's degree and often also from job settings in study jobs or full time employment. Students have self-images and understandings of their abilities, skills and competences. Coming to university implies risks, challenges the learning identity of the learner and questions the transferability of competences (Christie et al., 2007). From a socio-cultural perspective, a university and a study programme may be understood as an activity system with its own logic and communication/discourse system (Säljö, 2003). This means that newcomers must learn to understand the system and the discourse and translate their understanding, knowledge and skills into that framework, in order to situate themselves within the system.

The process of meaning-making is essential to adult learning processes (Mezirow, 1991). When meaning-making becomes difficult, if for instance you struggle to understand what is going on in an unfamiliar setting, or you as a learner are faced with subject-related issues that seem to offer no clues helpful to understanding, the situation may lead to an emotional response such as feelings of confusion,

B. Lund & T. Chemi (Eds.), Dealing with Emotions, 61–80. © 2015 Sense Publishers. All rights reserved.

uncertainty, self-doubt or even anger or, in a different vein, feelings of curiosity and interest. On the other hand, when meaning is created, whether it is in the form of an *aha* moment, or through hard cognitive labour, the emotional response may be of a positive nature, like relief, feelings of self-confidence or joy. In these cases, the emotional response to the situation may be a strong motivational driver for (continuing) learning processes, but may also present an additional challenge for the learner who has to overcome the feelings or learn to deal with them. Students coming to university for the first time may experience the change in learning style and culture from what they have been used to so strongly that it amounts to what Christie et al. (2007, with reference to Griffiths et al., 2005) term a 'learning shock'. In addition they may feel bewildered and dis-located.

Research into academic emotions, i.e. emotions related to students' learning processes, concludes that emotions influence students' knowledge and skills, and vice versa (Pekrun, 2014; D'Mello & Graesser, 2011). Furthermore, students' emotions and feelings have an impact on their learning processes and learning strategies (Pekrun, 2014). Students in student-centred learning environments who experience feelings of insecurity, uncertainty, anxiety, fear of failure and low selfesteem are reported to be more likely to be oriented towards a surface-learning approach. This means that they focus on reproduction and memorisation (rote learning) rather than on reaching a deep understanding of the subject in question (Ibid.). The latter approach is termed a deep-learning approach (Marton, 1976; Säljö, 1975). In a recent study M. Baeten et al. (2010) found that students are more likely to adopt deep-learning approaches, as opposed to surface-learning approaches, if they feel self-confident and show high self-efficacy (M. Baeten et al., 2010). Furthermore, feelings of stability and being able to see the relationship between the study programme, the assessment and the student's future practice will also prompt students towards deep-learning approaches.

On the one hand boundary crossing, i.e. coming from one educational institution or activity system to another, may offer strong learning possibilities (Engeström, 2003), but on the other hand, the emotions triggered by this process may be counterproductive to deep-learning processes. In view of the relation between quality of learning and students' feelings (Baeten et al., 2010), it is important to understand the character and the rationale behind these feelings in order to consider the pedagogical options for supporting deep-learning approaches.

This chapter will investigate whether students' emotions, analysed and interpreted from a socio-cultural perspective, might suggest new understandings of the problems reported and the triggers involved, indicating some pedagogical solutions. The question will be studied through a specific case, a master's programme with a diverse student population in terms of age, educational background and job experience. The study programme is situated in a learning environment with a group-oriented study tradition, where collaboration and social learning forms a substantial part of the theoretical foundation of the pedagogy.

THEORETICAL FRAMEWORK

Pekrun (2014) operates with four categories of academic emotions which are relevant for student learning: achievement emotions relate to success and failure with activities (e.g. contentment, anxiety, frustration); epistemic emotions relate to cognitive problems (e.g. curiosity, confusion, surprise and frustration); topic emotions relate to the topics students work with (e.g. empathy); and social emotions relate to teachers and peers (e.g. pride, shame, jealousy, love, compassion, social anxiety) (Pekrun, 2014, p. 8; D'Mello & Graesser, p. 2). Social emotions are particularly important in collaborative educational settings.

A key point in the socio-cultural activity theory is that communication and interaction between people are essential in all learning processes, and it is through communication that socio-cultural resources are created. Learning is understood as acquiring the resources for thinking and being able to carry out the practical projects which are part of our culture. Becoming able to use tools and artefacts in a broad sense is part of the learning process (Säljö, pp. 22–23). Language is regarded as a collective tool for action and as such a resource, which is developed prior to the individual's thought processes. The existing discourses lend themselves to the individual's thinking and at the same time are the tools with which the individual thinks and speaks. In this perspective, learning means to be schooled in understanding and making use of discourse systems (ibid., p. 251). Each institution, in this case, educational institution, will have its own discourse and communicative logic, and learning means to acquire this particular discourse and be able to navigate within this communicative framework.

One important point about learning, in this perspective, is that learning and learning difficulties are not to be understood as individual properties or capabilities, or to be seen as an indication of the individual student's cognitive capacity. Instead they should be perceived as difficulties in handling and acquiring particular forms of communication. This difficulty arises because the individuals are not able to easily connect with the communication forms and relate them to their daily life experiences (Säljö, 2003, p. 237). In other words the communication becomes too abstract.

The students in this master's programme are coming from one educational practice to another, from one activity system to another and it might therefore be relevant to conceive of the situation and their challenges as related to the concept of 'boundary crossing' (Engeström, 2003). Boundary crossing in this understanding is a potential learning situation, if the following sequence of actions is taking place, ideally:

- questioning, challenging and rejecting existing practices across boundaries
- analysing existing practices across boundaries
- collaborative, mutually supportive building of new models, concepts, artefacts or patterns of conduct across boundaries
- examining and debating suggested models, concepts, artefacts or patterns of conduct across boundaries

- emulating and appropriating new ideas, concepts, artefacts or patterns of conduct across boundaries
- negotiating, bartering and trading of material or immaterial resources related to new ideas, concepts, artefacts or patterns of conduct across boundaries
- reflecting on and evaluating aspects of the process across boundaries
- consolidating the outcomes across boundaries (Engeström, 2003, pp. 4-5).

Boundary crossing in this sense represents a powerful learning potential as it might lead to expansive learning. Expansive learning is the concept or metaphor for learning developed by Engeström, which is based on the premise that learning is neither just a case of acquisition, nor solely a question of participation. The "learners learn something that is not yet there" (Engeström & Sannino, 2010). This means that the learners themselves construct the object of their learning process, work on conceptualising it and then move on to implement it in practice. This process is understood as a collective activity. In Engeström's work this theoretical understanding is primarily related to activity systems such as workplaces and institutions. Boundary-crossing actions, if they are to be labelled as such, must be two-way interactions, which means that both sides must display commitment and be engaged in the process. Furthermore, in order to be expansive, the process should result in a transformation of the activity systems involved.

BACKGROUND OF THE STUDY

Aalborg University, which is the framework for this investigation, is a PBL (Problem Based Learning) university. The students in the programme in question are young adults, though some a little more mature having had work experience.

The context of this study is a two-year full time master programme in learning and innovative change. The admission requirement is relatively broad, which results in a diverse student population holding academic bachelor degrees (e.g. in languages, sports science) as well as vocational bachelor degrees in areas such as teaching, nursing, nutrition and health, physiotherapy. Some are mature students who have been practicing as primary school teachers, nurses, consultants and so on for a number of years, before returning to get a master's degree. The result is a diversity of students with respect to subject field, age, work experience, study competence and experience with study forms in academic environments.

The study programme is, as mentioned, based in a PBL university so the pedagogical approach to learning is problem-based project-organised group work with supervision. This means that the students are encouraged to work collaboratively and thus benefit from each other's knowledge, skills and competences and support each other in their learning processes (Lund & Jensen, 2012; Lund & Jensen, 2011). The problem-based project-work in general runs through an entire semester (one project each semester) and accounts for 50% of the student workload.

As a compulsory part of this study programme, students participate in an individual Student Development Dialogue (SDD). The SDD model is an encouragement for students to focus on and reflect on their individual development in relation to the study programme, on how to integrate their specific bachelor education in studying for the master's, on how to become aware of their wishes for a future professional profile and to determine how to realise their ideas (Lorentsen, 2008). When introduced into the master's programme in 2005, the idea of a student development dialogue was a novel initiative in a Danish educational context.

The rationale behind introducing SDD to the study programme was to support students' learning and development processes, to help students understand the study programme and its possibilities in relation to their specific background, experiences and wishes, and to facilitate the students' ability to be explicit about their knowledge, skills and competences through the reflective processes, or, to put it differently, to facilitate the students' meaning-making processes.

The general characteristics of this method are that it is based on a developmental perspective, in the sense that students take stock of and assess their own progress in order to plan further development. The plan is based on an identification of wishes and needs for development, which is the result of a reflective process prior to the meeting, and clearly defined steps have been devised to support this process. Students have ownership of the process – this means, for instance, that the student sets the agenda for the meeting.

The student development dialogue takes place three times during the master programme, once each semester (7th through 9th semester). The point of departure for each dialogue is an SDD-form with a number of questions to spur the students' reflection in preparation for the dialogue. The SDD-form reflects the formal requirements for each semester as well as the overall progression of the study programme.

The dialogue partner is a teacher or supervisor connected with the study programme, and the meetings are strictly confidential. The term 'dialogue partner' was chosen to indicate that the relationship is intended to be as equal as possible, and that the dialogical form is the foundation for development. The role and ethics of the dialogue partner are taken very seriously, and it is ensured that the dialogue partner will not appear as either project supervisor or examiner for the student.

The idea is that students actively study the formal goals and intended learning outcomes of the study programme as they are stated in the study regulation, make an effort to interpret them and relate them to their own background. Based on this reflection, students describe in the SDD-form their competences as they see them, and the visions, dreams or plans they entertain for their future professional life. When filling in the preparatory form for the dialogue meeting, students will, to varying degrees, include not only various aspects of their thoughts and reflections, but also the feelings or emotions they are experiencing at that particular stage, as expressed by student N,

My Student Development Dialogue went well and it was nice to have the SDDpartner to talk to about the study programme. There were many frustrations being a new student at the university and when you have never attended this kind of study programme before... (Reflections in SDD-form after the first meeting, N, 7th sem.)

From a socio-cultural perspective, the Student Development Dialogue may be understood as a process through which the activity system, i.e. the university and the specific study programme, offer newcomers a dialogue partner who might assist in introducing them to the discourse and language of the study programme and with whom they can negotiate understanding of the discourse of the institution. The dialogue partner is also someone to talk to about problems that might be related to understanding that particular discourse and the inherent institutional logic. From a socio-cultural perspective, it is considered valuable to have a competent dialogue partner to support newcomers in the process of making their cognitive contextualisation coincide with the institution's discursive contextualisation (Säljö, p. 45).

Based on the written data material, this chapter will study the students' selfreported feelings and emotional development during the first semesters of the master's course. The research focus here is on the types of emotions involved in becoming a master's student in that particular programme and the learning processes that this may provoke.

EMPIRICAL DATA

The empirical data consist of 132 written SDD-forms prepared by students in semesters 7 through 9 of their master's programme, documenting some of the emotions and feelings expressed by the students. The data cover a period from 2007 to 2010, i.e. 4 cohorts of students, each having participated in 3 dialogues.

Researching emotions in education may be challenging because of the ethics and of the problems of getting insight into students' thoughts and reactions (Schutz & DeCuir, 2002). In this case, access to the informants' emotions and feelings was by means of their self-reported emotional status. The interpretation of feelings and emotions and the choice of words to describe them rest, therefore, with the informants and represent the result of a reflective process. It is not a question of researching spontaneous expressions of emotions and feelings, but rather statements, which have been critically thought through during the students' preparation for their Student Development Dialogue. This reflective process leads to the students' appraisals about the world, their goals (i.e. considering past, present and future in relation to the education in question) and, through this process of transactions with the world, emotions emerge (ibid., p. 126). It is thus the result of a process with cognitive dimensions.

DATA COLLECTION AND ANALYSIS

The method of analysis of the study is document analysis, in the sense that the texts analysed were not produced primarily for research purposes and the researcher was not involved in production of the texts (Lynggaard, 2012), i.e. the preparation forms for the Student Development Dialogue.

The preparation form filled out by the students poses some overall questions and themes regarding the study, the students' interests and ambitions and their assessment of own competences in relation to their study. The individual student decides what to put forward, what to focus on and, most importantly, the degree of detail of the written answers. In this study, the students' accounts of their emotional responses and/or reactions to their learning situation are taken as an indication that these particular issues are experienced to be of great importance for the students at that particular time and are therefore possibly of importance for their learning and development, since they choose to be explicit about them and bring them up for discussion in the meeting with the dialogue partner.

The data have been analysed from the socio-cultural perspectives of language and discourse as an indication of contextualisation and integration into a new activity system, and boundary crossing as a potential expansive learning situation (Säljö, 2003; Engeström, 2003). The emotional aspects have been decisive in the selection process, as the focus has been on material exhibiting expressions of feelings and emotions, thus indicating the degree of importance to the students, be they positive or negative feelings (Pekrun, 2014). A process of discourse analysis (Phillips & Hardy, 2002; Silverman, 2001) has been combined with categorisation of the emotions expressed, according to Pekrun's four types of academic emotions (ibid.).

A limitation of this research method is that students who have not expressed feelings in their SDD forms might indeed have experienced emotional reactions or faced challenges and may have discussed this during the face-to-face meeting with their dialogue partner. This is, however, not recorded and thus not accessible for analysis.

FINDINGS

The data show a general pattern – that students refer to feelings of 'frustration', 'confusion', 'chaos', 'uncertainty' and the like during the first semester (7th) of the programme. By the next semester (8th) the picture will have changed and there are fewer expressions of that nature. The negative emotional feelings will to a large degree have subsided and be replaced by positive emotions and feelings of confidence.

Boundary Crossing and Expansive Learning

As was indicated in the above quote from student N, the diversity of student background in the study programme means that many students feel they are facing a new study environment, with requirements for them as students that may be unfamiliar and demanding, perhaps even daunting. They are, as mentioned, coming from one activity system to another, which means that the knowledge, skills and understanding they have, have been formed by and in the context of previous activity systems (Säljö, 2003, p. 152 ff.). As Säljö points out, transferring knowledge, skills and understanding from one system to another is by no means unproblematic because each system operates based on different preconditions and with different logics. A translation process is therefore needed (ibid).

Some students come from another type of educational institution (e.g. university college) and are going to university for the first time, so they face different and unexpected demands and requirements. Among these, is the fact that students must be able to create their own vision of the functions and jobs they are aiming to qualify for during the study programme. Most master's programmes do not aim at any one specific profession and the job profile and labour market is consequently less well defined,

As described in previous SDD-forms, the 7th semester was for my part characterised by a lot of turbulence and uncertainty regarding whether this study programme was the right one. Coming from a vocational bachelor programme with a clear job profile to the university where – to a much larger degree – it was up to me to shape the education was a bit of a shock. (R, 9th sem.)

The unknown future prospects and the demands - or freedom - of the student to create his/her own direction (to some extent) was clearly felt as a heavy burden, which made the student question his/her choice of education. Studies show (Greenbank, 2014) that students often defer reflections about career path and options until the very end of their education, and in cases where the master's programme is a continuation of the bachelor programme, they will not necessarily be confronted with that question before graduation. They may, however, have deliberately chosen to do a master's degree at university as the result of some reflections and ideas on which options this transition might entail. From a socio-cultural perspective, one issue here might be the change of institutional logic. They are coming from an educational institution that teaches and educates for a specific job type and professional career. It thus offers a discourse of a specific profession, related to concrete job functions which the students may have encountered in practice during their upbringing and which are integrated as a part of their education in the form of internships. The students are therefore able to communicate in the institutional discourse related to that professional area, and have concrete images of that. At university they are faced with the lack of a discourse aimed at one specific professional field. Instead, students are offered a number of theoretically founded discourses which they must then try to understand, without having a specific, related practice area. At the same time, they must try to imagine a professional context that might be relevant for themselves. This is a double challenge, since the students may not yet know what kind of career they will opt for and, for good reasons, do not yet have insight into the professional areas they might wish to pursue. Consequently, they are not able to relate the theoretical discourses to any specific part of reality. This phenomenon is in fact what the following student describes,

The thoughts I have been having have mostly been about the fact that I find myself in a very frustrating phase, because I feel that I am learning a lot, but at the same time I have difficulty in putting into words the learning and the competences I am developing. This is also related to me having a hard time defining what I precisely would like to benefit from the study programme – that is, what I want to do once I have finished my degree. When I do not have a more or less specific practice context to relate the competences to, I find it difficult to assess what I really learn and what I may use it for. (CC, 8th sem.)

In this case, the feelings of shock and frustration might be understood as related to the student's initial struggles to grasp the task that (s)he¹ has to take on in constructing a new and unknown object for the learning, which would be the first step in an expansive learning process. This problem might be understood in terms of the student lacking a 'horizon' to aim for. Christie et al. (2007) describe this phenomenon with reference to Hodkinson: "...Hodkinson (2004: 7) argues 'horizons. are influenced both by opportunities which a person has access to, and also to a person's perception of self, of what they want to be, and of what seems possible'." It appears to be a lonely struggle, since one important aspect is missing here, namely, the collective effort of sense-making. In both cases, the academic emotions produced may be categorised as epistemic emotions triggered by cognitive problems.

Students may experience conflicting logics between their previous education and the present study programme when it comes to interpretations and particular understandings of, for instance, the use of methods for doing research, analysis and so on. Entering a new educational/learning culture (activity system) might mean that some of the concepts and learning methods are interpreted differently from what the students have been used to.

It has been hard to write a project because I thought it was my strong side, but the content and the argumentation turned out to be different from what I was used to. So I have been held back by myself, because I sometimes could not or would not understand other options, because I thought I had cracked the code regarding writing a project. (L, 8th sem.)

For student L, too, it is a question of epistemic emotions. In this case, the student also explicitly refers to problems of understanding the logic, the institutional discourse, here referred to as 'the code'. This may result in some kind of disorientation and

perhaps even a struggle to give up or set aside previously learned methods and understandings, in order to accept and try out new approaches. This student expresses the nature of the struggle when stating that the problem was just as much a lack of willingness to adopt a new logic. The student had an understanding of being a person who, having mastered the art of project writing, was suddenly confronted with a logic, which - if accepted - took away that mastery. Research in adult learning processes states that it is imperative for adults to feel that they are regarded as professionally and personally competent persons in order to be able to enter into learning processes. They must experience stability in their self-image (Nørlem-Sørensen & Marstal 2005). From a boundary-crossing perspective, the student seems to be stuck in the first step of the process - 'questioning' - and rejects the existing practice of the new context. (S)he does not seem to be able to find common ground with existing practice in the previous context, nor does (s)he find motivation or interest in moving on to the next stage, 'analysing the existing practices', which might have provided some insight into the rationale behind the respective methodological approaches. This phenomenon could be interpreted as a case of resistance to the learning situation (Illeris, 2003), which in fact contains an important potential for expansive learning. In this case, too, it appears to be a lonely struggle, where a collective effort as described in the next step – 'collaborative, mutually supportive building of new models, concepts' - might have helped the student.

The pedagogical issue here might be how to make students aware that what they have learned before is not necessarily wrong, but that they have entered a new context with other learning goals – and that this calls for new/other methods, in addition to what they already know. A question might be who "the collective" should be and, in the context in question, an answer might be the project group together with the group's supervisor as a representative of the university/study programme.

In the following quote, the problem of entering a new professional field is directly related to learning a new discourse and terminology. The student gives an account of the strategy (s)he applies in order to try to overcome this challenge. The student deals with the problem by handling it in a systematic way, in an attempt to support the learning process,

As it has been a completely new field, I find that the study regulation has been a bit overwhelming. There is a lot we have to do... I must navigate in an entirely new professional terminology, and I try continuously to form mental structures where the many concepts are 'implemented', so that I may keep an overview of what we are learning. (AA, 8th sem.)

The feelings which the student reports as a consequence of this situation are of being overwhelmed (epistemic emotions). These feelings are being kept in check by conscious efforts to deal with them through cognitive strategies, where the student is working consciously with the new conceptual framework, based on an understanding that this a central key to moving into this unknown universe. At the same time, it appears that the student at this point is actively using elements of the discourse of the study programme ('form mental structures') in the account. However, if the statement is considered from the boundary-crossing and expansive learning perspective, this process shows little in terms of questioning, examining and debating, looking more like an assimilative and perhaps accommodative process. On the other hand, new ideas may have been emulated and resources may have been related to this and negotiated during the processes. The interpretation of the statement is not unequivocal. Again, this example very much points towards an individual approach to working with the challenges. Below we will look at the role the collective plays or could play.

The Class as a Forum for Emotions

When entering a new educational context, students try to situate themselves within that context and determine their own subject-related strengths and weaknesses. The process of mastering the academic and professional resources of that context is in part also a process of becoming gradually able to determine their own competence. The class may be one of the first places where the students encounter the subject area and the related discourse, where they start assessing themselves and their fellow students based on communication and interaction. The following statement from a student in the first semester of the programme (7th semester) shows both his/her interpretation of the competences of fellow students and how this interpretation is used as a measurement to assess own competence,

Became insecure because many of the others in class know more at the moment than I do about the subject area. (Z, 7th sem.)

At this stage, it is fair to assume that the assessment is primarily based on a perception of how well other students seem to master the discourse within the subject area and to what extent they participate in the interaction and communication. The perception of fellow students' mastery of the discourse is interpreted as an indication of their knowledge level by the student, which leads to feelings of insecurity. The emotions expressed by Z seem to combine achievement emotions (fear of failure) and social emotions (social anxiety). The next example shows how the act of increased participation in the oral/verbal activities is understood as a positive development,

I have become better at participating in oral presentations and discussions in class. So the very act of daring is clearly improved. ... I dare do more than I did, when I came. (L, 8th sem.)

Speaking in public or in class is often perceived as intimidating, and much might be at stake (e.g. the fear of losing face) if one does not feel that the environment is supportive and friendly. For adults, in particular, the stakes are often high since their self-understanding may be in a process of change (Knowles, 1970). Overcoming such fear might in itself be considered a triumph and a positive development (achievement emotions). The student's growing courage to increase participation

would from a learning perspective at the same time provide additional opportunities for increasing learning through the change from passive to active participation and from receiving to producing knowledge.

The final example illustrates a phase in the process of self-assessment undertaken by the individual in comparison with fellow students, where the student has reached a level of self-confidence and thus is at ease with his/her situation in the context. It appears that it is through the communication in that context that the student measures his/her own levels of competence,

My subject-related competences definitely meet university level! In the end this was confirmed in the exam, which went really well, but I also have the experience that I am on equal terms with the others in the class, so that speculation/worry is gone. (K, 8th sem.)

In addition to the measurement against fellow students ('on equal terms with the others in the class'), there is the formal assessment undertaken by the system ('the exam') – and, from the statement, it appears that both' systems' (fellow students and the study programme) play important roles in the student's self assessment and understanding of what' university level' means as a criterion for competence. The statement shows that degree of mastery is evaluated based on the collective discursive community (the institutional logic). The student at this point feels confident in mastering the intellectual resources and in being able to self-evaluate. There is no feeling of insecurity. The academic emotions expressed here may be categorised as achievement emotions (confidence and pride related to success).

For other students, the process of self-assessment is harder and they continue to struggle with the challenge of situating themselves and their competence in the educational context,

The worry whether the work I do on my own is good enough. (D, 8th sem.)

This student does not appear to master the discourse or the resources sufficiently to be able to assess him-/herself as was the case with student K, even though both students are in the same semester in the programme. In this case, the social context and feedback is still necessary for the student to achieve some degree of confidence. The emotions in this case are also categorised as achievement emotions (anxiety of failure) and epistemic emotions (insecurity related to solving non-routine tasks).

Group Work as a Context for Emotions and Learning

Comparison with the other students may lead to more than feelings of insecurity, for instance, if students feel that they are unable to adapt to the logic and make use of the resources as swiftly as the other students do. In group work, the extent to which an individual group member measures up to the rest of the group quickly becomes evident,

...I somehow have a feeling that I am the one behind in the group, because everybody else accomplishes more than me. I immediately feel that I am stuck and get doubts about how to move on. ... But I feel pressurised by the fact that the others do so much more than me. (M, 7th sem.)

Student M expresses negative feelings related to achievement (fear of failure in meeting the standards), epistemic (not knowing how to solve the problem/task) and social emotions (feeling pressured). Implicit standards/norms governing group work are formed through the degree of active participation displayed by the group members and the extent of contributions provided. Perhaps the lack of an explicit norm for the group work emphasises the problem in this case. An explicit and negotiated agreement on the framework of group work might have legitimised student M's contribution and made it acceptable. The student appears to measure fellow students' contributions by their quantity, which causes the student to feel unable to live up to the implicit expectations. But other criteria, such as academic quality, might have been an equally relevant standard to go by. Understanding the discourse is important. It is likewise important to be able to apply the discourse in the different learning scenarios and thus create visibility and transparency, allowing students to identify the communication ground rules and enabling them to master them. In practice, this means negotiating the meaning in detail, since all group members may have their individual interpretation (Nørlem-Sørensen & Marstal, 2005).

From a pedagogical perspective it is important for project work in groups - conceptual framework included - to be thoroughly introduced, both theory and practice. Since this learning method (PBL) is a central characteristic of our university and study programme, it becomes essential to facilitate fundamental understanding of all aspects of the method, in order to avoid or at least reduce the students' uncertainties and doubts. In this particular case, it would mean that the students should be able to address issues relative to studying and working together in groups, such as how to plan the work, to fine tune mutual expectations and so on. It would be important to create learning sessions where students can formulate and discuss their own previous understandings of the concepts, as they are coming from a variety of educational institutions and study programmes. These sessions should also provide the opportunity for students to discuss the understandings and interpretations inherent in the logic of this study programme because it may not coincide completely with their own. From a socio-cultural perspective, this could be termed as a question of discovering to what extent the individual's cognitive contextualisation coincides with the institution's discursive contextualisation (Säljö, p. 244). If the group were to initiate a process of developing and negotiating their own guidelines and rules for collaborative work, they might in fact be embarking on a potentially expansive learning process.

The learning processes and their outcome are not always immediately visible to students, but social contexts such as group work may provide the opportunities both for the learning processes to take place (through communication, discussion,

negotiation), and for students to become aware of their own development and learning outcome,

There were many concepts and much theory to be read and understood, which at times created some pressure. I have however seen that I understand and know more than perhaps I myself felt, for instance, when contributing to group work. (F, 8th sem.)

The institutional logic of project and group work requires participation, and the group offers a framework where the student has to be active and productive using the intellectual resources and tools of a specific subject area. This means that the student is challenged into making – or trying to make – contributions, which display understanding and are not just reproduction of existing knowledge. This process supports the learning process. These contributions will be discussed and further negotiated within the framework of the group – another process of enhancing understanding of the discourse of the subject area. Student F found that group work elicited knowledge and understandings of subject areas that at that time resided perhaps more in the form of tacit knowledge. And the experience of applying knowledge and understanding in group interaction supported the student's insight to his/her level of competence. The pressure experienced by student F seems to have been compensated by the experience of mastery of the subject area, which F achieved. These may be categorised as achievement emotions and epistemic emotions related to the discovery of own knowledge.

The group, consequently, may serve as a place where the individual student becomes aware of own competences. In addition, the data show examples of the group being used as a forum for developing specific behavioural strategies for the benefit of the collective process,

Regarding my stubbornness, I have been conscious that in our group work I should try to yield, instead of becoming grumpy and tired of it. I have basically succeeded, but I definitely still have to be conscious about it. (H, 8th sem.)

In this case student H has become aware of the importance of his/her ability or reluctance to negotiate meaning, and how it affects the work processes and his/her own feelings. The student trains him-/herself to rein in certain emotional reactions in order to improve particular aspects of the collaboration process. Student H shows signs of social emotions (consideration). From a pedagogical perspective this shows some of the demanding aspects of group work and the potential of transformative or expansive learning.

The Individual – Taking Ownership of Learning and Development Processes

From the perspective of the individual student, entering a new study programme may give rise to feelings of both excitement and apprehension regarding the learning journey ahead,

To dare to move into unknown territory and believe that my resources and potentials will carry me through unscathed. (E, 8th sem.)

The quote is from a student reflecting on the feelings (s)he had when embarking on the master's study programme. A great deal is required of students in terms of faith, belief and self-confidence from the very outset, in order to trust in an unknown future. The emotions expressed may be categorised as both achievement emotions (hope of success) and epistemic emotions (curiosity about the unknown).

One of the recurrent traits of the data is that students in the 7th and 8th semesters expressed feelings of' pressure' or' stress' caused by various factors related to their study. The data, however, also shows a number of ways in which the students dealt with the different types of challenges they experienced during their study. Student C demonstrated an approach where the student has constructed an understanding of the programme's scope, combined with his/her own aspirations, that allowed him/her to reduce the workload and hence avoid feelings of stress,

I have decided that I do not have to read everything, only that which is necessary. This reduces my stress level. (C, 8th sem.)

The student must have defined some criteria for him-/herself in order to determine what is 'necessary'. Of course, from a pedagogical point of view, this poses the interesting question: how to decide on this when you are still in the process of getting to know the subject area? Does this student have a specific job profile in mind when making his/her selections? Nevertheless, the student has taken on the responsibility of finding a way to navigate in the complexity, which makes it possible for him/her to create a meaningful learning process. The emotions expressed may be categorised as epistemic in the sense that the student has defined a problem and solved it with success.

Other students have found different approaches helpful in dealing with feelings of stress and insecurity,

Have become better at taking one thing at a time and not feeling pressurised by the large amount of work. (B, 8th sem.)

I have found out that it is OK not to be the best and am happy as long as I am working on something I like. The process is more important now than the result. (P, 8th sem.)

Student P has changed his/her focus from competitive, externally oriented motivation to intrinsically motivated process-orientation. This indicates a change in the self-image of the learner and that a learning process has taken place (Mezirow, 1991). In both cases the emotions may be characterised as epistemic. In student P's case there are also achievement emotions (joy in the learning process).

Students reported gains in self-confidence through comparison, from feedback from fellow students and from exams. This perceived acknowledgement brought about positive learning-oriented behaviour,

I am much more confident and believe that I actually have something to contribute. ... in general I have tried to strengthen myself and my knowledge by taking responsibility for tasks related to lectures and group work. (A, 8th sem.)

Student A seems to recognise the resources that (s)he has come to master and is willing to experiment by actively offering to contribute. The feelings of professional self-esteem, on the one hand, support the student's learning processes and, on the other, are increased through this process. The academic emotions expressed are achievement emotions.

Some students describe having developed specific competences related to an increased feeling of self-confidence,

I have developed into being much more independent and 'resolute'. To dare to speak out when something does not work (I am here thinking about group work in particular since that was where the greatest impact was). (C, 8th sem.)

My competences have been strengthened more in the subject-related area. I have gained the overview – almost – that I wanted. The academic chaos that ruled in the 7th semester has calmed down inside. I trust much more that I now have a greater academic competence, and I see it in my group and during lectures. (V, 8th sem.)

Both student C and student V express achievement emotions. When student V talks about 'academic competence' it is related to mastery of the discourse and understanding of the institutional logic. The feelings of 'academic chaos' describe the emotions experienced during his/her learning process of coming to understand and grasp the new context (epistemic emotions).

When students obtain an increased knowledge of and sensitivity towards the importance of the discourse, it may also be extended to the discursive construction of the self. One student is explicit about his/her growing awareness of the importance of discursive self-representation,

I must be careful how I talk about myself. I end up looking as if I do not believe in my own skills – and basically I do, in fact, believe in myself. I will therefore try to work my way towards a new understanding of myself and the image I paint of myself – to myself. (O, 8th sem.)

In this case student O has developed strategies for working with him/herself in order to be able to ensure that the discursive presentation of self-confidence coincides with the self-image.

The Pedagogical Perspective

From a pedagogical perspective, how much are students' emotions and feelings supporting or hindering their learning processes and what does the educational environment offer in terms of resources to facilitate learning processes seen from a socio-cultural perspective?

The analysis shows that the emotions expressed in the SDD forms are primarily epistemic, achievement and social emotions, either alone or in combination – some of a positive, others of a negative nature. Emotions related to the topics of study are not touched upon.

The feelings and emotions reported by the students in the SDD forms mostly relate to challenges experienced in coming to understand the new institutional logic (negative epistemic emotions), the discourse and themselves as agents within this contextual framework, i.e. being able to act with the discourse (achievement emotions). The pattern is that the challenges are felt most strongly during the first (7th) semester of the new educational context. During the following semester most of the students have come to understand and/or have developed coping strategies enabling them to focus on the positive aspects and potentials of the education. When the students feel able to participate actively and experience the value of their own contributions, this leads to various elements of empowerment (positive achievement and epistemic emotions). The social emotions expressed by the students are primarily connected with social anxiety, related to comparison with peers and the individual's interpretation of peers' view of him/her.

As indicated throughout the analysis, there are pedagogical solutions to a number of the problems presented. In particular, in response to the negative epistemic emotions related to problems of understanding the new educational framework, the institutional logic and the discourse related to the specific teaching and learning method (in this case PBL), there are ways of working towards greater transparency.

The resources in the programme supporting this process in terms of providing frameworks for introduction to and meaning-making of the institutional logic and discourse consist of three key elements: the Student Development Dialogue (combined with a learning portfolio²), the lectures and class work, and the problemoriented project-work in groups. The contribution of the SDD has been analysed in this paper. Students here have a platform for exposing/presenting their problems and insecurities to a representative of the activity system, the dialogue partner, and can receive feedback on their understanding of the institutional logic. At the same time, this is a place to try out the discourse. The learning portfolio is the student's own space to register, analyse and document interests, insights, development and learning processes, as well as to state goals and reflect on successful and less successful learning processes and outcomes. The learning portfolio is mostly considered a written resource and feedback on the processes will primarily come from individual students themselves. The students' reflections and considerations in the portfolio feed into their work when preparing the SDD-forms. Discussions in class and, last but not least, group work are essential platforms for students to test their understandings of the system and its requirements, practice their proficiency in the discourse and receive feedback from their peers and supervisors. The PBL approach is a resource - and a tool for learning – which offers interaction and communication as the basis

for both written and verbal discourse. Group work may be very challenging, both academically and emotionally, and holds the potential of transformative or expansive learning processes.

The question is, whether it is possible – and desirable – to reduce or eliminate some of the negative feelings that students report having experienced. Learning takes time, as stated by this student,

I have realised that an individual does not become an academic after one or two days at university – that I have to work my way into the understanding of that part. That has provided me with a feeling of peace – which now makes room for taking the time to acquire new knowledge. (T, 7th sem.)

On the one hand, time should be allowed for students to 'work their way into the understanding', taking into account that learning processes are the individual's construction of knowledge and mastery of the resources. On the other hand, it might be possible to provide stronger support for students regarding boundary-crossing processes, through a higher degree of transparency and explicitation. One pedagogical approach might be to create, in the initial stage of the study programme, a learning scenario inspired by Engeströms (2003) boundary-crossing sequence, thus creating a framework for joint negotiation of meaning and introduction to the prevalent discourse. An important point in such a process would be that the participants would come to see that the discourse is not a static entity, and that they as contributors will be co-creators of the discourse in the course of their learning process. Such a pedagogical approach could reduce the negative epistemic emotions related to the cognitive problems of understanding the institutional logic and discourse and the ensuing negative achievement emotions related to fear of failure. At the same time, it might enhance the students' feelings of integration into and ownership of their education. Students create their identity or self-image in relation to their experiences of competence and feedback. So when students experience mastering something, this contributes to their identity formation in this area. Christie et al. (2007), citing Wenger, put it differently: "Participating in a new practice or community involves us in forming an identity in relation to our competence such that 'we know who we are by what is familiar, understandable, usable, negotiable; we know who we are not by what is foreign, opaque, unwieldy, unproductive" (ibid., p. 153).

CONCLUSION

Being in the position of learner demands a certain readiness to develop further or even (re)construct your self-identity in this regard, and a willingness to venture into new territory without knowing what the outcome will be. More mature students, who have had a professional career, may experience that they have to let go of the comfort of knowing that they are working in a field where they are experienced practitioners, to accept the insecurity that comes with the feeling of not knowing. The data show that students, particularly during the first semester, seek to navigate and situate themselves in the context through self-assessment, measuring own competence against their peers in class and in group work. The latter provides ample opportunities for such evaluation and may lead to feelings of uncertainty and inferiority, as well as experiences of being confirmed in having the ability to make valuable and constructive contributions.

The problem uncovered by this study is that individual students try very hard to make sense of the new context, and make their cognitive contextualisation coincide with the institution's discursive contextualisation. Negotiation of meaning related to their transition from one educational context to another is an important tool in this process. Although the receiving activity system, i.e. the university/ study programme, provides a framework for scaffolding students' introduction to the discourse and institutional logic and meaning-making, this does not appear sufficient, judging from the students' reported emotional responses to the situation. Even though the system offers collective frameworks, the processes of coming to terms with the new context appear to be lonely ones, where the problems are experienced as the individual student's personal problem, while in fact this could be regarded as the system's problem and handled accordingly. A pedagogical solution might be, to be explicit about the problem areas uncovered here, i.e. the cognitive problems related to understanding the new activity system and the ensuing fear of failure. Such a process would provide students with the framework for dealing in detail and explicitly with their educational background and the related discourse and institutional logic in a comparative and/or contrasting perspective. This would give a concrete point of departure for a meaning negotiation process and create a framework for expansive learning related to the students' boundary crossing.

NOTES

¹ For anonymity reasons 'his/her' and '(s)he' will be used throughout the chapter.

See Lund 2008.

REFERENCES

- Baeten, M., Kyndt, E., Struyven, K., & Dochy, F. (2010). Using student-centred learning environments to stimulate deep approaches to learning: Factors encouraging or discouraging their effectiveness. *Educational Research Review*, 5, 243–260.
- Christie, H., Tett, L., Cree, V. E., Hounsell, J., & McCune, V. (2007). 'A real rollercoaster of confidence and emotions': Learning to be a university student. Online papers archived by the Institute of Geography, School of Geosciences, University of Edinburgh, Edinburgh.
- D'Mello, S., & Graesser, A. (2011). Dynamics of affective states during complex learning. *Learning and Instruction*, 22(2), 145–157. doi:10.1016/j.learninstruc.2011.10.001.
- Engeström, Y. (2003, March). The horizontal dimension of expansive learning: Weaving a texture of cognitive trails in the terrain of health care in Helsinki. Paper presented at the international symposium 'New Challenges to Research on Learning', University of Helsinki, Finland.
- Engeström, Y., & Sannino, A. (2010). Studies of expansive learning: Foundations, findings and future challenges. *Educational Research Review*, 5(1), 1–24.

- Greenbank, P. (2014). Career decision-making: 'I don't think twice, but it'll be all right'. Research in Post-Compulsory Education, 19(2), 177–193.
- Illeris, K. (2003, July–August). Towards a contemporary and comprehensive theory of learning. *International Journal of Lifelong Education*, 22(4), 396–406.
- Knowles, M. (1970). Andragogik en kommende praksis for voksenlæring. In K. Illeris (red.), 49 tekster om læring. Frederiksberg: Samfundslitteratur.
- Lorentsen, A. (2008). Portfoliounderstøttede udviklingssamtaler i videregående uddannelse Evaluering af en case (Arbejdspapirer om læring. 4). Aalborg: Institut for Uddannelse, Læring og Filosofi, Aalborg Universitet.
- Lund, B. (red.) (2008). Portfolio i et lærings- og uddannelsesperspektiv. Aalborg: Aalborg Universitetsforlag.
- Lund, B., & Jensen, A. A. (2011). Framing of collaboration and its impact on creativity and innovation skills. In M. Horsdal (Ed.), *Communication, collaboration and creativity: Researching adult learning* (pp. 145–160). Denmark: Syddansk Universitetsforlag.
- Lund, B., & Jensen, A. A. (2013). Creativity development by management training in POPBL. In L. Krogh Kjær-Rasmussen & A. A. Jensen (Eds.), *Visions, challenges and strategies for problembased learning*. Aalborg: Aalborg Universitetsforlag.
- Lynggaard, K. (2012). Dokumentanalyse. In S. Brinkmann & L. Tanggaard (red.) Kvalitative metoder. København: Hans Reitzels Forlag.
- Marton, F. (1976). On non-verbatim learning. II. The erosion of a task induced learning algorithm. Scandinavian Journal of Psychology, 17, 41–48.
- Marton, F., & Säljö, R. (1997). Approaches to learning. In F. Marton, D. Hounsell, & N. Entwistle (Eds.), *The experience of learning. Implications for teaching and studying in higher education* (2nd ed., pp. 39–58). Edinburgh: Scottish Academic Press.
- Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco, CA: Jossey-Bass Publishers.
- Nørlem-Sørensen, H., & Marstal, H. (2005). Modstand som meningsfuld handling en voksenpædagogisk udfordring. In C. Nejst (Ed.), Voksnes læringsrum. Værløse: Billesø & Baltzer.
- Nyström, S., Abrandt Dahlgren, M., & Dahlgren, L. O. (2008). A winding road professional trajectories from higher education to working life: A case study of political science and psychology graduates. *Studies in Continuing Education*, 30(3), 215–229.
- Pekrun, R. (2014). *Emotions and learning* (Educational Practices Series 24). Belgium: International Bureau of Education.
- Phillips, N., & Hardy, C. (2002). Discourse analysis. Investigating processes of social construction. (Qualitative Research Methods Series 50). London: Sage Publications Ltd.
- Säljö, R. (1975). Qualitative differences in learning as a function of the learner's conception of a task. Gothenburg: Acta Universitatis Gothoburgensis.
- Säljö, R. (2003). Læring i praksis et sociokulturelt perspektiv. København: Hans Reitzels Forlag.
- Schutz, P. A., & DeCuir, J. T. (2002). Inquiry on emotions in education, *Educational Psychologist*, 37(2), 125–134.
- Silverman, D. (2001). Interpreting qualitative data. Methods for analysing talk, text and interaction (2nd ed.). London: Sage Publications.

Annie Aarup Jensen

Department of Learning and Philosophy Aalborg University