Theory, practice and synthesized knowledge – Students' learning and reflections during internship-periods

Abstract
Courses with elements of internship are expected to bridge between different forms of knowledge domains and thereby contribute to synthesizing knowledge can easily be taken for granted. This requires a clear and systematic integration of theory and empirical knowledge, which can be seen as complementary opportunities. However, we still need more knowledge about how the relationship between different forms of work and knowledge domains can be understood.

We have scrutinized the organisations, aims and approaches to knowledge and learning on internship-periods at two programs at a university where they outspokenly says that they see workplace settlement as a point of departure to reflect and synthesise knowledge in science and theory. The data consists of policy documents, curricula, student assessment work and written reflections of internship periods.

Our results show that there are somewhat different conceptions of scientific knowledge, practice, knowledge, and the relationship between them. While some documents are based on theoretical perspectives other emanate from practical perspectives. In some texts internship is viewed as means to develop professional skills and other focuses theoretical analysis of practice, which have implications for pedagogical design. Ambiguous agendas are also reflected in students' assessments work where perspectives, focuses and reflections in and about situations differ depending on how students have perceived the aim with internship. Our conclusions are that ambiguity and different perspectives formulations may confuse students. To further develop internships pedagogically, an increased clarity and transparency is needed on both ontological and epistemological starting points and perspectives.

Introduction
Vocational training has been around for hundreds of years in the form of apprenticeships outside of academia and universities. In other vocational training with a long tradition, such as medical schools and teacher training institutions, education has taken place in the context of general education, such as universities and colleges. It is common for these courses are that they are expected to provide knowledge and skills that students need for their future profession. In addition, employers' demands and expectations of the trained
students have the skills to meet the future requirements of a changing environment and market.

The above requires education at college and university level to be flexible towards professions and activities is the development and the challenges and opportunities of today’s and tomorrow’s society demands. The challenges lie in the support and challenge students’ creativity, scientific, critical perspective and to contribute to an innovative and flexible approach. To achieve these educational objectives requires a clear and systematic integration of theory and empirical knowledge, especially the latter linked to the current and possible future business needs. This is seen in such as conflicts of interests but it can also be seen as complementary opportunities. One question that arises is to what extent that the professional and practice-based knowledge in education correspond to the conditions and dilemmas that characterize professions to train for and are not necessarily included in the theory related professional practice example of this might be various skills acquired through practical experience and cannot always be articulated or put in a theoretical context (Kuhn 1970). The forms for integrating theory and experience - based practice can take many forms in academic vocational training; placement courses, co-op education and mentoring programs, mentor, project and thesis projects are educational work given at University West. Such arrangements have long existed in the training courses we study and are expected to contribute to the integration of theory and evidence-based practice knowledge. If and how this is done we do not know much about, which means that we need more knowledge about how the relationship between different forms of work and areas of knowledge can be understood, how the learning outcomes of educational programs to meet the expectations and assumptions as to say they train for.

**Purpose**

We delimit our study to two professional programs in college; social educational programs and Programme in Human Resource Management. In these courses are stated aim to start from science and theory to develop practice skills close. One way to achieve these goals is to organize and implement these courses so close to practice skills are challenged and developed through theoretically based discussions and analyses. This is evident in both the training plans that curricula but also kind of how mentoring and practical training elements complement the more traditional teaching methods such as lectures and seminars.

The overall interest is to study the clinical course to the purpose or how the relationship between different forms of work and areas of knowledge can be understood. More specifically, we want to study how the learning outcomes in work-based courses are reflected in the students’ coursework. This means that our results can contribute knowledge about ALL that philosophy and pedagogical design in academic education.
**Background**

For universities, it is important to offer forms of learning that develops students’ abilities to process information, solve problems, to act flexibly and creatively (Carlgren & Marton, 2003). There are abilities such as Granberg (2009) suggests best developed by identifying, discussing, analysing, and train their attention on their own learning.

Dewey (1933) argues that the theory, practice, reflection and action are linked. For knowledge to be able to fill a real function, it must also be able to access the utility. Based on such an approach, it is important that in an educational context to tie the knowledge of the individual’s life-world and not only reduce knowledge to something that exists only in the framework of the school. For training to be able to include a developmental perspective, one has to first learn to do things, and then build on that knowledge that is also the subject of to put into words what you’ve learned. At the same time, this requires the organization of training programs where placement, often expressed as a response to these needs. Clinical education is presented as a way to provide opportunities for students to link theories, perspectives and ideas into practice, allowing for synthesizing knowledge. It also gives students opportunities to construct a scientific perspective on the practice they will become a part out, not least because they can link theoretical concepts to new situations (outside literature and classroom).

Human resource development related to clinical education has been studied from several perspectives. Kolb (1971, 1984, 1999) have studied how to understand how learning within and between various activity fields such as school and work can be understood. Based on his results, he has developed a theory of the process by which different experiences and processes contribute to learning. Based on his reasoning, reflection as process and activity experience, central to learning, which are also the aspects that he believes need to be made aware and structurally supported in educational contexts.

Griffin, Lorentz and Mitchell (2010) have studied the clinical training in the UK and believe that a prerequisite to structure the program so that students have a real opportunity to reflect on the experiences they have with them (which is of theoretical nature) when you get new experiences (from practice). They argue that more education take for granted that the students’ learning path during VFUn will be done in a certain way and reach a certain level just by students have a tutor on VFUn and that is stated in the course objectives. On the contrary, they argue, is the placement to be considered as a pure learning where different types of learning activities can take place and through awareness and clarity, the structures within VFUn more or less support certain learning trajectories. But it is important, they say, to separate the development of professional knowledge and the development of theoretical understanding. They assume partially each other but are not the same. Although Yang (2009) studied learning in higher education and believes that reflection and the experience in practice is a
prerequisite for learning. He also believes that with the right conditions, clinical education is regarded as a COP (community of practice) where both professional knowledge and abstract conceptual understandings can be developed. However, they are not the same and one should be careful structuring of internship and clear about the learning process so that the right kind of knowledge focus and interest is it that student learning courses targeting.

A common argument for work-based learning experiences is that it is a form of learning that supports student development in order to identify relevant discourses and learn to deal with them in different communicative practices. While this means that students participate in a variety of social practices in which learning occurs both within and between different communities of practice (Lave, 2000). By layering different forms of work, the students will gain a deeper understanding and a grasp of their own development and their own learning. This can be seen as a prerequisite and a deepening of the teaching practices that are put into the perspective of participation and engagement in which students' own abilities, resources and skills are challenged and supported in their clinical training. Then the students to reflect on their own development and their own learning and their own abilities, individually as well as in groups, presupposes and reinforces the various forms of work and play together.

Learning in this perspective, is seen as situated off in social settings. Using previous experiences, knowledge, and cultural "bridges" the student may make aggregate analyses within and between theories and practices to create an understanding of the situation. It is a pedagogical strategy that involves clinical education is seen as a learning activity that invites and accommodates communication, thinking and actions that are situated in different contexts in which learning occurs and can be understood in context. This situated and learning is very similar to what Kolb (1984) calls for experiential learning in which he defines learning as "the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience" (Kolb, 1984, p. 41).

Another related approach to learning is what Lauvås and Handal (2001) calls for practical vocational theory. They argue that it is important to experiential learning in collegiate (social) context and that the need and interest of knowledge can be seen as "the individual's expectations of practice and the overall preparedness for the practical activities" (Lauvås and Handal 2001 Page 206). This includes knowledge based on both my own and others' experiences. Practical vocational theory can be said to contain two parts: a rule knowledge, such approaches and procedures, and practice knowledge, which is seen as the skill to make use of the accumulated experience and familiarity with the example set goals.

In situations which in some sense is problematic person seeking understanding and meaning by questioning the situation and then develop their preparedness. Dewey (1933) defines reflection as to not immediately take the first without binding solution of arising situations without critically thinking about other
possible solutions. Specific situations that are intractable increase the opportunities for reflection. Schön (1983) describes that students find it difficult to integrate the theoretical knowledge with practice. By reflecting in action, "reflection in action", improve the prospects for integrating theory and practice. The second reflection shape Schön presented, "reflection on action", means reflection after the situation that arises and action / solution. In many situations it may be difficult to work and reflect simultaneously. Setting aside time and an opportunity for reflection is something that can be difficult during the internship. The reflection questions the predetermined framework surrounding the situation or action and by perceives these unconscious frameworks, a critical questioning done.

Van Manen (1991) describes reflection in four different levels, but the levels are partly overlapping and that they may be interpreted more of a theoretical than a practical level. The first, basic level of reflection is described as a reflection of daily activities where activities occur routinely and partly without comment. Some reflection is present but the conducts of the activities are not questioned. Other reflection level is that we are asking questions about how we can develop and in some cases change, for example the routine conduct in a given situation. For these two reflection levels apply to you mainly looking for answers in the routine conduct and not question this action. Reflection Level three requires reflection on experience and behaviour is more systematic and develops a critical and theoretical approaches. Here, the theories and activities together, which increases the understanding of different phenomena in the business. The fourth level is a deeper reflection that can be seen as reflections of reflections in activities linked to theories. By this meaning is understood by which knowledge is used and to their own taking for granted becomes contested.

**Method**

In total, we studied the coursework from 26 students' placement, 13 from a Programme in Human Resource Management and 13 from a social work program. Programme in Human Resource Management's placement was ten respectively and social work program was fifteen weeks. All examinations de-identified gender and age when these factors are not relevant in this study. The placement period for the social work program occurred during the fourth semester and for Programme in Human Resource Management during the fifth semester.

In addition to examinations, we have studied documents such as training curricula, syllabi and descriptions of operations and student examinations from the practical training periods. All records were analysed to understand how knowledge and learning can be understood and what epistemological standpoints programs rests. The results of this analysis formed the basis of the analysis scheme used for examinations.
All examinations were read first independently by the authors and then discussed the similarities and differences between the analyses. The focus of this first analysis step was:

- Synthesizing knowledge from two activity fields (education and business)
- Reflection in, on and over the experience.
- Trends and perspectives, i.e., theory meets practice, own professional development, self-knowledge (wider than professional development).

The next phase was taken coding the text for which content-expressing various forms of reflection. Although this analysis was first conducted independently by the authors and then compared with each other. The different reflectance levels this stage are focused were:

- Description of situations and activities
- Description of situations and activities linked to the theory/literature
- Reflection on the relationships between situations/activities and theory/literature situations/activities
- Critical reflection on their own learning

**Results**

Our results show the conceptions of scientific knowledge and practice knowledge and the relationship between them, which are available from training providers.

Starting points and goals

In Figure 1 you can see the ontological and epistemological starting points that clinical education vocational education is based and which also forms the basis for the organization and the implementation you have. Moreover, it turns out in the governing documents of the training how the conditions and perceptions of how the forms of education supports the development of the different knowledge domains.

The placement is controlled by the curriculum and goals of the curriculum. These focus on knowledge and understanding, skills and ability and judgment and attitudes. The premise of the program is the people and their living conditions as well as phenomena, issues and processes that arise in the context of social exclusion, disability and other addictive life situations. The service line placement (internship) is organized based on a model of work integrated learning where students continuously develops and integrates knowledge and skills through both campus-based and clinical training.

**Figure 1.**
The programs are different placement, and in Figure 1 discerned what they are and what are the underlying ideas behind them. In the studied programs, the focus is on the student to reflect on their own experiences in the professional field related to scientific texts and theories. It aims to provide opportunities for students through this process develop skills that provide preparedness in the workplace. It also provides opportunities for students to later out working continuously integrate and further develop knowledge and skills. The placement is carried out in private and public organizations and even within organizations with charitable organizations.

If, for example we look at the course objectives in the other program, you can clearly see that there is a clear desire for the students to synthesize knowledge between the theoretical and the clinical activity systems during VFUn.

<table>
<thead>
<tr>
<th>Course Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker Training</td>
</tr>
<tr>
<td>The student will:</td>
</tr>
<tr>
<td>1 - be able to describe the organizational context for professional practice in business</td>
</tr>
<tr>
<td>2 - understand and apply the theories and proven practice in the professional social and social pedagogical work</td>
</tr>
<tr>
<td>3 - reflect critically on ethical and power aspects of social and socio-educational work in relation to vfu - 's Audience</td>
</tr>
<tr>
<td>4 - reflect on their own values and the importance of their own approach in social and social educational work</td>
</tr>
<tr>
<td>5 - demonstrate an ability to communicate with and mobilize resources in the process of target</td>
</tr>
<tr>
<td>6 - describe and reflect on the processes that occur in the work of individuals and groups in vulnerable situations in relation to the role and position.</td>
</tr>
</tbody>
</table>

Programme in Human Resource Management

After completing the course the student will:
| 7 - reflect and discuss in work width Human Resource Management based on experience during the training period |
| 8 - relate theories in work and organizational psychology to practical HR work |
demonstrate proficiency in report writing and oral presentation

9 - demonstrate the ability to reflect on clinical training as a form of work-integrated learning

10 - reflect the views, values, ethical dilemmas, which comes to expression in the human resources work

11 - reflect on and describe how the organization works on issues of diversity and gender

Figure 2.

Based on the course objectives in Figure 2, one can see two main streaks that also relate to each other. To synthesize the activity fields school (theory) and work (practice) is projected as both an explicit target (see Objective 2 and 8), which are indirect in the other cases (see case 3, 4, 6, 9, 10 and 11). Reflection is written also presented as a way by which to achieve goals in the courses and this is also seen as something that should be done by the two different activity systems meet. Under the item "Other" in the syllabi of the courses is that to happen regular seminars during the placement set and their purpose is to "provide an opportunity for reflection on the development of their professional role and reflect on how the experience of practice can be leveraged, extended, and problematized in relation to different theoretical perspectives "(from the syllabus of social work education).

First, this is a description of the supporting processes to the content - descriptive targets that set. First, it is interesting to note the wording is perspective into question. It is their professional role as the seminars will focus, and seen the placement as a "practice". Sentence parts are interrelated but not against objectives or with the program's syllabus stating that it is an academic graduate education and not vocational training. The work-based learning should thus not be an arena in which students will practice their skills.

The curriculum goals express requirements on both rule knowledge practices knowledge. In terms of rule knowledge, it is possible to define clear criteria but it requires systematic and long-term work in the dissertation advisors. To formulate criteria for assessing practice knowledge is a major challenge. Praxis Knowledge tends to be more or less unconscious and cannot articulate fully (Gustafsson, 2008; Lauvås & Handal, 2001). Accompanying this, the practical vocational theory is an individual design with more or less common features between different individuals' constructions.

Examinations

One obstacle to synthesize a rule and practice of knowledge is that it is not coupled with practical activities. That is to say that it is a relatively isolated
knowledge that can be called school knowledge. Only when the professional role is tested at work developing the acquainted knowledge and opportunities to reflect on the link between theories and experiences (Lauvås and Handal 2001).

Both courses we have studied up reflection type as a vital activity linking practice of learning. Through reflection, the students will synthesize knowledge from both fields of activity (school and activities) and thereby able to aggregate and develop new skills and understandings.

We have analysed thirteen examination data from each program, where the focus has been to categorize texts from three complementary perspectives:

- Synthesizing knowledge from two activity fields (education and business)
- Reflection in, on and over the experience.
- Trends and perspectives, i.e., theory meets practice, own professional development, self-knowledge (wider than professional development).

One way to systematize the experience of placement are as follows:

1. Description of situations and activities

2nd Description of situations and activities linked to the theory / literature

3rd Reflection on the relationships between situations / activities and theory / literature

4th Synthesizing knowledge from two taskbars (school and situations / activities)

5th Critically reflective about their own learning

Schön (1983) argues that education at colleges and universities are characterized by a technical rationality, which is different from the ecological rationality that characterizes professional practitioners. The technical rationality is similar to what Cochran-Smith and Lytle (1999) call for knowledge - for – practice, which assumes that there are theoretical and research based knowledge that you as a professional should apply and solve work-related challenges. The ecological rationality is similar to what Cochran-Smith and Lytle (1999) call for knowledge -in- practice, and involves professional reflects in their profession and to theoretical and research -based knowledge is used to frame and identify challenges but the experience -based knowledge and the contextual conditions are used to manage the challenges.

At first glance it might not seem to matter so much what rationality (the placement) education lay, but as our results show, there is reason to believe that there are consequences for students’ perspectives and learning process. If the students understand what they are expected to be able to apply theory in practice or use the theory to understand the practice affects what they put in the foreground and background. This can be seen in our data when examinations in
social work education largely focus on the action perspective and descriptions of activities close to the work processes.

The complication that arises out of this event (described earlier) is that you have to choose what you like staff to prioritize. Is it the patient's free will have to spend his life with which this person want? Or should we try to give priority to the customer with a functional life with methods that fit him and its impairments. How should you act when that staff notice that a user's free choice affect him negatively. Can one act at all without taking away the person 's right to influence his life?

In the above quote from an examination of social work training begins the student to tell about an event that he participated in during the placement set and the discursive / reflective future (see the quote) puts the event in relation to their own professional role and possible courses of action based on responsibility and power perspective.

"The parents are forced to accept the intervention as social services or else take the kids. This means that from the beginning there is a suspicion of parents towards family therapists that they must meet. The family has also been forced into a new role; they have gone from just being family to become clients, a family that needs help. Skau (2007:45) argues that this leads to a difficulty when the family no longer feel that they themselves decide over their lives, they are not themselves the decisions but have been forced into using the device whose function is to bring order to the family."

In the quote above, we see how a student from social work education in their assessment task is based on a description of a situation during the placement: connections to power. The starting point is a practice situation that the student develops a power of discussion.

"It is important that you think about why you do what you do and for whose best. If the staff would not have her things and money locked up, had the control and power that staff have had not every day worked for Lisa. Which allows me to conclude that power is good when treated right. It is important to treat power with great care and respect and to not offend anyone. To continuously evaluate the needs of the individual, so as not to exert more power than necessary. Through a user influence increases patient involvement and influence."

In the above quote becomes action perspective prominence and power aspect is inserted in this context. Focus on action and descriptions of activities close working processes is also supported by the curriculum for internship for social work education where it says " The purpose of the seminar groups (reflection group) is to provide an opportunity for reflection on the development of their professional role and reflect on how the experience of practice can be leveraged, deepened and problematized in relation to different theoretical perspectives." In the foreground of the seminars is the development of their professional role, although there is a training, including for example teacher training. It is also interesting that the reflections should not only focus content and relationships.
between fields of knowledge, but also to focus the how questions, i.e. how the experience can be utilized. Reflections in and on situations is one thing, but here the reflections also was the experience the possibilities. In Programme in Human Resource Management characterized examinations instead of a perspective where theoretical and research-based knowledge is the basis for activity descriptions. You can say that based on our results will practice in the foreground in social work education and theory and research-based knowledge in the background, while the opposite is in Programme in Human Resource Management.

Based on how training plans, curricula and assessment tasks are designed and staged in training so we can see how the relationships between theory and practice, to some extent, both simplification and problemathization. The simplification lies in the assumptions of theoretical reflection can be "forced" through individual wordings there while other tasks emphasizes practical action. But primarily through reflection, different forms of knowledge from various activity fields (theory and practice) are linked together and provide new insights. This is evident syllabus phrases such as "Reflect on ... / / describe and reflect upon ... / / critically reflect.." where the reflection as soon as an end rather than a means. Is it bridges between knowledge and activity fields to enable the reflection? Or is it that through reflection is a means by which other knowledge-claims can be reached?

Problematization, on the other hand, lies in the distinctiveness of activity and knowledge fields created by the education organization where knowledge, experience and learning processes are categorized as either theory (in school) or practice (in business). This dichotomy is reinforced in example rate target phrases such as "Understand and apply theories and proven practices in social and social educational work in relation to vfus audience." It is reasonable to assume that the division is seen as a problem in the way that students are seen to lose important knowledge which can only be found in either the one or the other of knowledge and taskbar. This is managed through clinical training and through the organization transformed problem instead of an opportunity. Assuming that knowledge can be transferred (transferred) from one to the other knowledge and task bar.

As the results show as expected learning to be a collective process, for example through collective reflection seminar, where there is an interaction between individuals, collectives and the Knowledge and Taskbar. The basis for learning is described as bound to experience that are situated in practice. But based on theories of situated learning (Lave, 1988; Lave & Wenger, 1991) are explained and studied learning and within e.g. an activity, however, it provides no tools for understanding learning between different knowledge and Taskbar. If, instead, to see knowledge and learning as a study, and instead see the individual as such so can Wenger’s (1998) theory of Community of Practice (COP) give explanations about how learning between different knowledge and taskbar can be understood. In this way, students can be seen as intermediaries that transfer knowledge and experience between taskbar and thus becomes the reflection of
the activity in which meaning creation occurs both between knowledge and activity fields and between individuals in a collective process.

But if you look in Table XX which students' reflection reports have been studied, we see that the picture is more complex than the above assumptions would suggest. If all knowledge and all the experience was transferable between different contexts that would have probably meant that the results looked the same between the studied programs. But the context is different, and not least the different perspectives that are projected between the courses, in order to apply the theory in practice and use the theory to understand the practice, which we can see a major impact on student learning path. A likely reason for the differences is that the focus of participation in the various activity fields differ which also allows reflection and analysis units look different on a collective level between program students. Perspective differences affect students’ focus, behaviour, memory, problem solving strategies, etc. which makes the foundation of individual and collective reflection is different.

Discussion
We mean, just like Guile and Young (2003) and Hegander (2010), to vocational training needs to have practical training element to enable students to develop their skills even in the taskbar that they will become a part of. But at the same time, one cannot expect to experience from a taskbar automatically develop individual skills to a new field of knowledge. Meanwhile, there is a risk that activity fields differences are of such nature they may need support in the boundary -crossing, the crossing of taskbar that placement is. One example is Guile and Young (2003) who argue that the acquisition of knowledge and skills in vocational training is a fundamentally social process that involves student participation in a new context. But while it makes sense that the bases of our results assume the learning targeted by placement: n cannot only be immediately possible only through participation.

As our results show that the learning in the workplace is very complex and is based on assumptions about the transferability of experiences between different taskbars. The differences in conditions between the placement and the formal school curriculum, however, clear in terms of opportunities for intentional / planned learning. If you compare the two programs in our study, it is curricula and training-plans structurally and perspectival similar contrast differ examination 'perspective and focus to. It is reasonable to assume that the more subtle differences in various formulations between programs give these rather large differences in student learning paths and objects of knowledge. In Programme in Human Resource Management met toned vocational aspect of education down, and theoretical and research-based knowledge is clearly in the foreground. The social work program is spoken, however, more explicit about professional roles and professionalism. This can be likened to the programs based on different epistemological presuppositions, which allows placement at an overall level can be said to be on both programs. But on closer inspection, based on a student and learning perspective, are placement so different that one
can say that the internship can only be understood in terms of the specific target with it.

At Programme in Human Resource Management is an approach to implementation, which is reflected in coursework that is about what a student needs to know and understand from a theoretical perspective, while social work program is characterized by a perspective that emphasizes what a student needs to be in their future profession. This means that the practical part of each training serve different purposes and provides students with different experiences and knowledge. Programme in Human Resource Management placement based on theory and operations becomes the empirical field where the students through a scientific basis to develop their disciplinary knowledge. The social work program is the starting points to a greater extent the different professions way to define knowledge and action. The students’ examinations have a more pragmatic content where their professional role and the prerequisites and requirements are discussed in relation to what is and is professional knowledge. In summary, one can say that the placement is a heterogeneous activity in training and that it is not possible to discuss in terms of a way to conduct training.

References


