Academic quality in internships: field supervisors´ account of the value of theory in practice

LEIF KARLSSON*
Kristianstad University

ABSTRACT

Internship should not just introduce the students to a future professional role, but is also obliged to live up to the requirements of the Swedish Higher Education Act (SFS 1992:1434) for scientific methods and scholarly activities as well as stimulate a critical and reflective attitude. In order for internships to reach higher education standard, not only must there be students, who through their theoretical studies have developed knowledge with a scientific foundation and an ability for criticism and reflection, but a practice is also required in which this knowledge and ability may be developed and utilized. With this point of departure, the supervisors and the context of which they are a part become of special interest to study and understand. The practice within which the students in the Health Promotion and Education Programme at Kristianstad University College perform their internships is distinguished by richly varied work tasks, ill-defined professional roles and a mixture of different training and competencies (Karlsson, 2005). The supervisors lack supervisory training and only a few have an education that corresponds to the Health Promotion and Education Programme. Interviews were carried out in 2006 with 14 supervisors concerning what they perceived is required in order for them to be able to perform their work tasks, not as supervisors but in general, that is, what knowledge they perceived their work to be based upon; and how they perceived the value and relevance of the core concepts of academic quality, scientific methods and scholarly activities, critical thinking and reflection, with respect to their practical activities. The results of the study show that the supervisors perceived the basic knowledge for their work and the relevance of academic knowledge and ability for their work quite differently. The five different patterns or categories that emerged: *Undeveloped*, *anti-academic*, *administrative*, *renewing* and *tension-laden* all give different prerequisites for the socialisation to and learning of a 'new profession' by the students. The study reveals the importance of the supervisors perceiving academic thinking to be important to their activities, but also the significance of a practice where such knowledge and ability may be exploited and developed. Internship jobs give very different prerequisites for the students' learning, which shows the significance of supervisor training and of internship placements with incentives for more development-oriented learning. (Journal of Cooperative Education & Internships, 2010, 44(2), 32-42).

KEY WORDS: Academic quality, internship, field supervision, learning on the job.

I n addition to introducing the students to a future professional role, internships should also fulfill the requirements of the Swedish Higher Education Act for scientific methods and scholarly activities as well as stimulating a critical and reflective attitude. In order for the internship to attain academic credibility, there must be students who, through their theoretical studies, have developed knowledge with a scientific foundation and ability for criticism and reflection; in addition a practice placement is required in which such knowledge and abilities may be utilized and developed. The supervisors have a core task in the internship in addition to integrating theory and practice. Without them, it is not education but merely an experience, a kind of access to the field. With this point of departure, the supervisors and the context in which they are a part become of special interest to study and understand. What are the prerequisites that the students are given during their internship to develop important competencies for their future working life while retaining academic quality at the same time?

The Health Promotion and Education Programme at Kristianstad University College was started in 1998 and integrated the subjects of teaching and learning with public health science. At the time of the study, the programme contained 10 consecutive weeks of an internship. Since only a few students have been through this education programme, supervisors with competencies corresponding to what the students attain after the education are almost completely lacking. The supervisors possessed instead a number of different kinds of education and competencies: social worker, district nurse, industrial safety engineer, physical training instructor and physiotherapist are some examples. The majority of the supervisors, moreover, were lacking pedagogical training and/or education in public health science or other education specifically for health promotion work. None of the supervisors included in the study had gone through any special supervisory training. These prerequisites may, of course, be regarded as problematic when it concerns developing the learning of the students during the internship part of their education. At the same time, this provides

* Correspondence, email: leif.karlsson@hkr.se

interesting sets of questions for a researcher with a special interest in the relation between theory and practice and between campus-based and workplace-based training. This paper addresses two important questions in this context: What do the field supervisors perceive as being required in order for them to be able to perform their work tasks, i.e. What knowledge, ability and attitudes do they perceive that their work is based upon? And how do they perceive the value and relevance of the concepts that are essential to academic quality, scholarly activity, critical thinking and reflection, with respect to their practical activities? An empirical study on the basis of these sets of questions may of course be performed in different ways. The theoretical foundation(s) and perspective(s) one starts from determines to a large extent where one begins, but also where one ends up. Learning at the workplace and on the job and its relation to the theoretical knowledge with which the university college is normally associated thus needs some theoretical elucidation.

LEARNING ON THE JOB - THEORETICAL POINTS OF DEPARTURE

Integrating education and work and developing forms for participation by the university college students in different forms of practice has support in a number of different theories of learning (Tynjälä, Välimaa & Sarja, 2003). Engeström activity theory (Engeström, 1996, 2001), Dewey's learning-by-doing (Dewey 1966) and Kolb's theories on experiential or active learning (experimental learning) (Kolb, 1984) are all examples of theories that also emphasize learning on the basis of experience and which highlight the significance of integration of learning and work.

The sociocultural perspective and situated learning involves learning to a significant extent being situated in and embedded in practices (Lave & Wenger, 1991). Learning is developed through participation in social practices (communities of practice) (Lave 1993). Nielsen and Kvale's (2000) theory on master learning has its starting point in sociocultural perspective and situated learning. According to this approach, personal knowledge and competency can only be developed in practical activities, in close relation to the context where it will be used and in contact with competent persons (Kvale, 2000; Lave, 1993; Nielsen & Kvale, 2000; Polanyi, 1958; Resnick, 1987). Through active participation in a work community, the ways of thinking, the patterns of action and the culture that distinguishes a specific work community are acquired. On the basis of this view of learning, it is important that the students be given the possibility in their education to participate in social interactions and be an integral part of authentic practices (Brown, Collins & Duguid, 1989; Darrah, 1995; Lave & Wenger, 1991; Rogoff, 1991; Wenger, 1998).

This participation in practice may, however, differ in expression depending upon the students, the workplace and the supervisors at the workplace. In addition to students prepared for learning in practice, an activity is required that makes relevant learning possible, as well as supervisors who stimulate reflection and critical thinking, and who, in addition, view this as a part of their professional role.

> Getting students to cross boundaries between education and work through different forms of work-based learning would seem to provide a promising starting point for developing the prerequisites for professional expertise. However, this requires that true integration of theoretical, practical and self-regulative knowledge takes place and that students really are allowed to solve complex and ill-defined problems during their work-based learning (WBL) periods. Practica should be seen as complex and challenging experiences, not because of the off-campus environment itself but because of the relevant and significant problems for the future professionals to resolve. (Tynjälä, Välimaa, & Sarja, 2003, p. 155)

According to Ellström (2005), the view of learning at the workplace is characterized by a duality. Ellström talks about learning at work as a primarily reproductive, instrumental and production-oriented process or as a development-oriented process. The former is distinguished by a view of learning as establishing and cementing procedures, following given directives and instructions and adapting oneself to situations that arise. The reproductive, routine adaptive learning is a necessary part of the work. Many of the tasks that must be handled within practice can be carried out on a routine level. The reduction of actions to routine procedures becomes a way of managing the daily flow of events, problem situations and conflicting requirements, while at the same time maintaining a sense of security and stability in one's existence. Developmental learning is distinguished by the individual having a critical, questioning attitude to tasks, goals and other preconditions, as well as being prepared to influence and alter their own working and living conditions. Problem formulation becomes more important than problem solution. Questions involving *What*? and *Why*? come to the fore more than *How?* The capacity for a development-based and reflective action arises when a more routine action meets with opposition and a new and different problem that arises requires the capability to break and replace established routines.

Learning takes different forms depending upon the conditions for learning that hold sway in practice. In the same way that learning under favorable circumstances may involve development of an individual's knowledge, personality or competence, it may instead, under less favorable circumstances, involve adaptation, passiveness or subordination. In an established practice, distinct impediments to development may exist. In this respect, far too strong proceduralisation may have a negative function that works as blinders, making the discovery and handling of changes difficult. The members know what they have to do and how, and do not question these actions since they give stability to both the organization as well as to themselves. The effect is that renewal and development are impeded and a sort of status quo is established instead. Other ways of viewing and understanding the work and how it may be performed are quite simply not discovered. People tend to reinterpret and, thereby, ignore or erroneously interpret changes in their surroundings for purposes of maintaining existing structures, thought patterns and patterns of action (Gersick & Hackman, 1990).

In order for positive development to occur, it is thus necessary for favorable conditions to exist for learning in the tangible context (Ellström, 2001; Gustavsson, 2000; Svensson, 2002). This involves both structural factors in the form of material, cultural and social factors that currently hold sway in practice as well as the backgrounds of the participants in the form of subjective preconditions, actions and interplay (Ellström, 2005). Development-oriented learning is facilitated by autonomy (subjective and objective) with respect to experimenting and performing practical tests of different alternative actions (Ellström, 2001; McGrath, 2001). Lawrence and Miller (1978) are of the opinion that self-governing individuals, in addition to being distinguished by an ability to adapt to altered circumstances, can also use their authority to contribute to changes in the circumstances under which they work or live.

That one achieves a balance in work between reproductive and development-oriented learning is distinctly shown in Ellström's (2005) classification. He describes this balance as a pendulum swinging between routine and reflection, a continuous interplay between different levels of action, between two complementary aspects of a complicated learning process. What many studies of professional skill, expertise and competence have in common is that they only show the importance of being able to swing between different levels of action in work (Ellström, 1996; Rolf, 1993). With a point of departure in the two forms of learning, Ellström (2005) describes two forms of logic: *an execution logic* and a *development logic* as different ways of thinking about learning in working life – *what* is learned, *how,* and under what conditions, but also for different ways in which practices are organized for a work-integrated learning within organizations, work teams, projects, and so on.

Execution logic involves the promotion of homogeneity, consensus, stability and standardization.

> The ideal is that the people in practice assimilate the 'code' as quickly as possible and thereby learn 'what is important' and how one 'ought', 'may' or 'must' think and act in different situations. A strong emphasis also lies on the mastery of applicable methods and routines in order to carry out the work tasks assignments ('best practice'). (Ellström, 2005, p. 188)

An efficient goal-oriented action is rewarded. Tasks and difficulties are managed by applying given rules and instructions. Established routines are not solely negative since many actions within different activities are of a nature where it is an advantage to make use of routine procedures. Doing so creates space in time for tasks that demand more creativity, freedom and variation in their performance, i.e. more of the development logic. Development logic involves creating preconditions for critical reflection, alternative thinking, viewing perspectives and analytical thinking. Development logic presupposes that more knowledge-based and reflective actions dominate over a level of action involving routine procedures (Ellström, 1992, 1996). In order for this logic to gain validity, it is necessary that the employees participate in the formulation of the activities. In addition, space has to be created for critical reflection on practice's preconditions, goals and means. Development logic is clearly connected to development-oriented learning. Both logics may be said to be necessary for an organization's continued existence and development. What is problematic, in Ellström's opinion, is that development logic often tends to be neglected in practice. It takes longer to develop and future gains from this development are more difficult to see in a short-term perspective.

In order for development logic to be applied, in addition to the more objective organizational preconditions for learning, it also requires a subjective consciousness among the members of the organization concerning the importance of this learning as well as how it may be attained and can be put to use (Ellström & Ekholm, 2002, Helms Jørgensen & Warring, 2002, Gustavsson, 2000). Fenwick (2003) show that this type of subjective consciousness can, in fact, be more important than the objective time resources that are available, since the person who sees the benefits of the development-oriented

logic will find the time that is required within the available framework. Training and work may have different goals, evaluation systems, traditions and practices. In the same way, the different practices that the students meet during their internships are differentiated in terms of the potential that exists for learning and the accessibility of this learning to the students. In addition, the practices have different complexities, characters and power relations and also differentiate themselves in their attitudes to academic knowledge and knowledge development (Sung & Ashton, 2005).

In practice, cultural aspects may exist that may create impediments to a more development-oriented learning or reflective action model. Norms and attitudes can exist that disparage and even arouse distrust towards taking individual responsibility in the work, undergoing additional training and abstract work tasks. Development-oriented learning, instead, requires tolerance for differences in perceptions and ways of thinking, encourages reflection over, and critical examination of, one's own workplace culture as well as an emphasis on initiative and drive (Ellström, 1996). The significance of the relation between the formulation of the work organization and learning is thus essential. Changes in work organization or an elevated level of knowledge in the individuals cannot separately create the prerequisites for reflective actions and development-oriented learning. A profession or a work organization that only gives space for routine-based, rule-governed actions gives the least possibility for development, actions and learning on a more reflective level. The practical activity cannot either be separated from its practitioners (Billett, 2001; Bourdieu, 1977; Giddens 1984; Lave, 1993; Wenger, 1998). The practitioner constitutes and constructs practice and is co-creator of both the practices themselves and the traditions that are developed within them. A practice is not a static condition but rather a constantly on-going process that is created and recreated by the practitioners. Research also shows that the ways in which practices are understood are fundamental as to how they are carried out and developed (Dall'Alba, 2002, 2009; Dall'Alba & Sandberg, 1996; Sandberg, 1994, 2000).

With these points of departure, the study of the perceptions of supervisors of their work and of the work's relations to core concepts for academic quality is of particular interest.

METHOD

This study was carried out in the form of interviews at the Institute of Health Sciences at Kristianstad University College in the spring of 2006. The participants in the empirical study consisted of 14 supervisors who were running a varied range of types of health-promoting programs. The extent to which the activity was private or public and whether it was at the local, regional or national level was further taken into consideration. The supervisors worked exclusively within occupational health or as public health coordinators for local or regional authorities. The supervisors who were not interviewed did not in this case deviate from the interview group in any relevant respects. All supervisors were informed of the overall purpose of the study and the interview's design, content and structure, that participation was voluntary and that they had the possibility of withdrawing at any point in time.

The interviews where semi-structured. An interview guide was used that emphasized certain themes and which also contained core questions. The interview focused on two fundamental questions for the purpose of the study:

1. How do the supervisors perceive what is required in order carry out the work tasks? The question gives information on how the supervisors view the work and what the students need to be able to do or need to learn; and
2. What do they understand by the concepts of scientific basis, critical thinking and reflection and precisely what value and relevance do these have in their practices? The three concepts represent significant aspects of academic quality and thus can give information on how they perceive the connection between higher education, rendered tangible in the form of the three concepts, and the practices they are working within.

The interviews were transcribed from the tape recordings and the responses were the object of a hermeneutic analysis with the purpose of acquiring general patterns in the responses of the supervisors. The point of departure was openness towards the material, to proceed on the assumption that what is said in an interview may have another deeper significance, to attempt to find and understand what lies beneath the surface and to go beyond the descriptive without abusing the text. An interview is a social situation where the interplay is determined by the situation. It is not a mirror of what occurs outside the interview and obviously cannot be transposed to other contexts; the language is not an abstract representation of a tangible reality. The study concerns the statements of the supervisors. Despite this, the interviews can give important information on both the social world, in this case the practice within which the supervisors work, and on the supervisors and their subjective reality, as well as something about how one ought to express oneself or make statements in this contextual and specific set of interrelationships (Alvesson, 2003).

The processing of the material began with listening to all the interviews in their entirety. The material (the statements of the supervisors) was then sorted within the actual analysis. The sorting can be regarded as a sort of primary interpretation (Alvesson & Sköldberg, 1994) which involved dividing up the interview statements in each individual interview into categories. The interview was then read through in its entirety to check that the statements were placed in the proper categories. Subsequently, the material in each category was concentrated. Each of the categories was then read through in their concentrated form with the purpose of finding structure in the statements of the supervisors. The processing involved a number of perceptions appearing. The categorizations that both the fundamental questions resulted in and, after repeated re-readings of the individual interviews, emerged gradually as a number of variations or patterns that could be connected to the different perceptions. Variations that appeared in this part of the interpretation should not be regarded only as differences between the supervisors as individuals, but as an expression of differences in approaches or indications of the different contexts they found themselves in. In other contexts, different patterns could have developed in this way.

RESULTS

The final interpretation resulted in five different patterns or categories emerging: *Undeveloped, anti-academic, administrative, renewing* and *tension-laden*. The patterns are based on the three categories that emerged in the first part of the interpretation; what do the field supervisors perceive is required in order for them to be able to perform their work tasks?, that is, What knowledge, ability and attitudes do they perceive that their work is based upon? How do they perceive the value and relevance of the concepts that are essential to academic quality, scholarly activity, critical thinking and reflection for the work? and What distinguishes the relationship of the supervisors to their work? The patterns can be seen as the praxis the students experience during their internship.

Undeveloped

This pattern is distinguished by an apparent lack of awareness of precisely what knowledge, competence or attitude is required for the exercise of the profession. The following statement can serve as typical examples for this pattern:

> It is of course a fuzzy and unclear area so it involves thinking big and freely. (Subject 1)

The concepts that are of importance to the academic quality of scientific basis, critical thinking and reflection seem to have little relevance among the supervisors who are to be found in this pattern. They have difficulty verbalizing its significance and when they do so, the expression is for the most part vague and difficult to capture. This comment can serve as an example of this.

> Yes, it probably is not so awfully easy to summarise Yes! No! The health work is, of course, so extremely broad and wide and there is so much within it, so it is extra important, I can imagine, that one looks around so that one does not miss anything. (Subject 10)

In summary, the unaware are unclear about and unsure of precisely what knowledge and abilities the work requires and also about the significance of the academic basis. The connection between a theoretical perspective and the practical enterprise is almost non-existent. The supervisors cannot even explicitly state the sort of expertise that is reasonably required. They do not seem to reflect on the activities or their roles in these activities. In this way, they lack a conscious basis involving practice.

Anti-Academic

Academic competence, theories and knowledge based on literature is regarded by the supervisors within this pattern almost as an impediment for carrying on work in practice. These (the concepts) are deemed useless, and common sense can replace the academically based knowledge instead.

> They [the students] actually know nothing since it is their first internship… they have only read books, of course, so first they need to get away from that. (Subject 7)

In other words, if good work is to be achieved, theories must be set aside since they mostly just confuse matters. Academic knowledge and competence are viewed as an impediment to practice and not as prerequisites to it. The way in which they perceive their work means that reflection, analysis and critical thinking lies insignificantly in the

background. Work tasks are something that should be handled and completed, not reflected upon. To renew and develop work is not in the essence of its character.

Administrative

Factual knowledge, particularly about public health, the ability to read important reports, to be familiar with important concepts within the field and to be able to read relevant statistics distinguish what the supervisors perceive as being essential knowledge and abilities for performing the work.

> …keeping oneself up to date with research results, reports, and studies that the Public Health Institute or the National Agency for Education release. With this, there is, of course, a language and different concepts that you must be familiar with. You are able to read some statistics and follow columns and interpret different matters, and it is, of course, the theoretical background that you take with you when you leave school. (Subject 6)

In this pattern, the emphasis is clearly on predictive knowledge on a moderately tangible level. The representatives of this point of view describe the importance of academic knowledge in the form of the three concepts, as being substantial for their work. In contrast, this pattern is not distinguished by a critical attitude but rather that knowledge can sometimes be seen as reality.

> If it is scientific, you can rely on it, it gives scientific proof that it works. (Subject 5)

The supervisors do not talk about change and development, more about making the best of their work tasks in a pragmatic and sometimes even in quite an instrumental way. They become, in this way, almost administrators of a practice rather than innovators or developers.

In summary, the administrative pattern is distinguished by goal-oriented and instrumental views of action within practice. Routine procedures dominate and indications of development-oriented learning do not appear at all. Factual knowledge is emphasized while a more critical and reflective approach is conspicuously absent. Scientific methods become almost a tool for doing the right thing and a reality that justifies action.

Renewing

Supervisors in this pattern emphasize first and foremost strategic competency, to be driving and persuasive.

> This work has much to do with contacts, to have the kind of personality that one can have contacts and can maintain these contacts. It is, of course, very strategic…. how you get people to go along with you. (Subject 2)

To be an ambassador for health work and to function almost as an enthusiast is clearly shown in these supervisors.

> That you are quite simply keen and interested and open to meeting others, yes, a bit of an ambassador for this is, of course, a job where you must always fight for your workday. (Subject 3)

Academic knowledge expressed as a scientific basis, critical thinking and reflection is perceived to have great relevance to the work. The following statement may serve as an example of this.

> If you do not have this (academic knowledge) with you, you do as you have always done and find no new angles of approach and do not renew yourself in any way. You lose the driving force for development and stagnation ensues. (8)

Renewal and development emerge as the core for this group.

In summary, personal and social abilities emerge as being particularly important within the renewing pattern. These abilities must be learned within the work activity and cannot be acquired through theoretical studies. These supervisors function almost as enthusiasts and view their task as working strategically in order to drive the enterprise forward. At the same time, they regard academic knowledge and competency as being a prerequisite for this renewal work. The enterprise must rest on fundamental academic aspects such as scientific knowledge, critical thinking and reflection while at the same time one must possess social competence and the drive for personal initiative.

Tension-Laden

The base for work may be described here as academically critical and reflective. The following two examples will make this clearer.

> …that you, as a student, adopt this way of thinking, of critically inspecting, of not buying everything but of really being critical of what you do, your work, then if we think of the internship and the methods that you use and that you must be familiar with. Quite simply, the theory that lies behind the methods that are used. This, I think, is actually extremely essential and that you have this advanced knowledge, why we are doing what we are doing and what lies behind the research that forms the basis for why we do it. (Subject 11)

What these more critical reflective supervisors have in common is that they see at the same time few possibilities for academic quality, in the form of the three concepts, to have any real breakthrough in practice. In contrast, one sees structures in practice and colleagues who are impediments to academic thinking

> This is certainly useful, [i. e. scientific grounds, critical thinking and reflection] however, one does not bother with it, but your students will definitely find when they come out that there is nobody who is asking for this. You sit there and you have, of course, this perspective and you know about it, but there is nothing that you have to highlight or that you think is important with regard to an employer, in any event not in this structure in which I live today. (Subject 11)

Even if individuals can be seen to benefit by the academic way of thinking, it is not demanded in the practical work. The instrumental rationality's advantage over a more communicative and critical approach clearly appears in that the supervisors in this pattern often consider tempo more important than quality and production features too highly in their thought process.

The tension-laden pattern is, in summary, distinguished by a view of work as something that must be based on academic grounds. The significance of critical thinking and reflection has, for this group, a particularly important meaning. At the same time, it is these supervisors who experience resistance and conflict in practice. They are of the opinion that the work tasks require academic thinking in order to be performed with quality; however, the preconditions for this do not exist in practice. They possess academic knowledge and abilities on a personal level, but their knowledge and abilities do not correspond to the requirements of practice for more instrumental and goal-oriented management. The supervisors describe their situation as being in conflict with their colleagues, the requirements of practice and its goals, as well as with their heads of staff.

SUMMARY

The relation of the patterns as to how the supervisors perceived the specific knowledge that their work was based upon, the relevance of the academic concepts to the work and what distinguishes the relationship of the supervisors to their work as regards the three concepts is shown in Table 1. The differences are appreciable between the way the supervisors look at their work and how they perceive the concepts of a scientific basis, critical thinking and reflection that are the core of academic quality. With a point of departure in the reasoning that is conducted in *theoretical points of departure*, the prerequisites for learning in these contexts are probably also great. What these differences imply for the possibilities of the students to develop important knowledge, abilities and attitudes for future work is a question of the greatest importance to elucidate in further detail. This question will be emphasized in the following discussion.

DISCUSSION

The five patterns give as contexts different preconditions for the learning of the students and socialization to a new profession. Development logic, qualified practical learning, the possibility to develop professional competency and not just to meet know-how, emerges as the ideal picture for an internship context. The study shows that this ideal picture is quite conspicuous by its absence.

The *unconscious* pattern is a context that does not occasion either critical thinking or reflection. Supervisors cannot explicitly state precisely what knowledge the work builds on or the extent to which academic knowledge and competency have significance for the work that is being conducted. If the supervisors lack insight into their own knowledge and its limitations, a deeper understanding of what can and cannot be done, they also lack the possibility to support the student in reflecting and developing critical thinking. Development logic and development-oriented learning are something that seems to be completely missing in these cases.

TABLE 1
Patterns: The perceptions of the supervisors about what knowledge, ability and attitudes they perceive that their work is based upon, how they perceive the value and relevance of the concepts that are essential to academic quality, scholarly activity, critical thinking and reflection for the work and what distinguishes the relationship of the supervisors to their work are clear in the table. The patterns can be seen as the praxis the students experience during their internship.

Patterns	Knowledge and abilities that the work is built upon	Relevance of academic concepts	Supervisors in the work
Undeveloped	Unclear/unclarified	Unclear/unclarified	Unclear/unclarified
Anti-academic	Common sense	Not useful and obstructive	Practically oriented
Administrative	Supporting facts	Gives credibility	Practically oriented
Renewing	Personal and social capabilities	Conditions for renewing	Strategically oriented
Tension-laden	Academic critical reflective	Conditions for renewing	Academic and conflict-laden

In an *anti-academic* context, practice is presented as a professional exercise without theoretical basis. Learning during an internship is more than placing a layer of experience on top of theoretical conceptual knowledge. Theory has meaning only through practice and practice becomes conceptually intelligible only through reflection that is grounded on theory (Raelin, 1997). Studies also show how essential the relation is between academic theoretical knowledge and the knowledge, abilities and attitude that are required in practice (Chalmers & Fuller, 1996; Korthagen & Wubbels, 1991). In the internship, theory and practice must thus be integrated, which makes demands on the knowledge and abilities of the students as well as on the university college and on their teachers, but probably especially on the practical activities at the workplace and on the working supervisors. In this pattern, the supervisor lacks the possibility to be the necessary partner for discussion and reflection that is required in order for the student to develop in development logic.

The *administrative* pattern has great similarities with what Ellström (2005) calls execution logic, a process that is primarily reproductive, instrumental and production-oriented. Renewal and development are impeded by strong routine procedures where alternative ways of performing the work and functioning within practice are not made clear. According to the view of learning that is strongly associated with execution logic, this involves establishing and fixing routines, adapting oneself to given directives and instructions and fitting in with situations that arise. The context appears to be unfavorable with respect to the possibility of stimulating development-oriented learning.

In the *renewing* pattern, the supervisors see their role as drivers and, in some places, almost missionaries in the public health promoting practice. Personal and social abilities are especially highlighted as being necessary for the work to produce results. The supervisors emphasize the importance of working for renewal, and view the scientific basis as important for practice as for the legitimacy it gives to the work. The academic basis functions in such a way so as to ensure a position within public health promotion work and to lend credibility to the development that the supervisor wants to see. In development logic, which presupposes critical reflection and analytical thinking, views in perspective and alternative thinking are missing. The professional role becomes more actively driving and less critically reflective, and the role as a public health educator risks being presented by the supervisor as being like a missionary in public health work, not as a critically reflective educator.

In order for development logic to have a breakthrough, it is necessary for the employees to become participants in the formulation of practice. In addition, space must be found for critical reflection beyond the ruling preconditions, goals and means in practice. The supervisors in the *conflict-laden* pattern clearly state that these preconditions are lacking. According to them, practice is governed in many respects by goal-oriented thinking and, in their opinion, lacks the possibility to develop practice towards more reflective and knowledge-oriented actions. They attempt to use their

authority to change the conditions under which they work, but are of the opinion that they are being hindered by both their colleagues and their heads of staff.

According to Ellström (1996), attitudes and norms may be found in practice that can have an impeding effect on development-oriented learning, something that seems to distinguish the *conflict-laden* pattern. Development-oriented learning requires encouragement for critical thinking, support for theoretical reflection and the view that differences promote development. In this pattern, the supervisors talk instead about how higher education, continuing education and abstract thinking are met by mistrust more than appreciation. The consensus thinking that distinguishes reproductive learning characterizes the practices in which these supervisors work. If development logic is to become a reality, incentives are required for this in practice, an encouragement via reflection, criticism and visions to renew the practices of which one is a part. If practice functions without these reflective and critical elements, the incentive is lacking for development-oriented learning and development logic. A critical and reflective attitude that is not supported by colleagues or heads of staff and which is also regarded with mistrust within practice, risks, as Eraut (1995) emphasizes, being regarded more as an intrusion from the academic world. These supervisors are those who seem to be the most firmly anchored in academic thinking. They are well-aware of the academic concepts and their significance for developing practice in the direction of higher quality. In this way, the supervisors have the preconditions for supporting students in developing important abilities relevant to their future professional roles. But, being a reflective and critical public health educator requires a practice that is receptive to such reflection. In this regard, the students risk learning resignation and mistrust instead of seeing opportunities for development and change. One learns the bad things in the same way that one learns the good things.

CONCLUSIONS

In order to be academic, the internship must provide education for professional competence that is founded on reflection and critical thinking. It must be meaningful and challenging for the students and it must have academic credibility. Internship should be seen as a complex and challenging experience, not because of the off-campus environment itself but because of the relevant and significant problems for the future professionals to resolve. Practice that is directed more on the basis of administration than development and renewal, gives fewer possibilities for this. Learning in internships may involve adapting to procedures and rules, but in order to be academically oriented it must be directed towards critical thinking, which challenges the status quo. The students ought to receive support in reflecting, be inspired also to develop critical reflection, and directed towards both theory and education, and practice.

Good internship positions, where practices relevant to the future public health educator exist, where the supervisor has the preconditions for functioning as a partner for discussion and support for reflection for the student, are required for this to become a reality. The internships can appear to be quite different to the students when what is to be learned is situated differently. Insufficient access to good learning situations make the learning difficult. However, it is not about giving all students the same experiences, but rather the same opportunities for learning. It is not the experiences that are reckoned to be primary, but rather the learning that occurs through reflection on experiences. This requires a context that gives favorable conditions for learning in the tangible practice. This applies both to structural factors and to subjective preconditions in the supervisors. The study shows that these preconditions are to a large extent lacking for the public health educator students. Instead, it reveals how the assorted contexts met by the students give them different conditions for learning and opportunities for integration between practice and theory. The study also shows the gap between the learning outcomes which are to be developed and evaluated during the internship, and the learning opportunity that the work place offers the student holds a risk of being too wide. In addition, it reveals that there is a lack of incentive for development in the work place where the students' internship takes place.

Further, there is the idea within higher education that, by connecting education more closely to working life, the employability of the students is increased. The introduction of more internship is one way that might make this connection. This brings to the fore at least two important questions: Precisely which requirements will be needed of an internship that should achieve increased employability? and What does the objective itself look like? i.e. Precisely what meaning or meanings can be given to the concept of employability? These two questions are of course interrelated, and both are determined by the specific theoretical points of departure one starts from. If employability is regarded as how many of the students have a job six months after the end of their education, this probably involves a different view of learning during the internship than if the students' development of scientifically grounded knowledge and their abilities for reflection and critical thinking were being emphasized. The former implies a more short-sighted, moderately

instrumental perspective, whereas the latter captures what probably ought to distinguish academic studies, both theoretical as well as during internships.

Which knowledge, competence and attitudes should be developed during the internship and how should these topics be compared in relation to knowledge, competence and attitudes in Higher Education? This is an vital question for those who are working in pedagogical development as well as for researchers in the field. In my role as both a pedagogical developer with special focus on internship, and also as a researcher in the field, I want to pin point two particular problem areas which have their foundations in the studies research question and results which need a deeper, more fundamental, research analysis:

- Do university teachers, and students, conceptions of professionals, expertise in their domain differ from those held by professionals in authentic working life, and if so, in what way?;

  To study how students, after having completed an internship, perceive the knowledge basis of the work and the three concepts important for academic quality of scientific basis, critical thinking and reflection in relation to their practice would be one way of obtaining additional answers. Such a study has been initialized, and the processing and analysis of its data have been begun; and

- A important first step in creating optimal conditions for learning would be that practitioners themselves consider not just the students but also the practitioners as learners. This point in question raises several different questions crucial to the academy as well as for the work place and the relationship between them. e.g. What demands can we put on the Intern's place of practice? In which way is this a problem, not just for the Academy but also for the workplace?

Naturally, there are several other important research questions concerning the field. My contribution has been to select and focus on a pair of questions taken from the result of the study. To invite other developers and researchers to study these questions more in depth will be the final point in this article.

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