



Students as Journeymen
Between Communities of Higher Education and Work

HPSE CT-2001-00068

Developing professional identity

Deliverable 13
January 2004

The project Students as Journeymen between Communities of Higher Education and Work (HPSE CT-2001 -00068) is realised within the 5th Framework Programme of The European Community. It is co-ordinated by Linköping University, Sweden, and apart from this institution it involves partners from Germany (Gerhard Merkator University, Duisburg), Norway (University of Oslo) and Poland (University of Gdansk).

The team consists of the following persons:

Linköping University:

Lars Owe Dahlgren

Madeleine Abrandt Dahlgren

Kristina Johannson

Helene Hard av Segerstad

Håkan Hult

University of Oslo:

Gunnar Handal

Beritt Karseth

Kirsten Hofgaard Lycke

Tone Dyrdal Solbrekke

Gerhard-Merkator University, Duisburg:

Manfred Bayer

Tarek Lababidi

Peter Krumpholz

University of Gdansk:

Tomasz Szkudlarek

Małgorzata Cackowska

Lucyna Kopciwicz

Maria Mendel

Astrid Meczowska

Ania Struzynska

<i>1. Sweden</i>	<i>4</i>
1.1 Political Scientists	4
.....	4
A. Entering work life: Novices experiences of work	4
Domains: Moral/ethical dilemmas and social/societal responsibilities	8
B. Novices' appraisal of their study programme after work life experience and comparison with their opinions as seniors.	9
1.2. Psychologists	11
A. Entering work life: Novices experiences of work	11
B. Novices' appraisal of their studyprogramme after worklife experience and comparison with their opinions as seniors.	15
1.3. Engineers	17
A. Entering work life: Novices experiences of work	17
B. Novices' appraisal of their study programme after work life experience and comparison with their opinions as seniors.	19
C. The relationship between Higher education and work: An analytical comparison between study programmes	21
<i>2. Norway</i>	<i>24</i>
2.1 Political Science	24
A. Entering work life: Novices' experiences of work	24
B. Novices' appraisal of their study programme after work-life experiences, and comparison with their opinion as seniors	27
2.1 Psychology	28
A. Entering work life: Novices experiences of work	28
B. Novices' appraisal of their study programme after work-life experiences, and comparison with their opinion as seniors	30
2.3 Law	31
A. Entering work life: Novices experiences of work	31
B. Novices' appraisal of their study programme after work-life experience comparison with their opinion as seniors.	36
C. The relation between HE and work: analytical comparison between study programmes	37
A coherent journey?	37
Professional identity – what does it mean?	38
<i>3. Poland</i>	<i>40</i>
3.1 Political Scientists	40
A. Entering work life: Novices experiences of work	40
B. Novices' appraisal of their study programme after work-life experience, and comparison with their opinion as seniors	45
C. The relation between HE and work: analytical comparison	46
3.2 Psychology	47
A. Entering work life vs. novices' experiences of work realities	47
B. Novices' appraisal of their study programme after work life experience and comparison with their opinions as seniors.	53
C. The relation between HE and work: analytical comparison	55
3.3 ICT NOVICES	56
A. Entering work life: Novices' experiences of work	56
B. Novices' appraisal of their study programme after worklife experience and comparison with their opinions as seniors.	63

C. The relation between HE and work: An analytical comparison	65
4. Germany	68
4.1 Psychology	68
A. Entering work life: Novices experiences of work	68
B. Novices' appraisal of their studyprogramme after worklife experience in comparison with their opinions as seniors.	71
C. The relation between HE and work: analytical comparison	73
4.2 Educational Science	75
A. Entering work life: Novices experiences of work	76
B. Novices' appraisal of their studyprogramme after worklife experience in comparison with their opinions as seniors.	81
C. The relation between HE and work: analytical comparison	82
4.3. Political Science	85
A. Entering work life: Novices experiences of work	85
B. Novices' appraisal of their studyprogramme after worklife experience in comparison with their opinions as seniors.	88
C. The relation between HE and work: analytical comparison	89
Summary: Comparison between the different programmes	91

1. Sweden

1.1 Political Scientists

A. Entering work life: Novices experiences of work

Realities versus expectations: Description of novices' experiences of work compared to their expectations as seniors.

Domains: Knowledge/learning/competence

A changing role from student to employed

When asking the novices if their expectations were fulfilled the most frequent answer was “yes” – and “no”. It seems as if several students have forgotten what they expected of entering work life. The overall impression is that they seem to be satisfied with their work – or rather with their lives as novices. Some of them wish that they had a work that demanded more of them:

“Both yes and no, I think, in a way I am very satisfied with being so independent, it feels good, but then I can feel that I would like to work somewhere where education is demanded, and you may test yourself. Now I'm pretty sure that I know enough.” (POL 19, s 7).

Several of the subjects had previously, as senior students; report that they lacked an identity as political scientists. The only role models they had to identify with were their own teachers, which made them talk about political scientists as either teachers or researchers.

Some of them did also mention the relatively small group of scientists who appear in media commenting on contemporary issues and events. Based on this exclusive group of political scientists they characterise the role of political scientists as *watchdogs for democracy*, i.e. political scientists take on the role of carefully following what goes on in the political power circuits and also other institutions exercising power over the citizens. These political scientists scrutinise the political life on behalf of the common citizens. Among the senior students this role may be expressed in the following way,

“ How much influence you should have as a civil servant. What do I have the right to do and how much should I do. The higher up in the hierarchy you are or on different levels I think there are even

more of these moral dilemmas. How much should ignorant politicians decide and how much should knowledgeable civil servants decide. So I guess that's a moral dilemma in political science. (13)"

Moral dilemmas mentioned comprise the role as a kind of gatekeeper to defend democracy, to educate people etc. (From the previous report Senior students on Higher Education and Work Life). Later, as the subjects are interviewed after about one and a half years of work life experience, the role that many of those employed in public sector institutions is rather that of *the squeezed tomato* e.g. the novices report on having a position between politicians and the citizens, without gaining full confidence from any of the groups. One novice expresses this somewhat delicate role in the following way,

"It works that way that we write a proposal (about the application for permission to serve alcohol), and then the person who has applied comes here. If it's a negative proposal the person who has applied comes here with a lawyer and talks in front of the politicians. And that's a politician who is not professional politicians that do something else for a living. And they are not so into the legislation, how things work. So I realised very soon that if you can't be more explicit than the lawyer, the decision that you have proposed will not be approved by the social security office That's one thing that I learned very fast, you were run over by the politicians in the beginning." (13).

Up to the knowledge test: Are you a political scientist?

The answer to this question partly depends on whether novices are found in the private or public sector. To the novices employed in the private sector the identity as a political scientist is very weak. As has been mentioned above, when asked about what skills and knowledge they lacked after having graduated from the studies they mention a lot of examples that rather indicate that they should have chosen an entirely different program if they were to prepare themselves for their present work tasks.

Several novices also seem to view a political scientist as a researcher. When asked if they felt like a political scientist most of the interviewees say *no, I still feel like a student* or *no, I just do evaluations*. Some expressed that, *I feel like a political scientist when I am at home watching the news*. What does this imply? Is the novice's view of a professional political scientist still to "fresh" to the subject of political science? How do students of political science develop their professional identity? When questions like these are to be answered one should also bear in mind that when students are asked about their motifs for choosing studies in political science several of them mention a personal *bildung* project as the most essential. (Dahlgren et al, 2001). As mentioned before, the novices talk about the profession in terms of the skills that are required within the profession. Although the skills pointed out vary, analytical and communicative skills are the most frequently mentioned. Perhaps the core of the identity of the profession of political science is constituted by such skills. When it comes to how the novices reflect upon how they are being seen by others, the answers differ. Some novices express that they can "disappear", without being noticed by the others. This may imply that they work quite lonely. Others say that it is expected of them that they should be present at their workplace every day even if it is not required for carrying out the tasks. Furthermore, one subject emphasises the importance of their engagement, to be active and like what you are doing.

All of these answers indicate that the informants emphasise the personality of the professional novice rather than their knowledge as the most important contribution they bring with them when entering work life. When asked if they ever felt like a good political scientist, some examples were given. The first one is from a male novice working with applications for permission to serve alcohol in restaurants and pubs.

" Well. it should be when I have been working a long time with an investigation. and you feel that it very good and then it goes to court and it gets approved." (13)

“ When I think of a political scientist I think more of a researcher that continues research within the subject ... The kind of political scientist that I represent, gives you a more complex view of the society and you will think twice before you do something...” (14)

Learning new boundaries for time and responsibility

Both to learn to prioritise and to meet and co-operate with new people could be seen in the light of a process that aims for adulthood. Another important aspect here is their time and time-spending. Many novices expressed that one of the biggest changes from being a student to enter working life was how to use the time and how studies and leisure were related to each other. A kind of freedom under responsibility was given both in work life and at the university. The novices do however point out that they have a responsibility in relationship to other people at the work place, in relationship to clients or customers, while they as students only had to cater for themselves.

Several novices point out that a major difference between being a senior student and a professional novice is the fact that being a student is a state that lasts 24 hours a day. As a student you always identify as a student no matter in what circumstances you find yourself.

“You give all you have at work. Then you may go home and think about something totally different. Meet with friends or whatever you like to do, without even thinking that I might as well study for the next assignment. You relax, sort of.” (14)

Being a novice, thus, means that there is a clear distinction between work and leisure. The freedom as a student is partly illusory in that many students report that you always have a bad conscience if you are not studying. Thus, the freedom to choose when to work is difficult to exercise for many students. Another difference is that as a novice you may also take on responsibility for other persons and not only for yourself.

“ It's more responsibility. Earlier, all responsibility had to do with myself. If I didn't make it I was the only one who was struck. If you should fail or make a mistake now, other people are struck instead. That's the major difference.” (20)

Work is, however, not as intellectually challenging as studying. A substantial share of the work is obviously of routine character:

“I would like to work somewhere where you can develop...it doesn't feel that fun to work with something that is only routine. I would like an independent job where you can learn new things.” (19)

“It's not as stimulating in work life. May be that's the way it is in a small firm, that you have to do a lot of different things. It's also a lot of practical work. Things to get done.” (17)

“Job means a lot of routine that you are not used to as a student. If you have not worked with the State before you notice after a while that, God, how boring to work. It gets sort of routine.” (15)

Generic skills are a substantial part of competence

The novices' answers are generally pointing out generic skills, both when asked what kind of knowledge is required in their present work and the more general question about the need for knowledge among political scientists. Analytical and communicative skills are the most frequently mentioned abilities. A thorough understanding of the structure and functions of the Swedish civil society is, furthermore, mentioned as a significant element of professional competence. Thirdly, a critical attitude is mentioned as desirable, not the least when assessing data gathered for investigative or evaluative purposes.

When asked about what they have learnt from working it appears as if the novices that work in public sector organisations have contextualised their general understanding of political and administrative issues to permit them to function in a specific field. The two novices that made their work life entrance in private companies have rather added knowledge and competence to their original repertoire by learning new and specific skills like e.g. technical knowledge or advanced ICT skills.

When asked why we have political scientist the novices agreed on some specific skills that a political scientist should have such as being a voice in media or carrying out research in the field.

“ I think rather of a researcher, who continues to do research within political science, they should study the important questions and how things are related to each other, the same sort of unwinding work that journalists do but more scientific in a way. “ (14 p.9)

“ Well, you may wonder. But probably it is to get a sensible voice in the debate, I hope. Someone who can point out the way in between, because there are political questions on the agenda. And if there were one turn in one direction there would be one turn in the opposite direction. But somewhere in between there must be someone who can ... see the right way and represent a clear voice in the debate.” (15 p. 11) .

This last quotation indicates that political scientists could have the function of moderating standpoints in political discussions, to find the possible compromises. (This may even be a typical Swedish notion of what should characterise political scientists. In a way, Sweden has an image of always searching for consensus by finding a solution or an alternative that all parties can accept).

Of course some significant statements that reflect the specific content of political science are also at hand. Statements like, it is important to be interested in how the government functions, to be interested in issues of democracy and the risks of not taking part in democratic processes, are quite frequent. These aspects are interwoven with what kind of knowledge a political scientist should possess. One reoccurring statement is that a political scientist should possess both general and specific knowledge.

“ We have read lot of different things, we may not have very deep knowledge... we have a little of a lot to say. I think it is important that you as a political scientist have and should know... “ (16 p. 12)
“ ...to get the whole picture and then you should know something about the political system and stuff like that. But it is quite broad. I think it will be like you can pick a little here and there in the brain and

then you move into a specific area, and that I think is a good political scientist, because a political scientist who only knows a little about everything is not so good, maybe. You have to specialise if you should get somewhere. “ (20 p. 7)

When it comes to what is characteristic of a successful political scientist the novices once again emphasise analytical skill and to be able to see underneath the surface of what is going on in the political life. But even more emphasised is the ability to educate people in political matters.

” You should be good in mediate, mediate knowledge, to the people you work with, make things easy to grasp.” (34)

Another communicative skill mentioned by several of the novices is the ability to write,

“ You don’t get a job directly from being a political scientist, it varies regarding where you end up, But I think it’s the writing again.” (13)

Domains: Moral/ethical dilemmas and social/societal responsibilities

Political science is basically about power; how power is allocated and what mechanisms and institutions democratic societies develop to make sure that every citizen has a possibility to – directly or indirectly - influence political decisions. Moral and ethical dilemmas as well as societal responsibilities mentioned by the subjects do in various ways reflect this fact. Furthermore, it appears as if the novices ways of talking about this area in a way reflects the two aspects of the professional identity mentioned previously; the role of a *watchdog for democracy* and the experience of being *the squeezed tomato* between politicians and people in general. Many subjects mention the obligation to defend democratic values in the public debate and to educate people in general regarding basic prerequisites for democratic processes to take place. As to the former role one of the subjects comments in the following way,

“ I think that it’s important sort of if a person is incapable of thinking, you can at least try in a kind way to help that person to take part in the dialogue that goes on in society. “ (16, p. 11).

The dilemmas mentioned often refer to their own professional experiences, e.g.

“ Yes, I could really say /that I have experienced moral challenges/ if you are asked to implement a law that you do not think is an entirely good one. It can be difficult to do that...if you have an application /to serve alcohol/ that you think is a good one and that would work well, and then you have to say no anyhow. Then you really want to formulate yourself a bit positive even if it’s a negative statement. It’s a matter of resisting such a temptation and write the convenient way

“Well there is always room for interpretations...if I see that it is a person who has mistreated his wife, or perhaps has mistreated his children and has been sentenced for that. Then I don’t really want to help him through the process (to get a permission to stay in the country), if you see what I mean. But

maybe I have to...though sometimes it's difficult, particularly if it's a borderline case regarding the karenstid that we apply. – No this person will have to wait for a while. And then we have the easy way out of it, by saying to yourself that; well he can always make a complaint of the decision. They have that possibility.” (15, p. 9).

What is common in the two quotations is that they both illustrate a quite cynical attitude to exercising power over other persons' lives. The difference is that the former novice finally complies with what is the regular procedure, whereas the latter has found a way of acting in accordance with her own conviction, well aware that higher instances may modify her decisions.

Besides these themes that may be regarded as typical for and related to the informants' educational background and present work, they also mention some themes of a more general character. These comprise e.g. the attitude towards your colleagues or how you deal with conflicts at the work place.

“ I had a class (this novice is working as a teacher)..where the students just did not get along with their form master. And then they wanted to talk to me. My big problem was that I didn't want to back talk my colleague, but at the same time I wanted to help the kids because I understood that they didn't have anyone else to talk to. I let them talk but didn't tell my colleague.” (22, p 10).

B. Novices' appraisal of their study programme after work life experience and comparison with their opinions as seniors.

This section deals with novice's perspectives on features like relevance or feasibility/impact of their educational programme. Mainly the section will focus on questions regarding learning. In the interview the questions was asked in relation to the work situation or within the programme i.e. we aimed at contextualising the concept of learning.

Learning within the educational system: The skill of finding information

Many of the novices are once again pointing out the importance of a specific skill, in this case how to find knowledge, by search in different register.

“ To work independently and search information” (20 p. 5).

Another novice talked about the difficulty of prioritising, to really sit down and do things.

“We had a lot of independent studies within the political science, so it's probably to learn to become independent, sit at home and read...” (18 p.6).

Another statement pointed out the importance of life in general, to move to another town and to meet new friends. It seems like the two last answers are more aimed for learning to become an adult, rather than to learn professional competence.

A source of inspiration

Have the novices found their professional role a year after graduating from the programme? When asking them about this and the role of the educational programme in this process, some of them expressed that the study programme had the role of a source of inspiration or as an agent of socialisation in general.

“ My education have inspired me to become even more eager to follow the debate and try to explain to others in an easy way how it is...” (33 p.6).

“Yes, it is the education that partly have created, made that this interest are very, very huge still, but I wouldn't be were I am today if I didn't study at the university...” (17 p. 18).

“Well, it has shaped me into a political scientist, with this knowledge base. But then I think, to become a real political scientist perhaps you should go a step further and deepen even more “(20 p.11).

Learning - now at work

Some novices expressed that they felt the importance of learning through life i.e. lifelong learning and their working situation were providing them with learning situations. Many of them were satisfied with their work from this perspective.

“ I have learned a lot. Partly from a practical point of view how it is to work and not to study and the difference between them. And some new areas, I have written press releases and other argumentative texts and then received an answer to them. And then I understood how media works” (14 p. 5).

“ It is very important that we are up to date with the news of the world and what is happening in different countries. So it's a constant learning ... you learn new things every day... “ (20 p. 3).

A novice now working as a teacher expressed it like *I'm teaching them but I learn a lot as well*. When it comes to what she is learning from the colleagues she says the following,

“ Just to learn to cooperate in a large group and try to make everybody happy. It is not always easy ... you have to compromise actually quite often.” (22 p.5).

A changing role in an uncomplicated workplace

Many of the novices have a feeling that they are more qualified than their job requires. To a majority of the novices their jobs are relatively uncomplicated, even less demanding than their studies. The work tasks for the novices show a considerable variation. When it comes to the question of whether they have an identity as political scientist it is interesting to once again notice that they have their strongest experiences of having an identity as political scientists when reading political articles in newspapers or when involved in private discussions on political matters. The novices that work within public sector institutions say that the work tasks have defined them as political scientists. Yet, they still have a vague professional identity. The two novices that work in private companies emphasise the acquisition of very general skills when asked about their experiences of having an identity as a political scientist.

1.2. Psychologists

A. Entering work life: Novices experiences of work

In this section, we give a description of novices' experiences of work via the domains of knowledge/learning/competence and moral/ethical/societal dilemmas. The focus is realities versus expectations: the novices' experiences of work are compared to their expectations as seniors.

Domains: Knowledge/learning/competence

Up to the knowledge test: Are you a psychologist?

Entering the working arena meant for several of the novices that they felt that they were put to the test as regards their contribution of professional knowledge to the workplace. Some interviews show clearly that the students felt that they were accepted when they had shown that they managed to contribute their knowledge.

It is a matter of proving that you are a trustworthy and full-fledged representative of the profession, at the same level as the colleagues.

I think they were satisfied.. I have realised that the knowledge I have put into practice really functions
(12)

Some of the interviews are also very convincing as regards students feeling of being prepared, of putting into practice the knowledge they have carried with them. For some novices, the insight in

being capable of doing this is accompanied with a feeling of surprise, they had doubted whether they would be ready for professional work and could not clearly articulate their knowledge base at the end of the programme. The experience of finding their knowledge applicable and transformable to the practical setting contributed to a certain self-conviction and confidence in the professional role.

'I did not feel that I was new and ignorant, I felt that I was new and contributing fresh ideas'. (5)

'I was surprised by, partly how easily I was entering the professional role and felt confident, and partly by that I could convey my knowledge to the people I met, I was a school psychologist and there was no doubt about it' (6)

A changing role and complicated work places

Several of the interviews give a description of the changing role of the professional psychologists. The role is described as changing from being a more or less lonely work where the psychologist is alone with the client behind closed doors to a more social professional role taking part in teamwork and collegial discussions.

The psychologists before me have worked more like taking referrals from the doctors and more on their own in their rooms, but I did not want to work that way, but rather together with the team and be more visible (5)

There are also indications that psychologists should make this move also on the societal level, by taking part in planning work and political work to create environments that would benefit peoples' mental wellbeing and health.

I believe that psychologists need to be more clear about their expert knowledge to be acknowledged in society.../.../ psychologist play, at least at my work place, a too withdrawn role, we should be claiming more space and show that we know things.. (12)

Another aspect is that the descriptions of the psychologists working places are that they are complicated and that the novices discern structural problems that they often intervene into to the benefit of the organisation of the work place and staff.

I enjoy shaping my own work; I enjoy being allowed to take the responsibility to do this. I have worked really much with this task, what are psychologists for, how do I want to work, how do you want to use me (10)

Learning new boundaries for time and responsibility

The novices describe the life as a student as characterised by loosely held limitations for time on task, with no clearly experienced demarcation between work and leisure. The life as a novice worker has more clearly defined hours designated for work. The novices also describe that their responsibility has increased, compared to the student life where their scope of responsibility mainly comprised themselves and their individual learning. The work demands taking responsibility for clients as well as staff, in some cases also for shaping both the content and the structure of working tasks. This theme also reflects learning about how to structure and limit the personal efforts put down into the work task as well as to prepare for the unexpected. Some students describe how they have experienced that they gradually have learnt that the work could be so demanding that they need to protect themselves from exhaustion. Finding the relationship between the private personal identity and the professional identity appears to be a learning task that is actualised regarding this issue.

'I have learnt to be prepared for the unforeseen and to deal with unexpected situations' (5)

'It takes so much more time to work ..studying was rather laid-back in comparison' (12)

Reflection as an aspect of professional competence

Another aspect of the professional competence as a psychologist that is put forward by several of the novices is the ability of reflection. Reflection is used as an instrument in a variety of ways. It is discernible on an individual level as in the work with clients, where reflection constitutes both the way to synthesise and understand the client's problem and the way of fine tuning themselves as the instrument through understanding the psychologist's own thinking and acting in the actual case. Some novices also stress that the ability to reflect on the professional role, what it means on the personal level is important to train already from the outset of the educational programme

'I try to feel the body, how it really feels.../.../ an initial feeling, what is this, if I get affected, why, what is it that makes me feel like this, why do I feel so strongly about this boy.../.../ That is what you do, you re-think and reflect on the feelings that are evoked in the meeting with clients (6)

'It is important that I dare to be a human being in the encounter with other people, it is not only about techniques, technical knowledge, facts and methods, but that I as a human being allow my self to get moved by the meeting with clients, but also that I use my humanity to feel and reflect, to draw conclusions from the meeting. To develop in my professional role, it is clear to me that I need to also develop my personal identity (10)

Reflection also stands out as a hallmark of a good psychologist at the collective level. Some statements in the interviews indicate that the ability to contribute valuable reflection to a discussion between the team or between colleagues gives a feeling of being professional.

'I feel like a good psychologist sometimes when I meet clients and I feel I can help them in some way ..or if I can contribute good reflections in treatment conferences where we are discussing various cases. I sometimes feel that I can contribute to someone else's case' (3)

There is a kind of paradox in the findings that the novice psychologists report that they feel so ready and prepared for the professional work and at the same time state that they felt uncertain whether their knowledge base would be sufficient or not when leaving the programme. An overarching reflection or hypothesis could be that any educational system that defines one part as learners and one part as teachers creates an order of power relations that automatically subordinates the learner, despite any deliberate efforts to reduce such hierarchies, as in this particular case where the whole programme is problem based.

Domains: Moral/ethical/dilemmas and social/societal responsibilities

All of the novices demonstrate an awareness of moral and ethical dilemmas connected to the professional role of a psychologist. Only two of the informants have difficulties in formulating any moral issues from their own experiences, as they have not encountered any moral dilemmas in the professional work so far.

Handling conflicting interests

Examples of dilemmas encountered are to handle conflicting interests. The dilemma between the ambition of providing the best treatment for the client on the one hand and protecting the client from stigmatising or excessive attention on the other hand. Another dilemma related to the first mentioned is the issue of loyalty with the client on the one hand or loyalty with colleagues on the other hand. This dilemma is expressed either as e.g. facing the risk of an open conflict with a colleague in order to provide the best for the patient or risking the trustful relationship with the client in order to be loyal to the colleague.

...and there was a situation when I had to choose either to go into conflict with the doctor in front of the court, or answer to her questions .. I chose the latter, which meant that I had to try and repair the relationship to the client and explain the situation afterwards (5)

There are also some expressions showing that the novice psychologists develop strategies to avoid getting into moral dilemmas, e.g. through keeping clear cut boundaries for which part they choose to be loyal with. An example of this is to represent the client fully and only and to let a colleague handle contacts with the clients' relatives and family in order not to get into situations with conflicting interests.

A third dilemma is the loyalty with the client on the one hand and on the other what you as a psychologist have to report for example when a child is in danger.

“The first thing that comes to my mind is professional secrecy, and the cases where you for example need to report to a social welfare office that a child is in danger, or you have to go to a psychiatric emergency ward with a child” (2)

There are several different cases mentioned where the dilemma occurs in handling conflicting interests where the novices have to handle the conflict between the loyalty with the client and what the law provides. Some of the novices have already found out that they need to learn more about law.

Balancing private and professional sphere

This dilemma is about balancing knowledge about clients that also are part of the novices' private and personal sphere. On the one hand to maintain a professional attitude and professional secrecy regarding this knowledge, on the other hand giving in to curiosity, wanting to share the knowledge with family and friends.

..when I came across one of my friends in the client records..I mean, from a human point of view, you want to share this information with someone, as your husband or friends, but this is of course not acceptable...It was a kind of challenge, I did not tell anyone, but it felt strange..(S)

When describing this dilemma, the informant demonstrates an awareness of his own feelings but also a firm conviction that maintaining the professional attitude is the right choice.

As regards social and societal responsibilities as psychologists, the informants mention several issues. A social responsibility is to look after oneself and develop as a psychologist, which is particularly important since a psychologist is a psychologist even during leisure hours. It is also an important responsibility to keep developing the profession. The societal responsibility is primarily to raise the questions that are specific and typical for the profession on the political scene, but also to see to that the clients do not harm neither themselves nor the society.

B. Novices' appraisal of their studyprogramme after worklife experience and comparison with their opinions as seniors.

This section deals with the novices' perspectives on the relevance or feasibility/impact of their educational programme. The following aspects were discernible in the interviews with the novice psychologists.

Finding the individual niche through the educational generalist approach

There are some interviews indicating that the broad generalist perspective on psychology and psychologists that has been conveyed through the programme also have allowed for the more individual specialisation interests to develop. Students with different learning styles could find their way through the programme. There are also some indications that the networking of study peers have functioned as a tuning instrument for individual knowledge about oneself and self-reflection.

They did not expect me to be an expert or anything, but since I am more into cognitive behavioural therapy, and nobody else was, I was considered the one who knew about cognitive behavioural therapy, they turned to me regarding anxiety cases.. I was kind of niched into that.. (4)

For some students, the lack of a clearly defined unifying theoretical perspective throughout the programme has meant that they experienced difficulties in deciding which path to follow as their own personal choice.

Connecting the working forms and forms of learning of the educational programme to the work of a professional

The novices describe how their basic confidence in the professional role and in the contact with clients could be seen as the result of a dialectic process of applying and reflecting on knowledge. This is a process they relate to the working forms within the educational programme.

This is utilised in the individual encounters with clients, as a process of trial and evaluation but also together with colleagues, when individual experiences are verbalised and reflected on.

'My feeling is that I am someone and that I continue to develop'

'I stopped feeling as a student already the first day, it happened very quickly, I was so ready'

Getting yourself prepared for work life

The senior psychology students described, with a few exceptions, themselves in general as prepared and ready for entering work life at the end of their study programme. This pattern is even more reinforced by the novices' description of what their studies had meant to them. In the student interviews, psychologists' competence was often described in terms of shaping a kind of dual identity, to create a role for oneself as a professional fellowman, besides being a professional. This was seen as necessary in order to maintain the fine borderline between

empathy and personal involvement. Like in the student interviews, separating self and professional is a reoccurring theme.

1.3. Engineers

A. Entering work life: Novices experiences of work

Domains: knowledge/learning/competence

Delimited use of university knowledge

The interviews indicate a discrepancy between the knowledge achieved at the university and the demands of the working task. The university knowledge is not directly applicable; you have to learn while working with a task and in relationship to the specific demands.

The typical pattern seems to be that the novices get well-defined and limited tasks and responsibilities from the outset and only gradually working tasks of a more complex nature.

'You should have good basic knowledge - but it is not sure that you will use them in your work. I guess that is that engineering thinking skill' (31)

'Up to now it has been pretty basic...!./ but as time goes by, and you get more familiar with things, you will get more advanced tasks ' (30)

Learning new boundaries of time and responsibility

The boundaries of time are conceived of more clearly and strictly in working life compared to the education. The independence is lesser and there is a kind of supervised freedom. If the study period was characterised by everyone sharing all tasks, working life is characterised by every one doing their delimited piece of a rather dim totality. The study period is also described as a 24 hours identity as a student.

You are free when the working hours are over, that is something that differs from being a student when you are on 24 hours call continuously, always involved in some kind of studying. It is nice to be able to relax, week-ends is leisure time nowadays, while it was working time as a student (24)

Learning on task: to stagnate or to be flexible

Entering work life means learning while working on the task. This is described as a kind of dilemma between stagnation and development. Being able to contribute your isolated piece requires that you spend time on a specific task, but simultaneously, an engineer must be aware that if you do this, there is always a risk that you specialise in too much detail, which could mean that your career gets jeopardised. This could be interpreted as a fear that knowledge obtained quickly gets outdated as a result of the fast technological development. In order to stay attractive on the engineering labour market it becomes important to keep a flexible attitude to knowledge and to update knowledge as well as trying new fields regularly.

'I want a work where I learn new things and feel that I am developing...if you feel that you just repeat the same things and not learn anything new, in that case, it is time to find a new job (30)

'Engineering thinking skill' as the important aspect of professional competence

The ability to define what constitute a problem, to be able to solve problems quickly and correctly stands out as the central features of the 'engineering thinking skill'

The professional identity of an engineer is to be flexible and movable. Is the 'engineering thinking skill' a kind of omnipotence that makes the engineer flexible enough to fit in everywhere and pick up any learning needs on the local arena? Is it a kind of Taylorism, an engineer can fit in everywhere and contribute his piece. The 'engineering thinking skills' seem to be valued equal to any factual knowledge; it is in fact what makes you capable of contributing. To contribute a specific piece means not only to be able to solve problems independently, but also to seek support/consensus/compromises within the group of colleagues to legitimate the choice of solution.

/To be considered one who does a good job/you should do the technical part, but not too independently. If you do that and make a lot of errors, it is not a good job, it is better to have discussed all parts and be thorough in what you do (25)

It is your work tempo, and how many contacts you have, how much you talks think that he who ponders on his own in his own tempo will not be as appreciated as he who has a lot of contacts, talks a lot on the phone, runs up and down the corridor and makes himself visible (26)

Some of the novices also put forward the ability to plan and prioritise between work task and to be able to collaborate with other people.

The Tayloristic heritage is also visible when it comes to identifying learning needs or the needs for further professional development. The professional competence of the novice engineer is defined and subsequently broken down into components that are ranked according to significance. The professional development could then be scheduled and achieved according to a step-by-step procedure.

'We have a system that takes into account all your previous experiences from languages to maths, everything is graded from 1-4 according to your present level of knowledge. And if you see that you are lacking within a specific area, you can complete that part in some way to get that competence'

Discerning the parts within the whole

Another aspect that appears as an important part of the 'engineering thinking skill' is the ability to discern the parts within the whole, meaning to understand the function of the isolated piece within the bigger puzzle that constitute the product the novices are building/constructing.

Domain: Moral/ethical/ dilemmas and social/societal responsibilities

There are few descriptions of any moral dilemmas among the novice engineers. About half of the informants state that they have not encountered such dilemmas. Those of the informants who have anything to report regarding this issue typically mention one dilemma as described below.

Producing for construction or destruction

This dilemma concerns the aim of the products. Producing things like weapons that could actually be harmful for human beings is mentioned by three of the informants as a moral dilemma. The strategies for dealing with this dilemma is typically through rationalising e.g. projecting the responsibility for the use of the products to the buying partner or to turn the reasoning from producing offensive weapons to a reasoning about the need for defensive weapons.

It is a kind of moral responsibility that you possess knowledge to build a product that could actually harm people .. but the company I work for build machines to transport gravel, and that is what we do, even if some countries that have bought them have rebuilt them to torpedo ramps, that is not what we have intended..(31)

There are, however, few expressions displaying any societal responsibility of mechanical engineers. As regards social responsibility, the novices typically mention the ability to communicate with their colleagues as a social responsibility of the profession.

B. Novices' appraisal of their study programme after work life experience and comparison with their opinions as seniors.

The following aspects about the study programme were discernible in the interviews with the novice engineers.

Learn fast and work hard

The novices often say that they learned to learn fast and that they learned how to get an overview. “I have learned how to get information”, “I have learned to be efficient”, and “I learned to learn fast”. This is nothing they were taught; it is something that they had to deal with to manage their studies. The educational context made it necessary for the students. The tempo during the first two years in the programme was so tough that the students had to learn to sort things out and to find ways of grasping the subject.

“I felt when I was doing something that I easily could see very soon what was the problem, identify the difficulties, that I was learning, could sort things out. I was good at prioritising.” (32)

Problem solving

An engineer is a person solving problems. That is what the novices say is the hallmark of an engineer. They describe the problem solving process as a technique used all the time during their studies. This technique can be described like this: the students learn how to identify a problem and get an overview of the situation and the context. The next step is to identify the components, the parts, and after that they try to find ways to measure the parts, and finally, they put the parts together again in a formula. The novices mean that they have been instructed to think and act in this way, and they can as novices see the effectiveness in this problem solving strategy

“Critical thinking, the way engineers are thinking maybe....if one have a problem, to be able to sort it out, and divide it into different sub problems, is actually possible to solve, because if one have a new problem, then one must divide it to be able to find a solution and solve the problem”(31)

General and/or specific knowledge

There seems to be an inbuilt dilemma in engineering education and in engineers work. The dilemma is about being a generalist or a specialist. Some novices say they now need to know more about e.g. CAD (Computer assisted design) and they say that they would like to see more of that in the study programme. The next second they say that it is OK to learn about CAD at work and they see the problem of putting in more subject matter. It is already too much.

Theory and practice

What the novices want to see more of in the study programme is the reality out there; what the students can expect to meet as engineers. They want to have more real problems and they suggest that the study programme is more project -based. The reasons to use real problems in the study programme are in helping the students to understand the theories. Another aspect is that it will motivate the students in their studies more than the programme does today and the novices say that it is a fact that students today have less experience of mechanical work than students had some years ago. The development of technology from mechanic to electronic makes it difficult for people to experiment with different machines on their own. This is also a question of male – female interests and possibilities, which female novice’s points to.

Engineers: A ticket to the highest division

The relation between the educational programme and working life is to get a kind of certificate that you are of the right calibre, the education has an overall reputation of being hard and difficult. Passing the educational programme hence signals that the novice engineers are ready to enter anywhere in the working field of engineering. To some students, this means that passing the tests is the most important within the educational programme. The certificate of the programme is the certificate to the work life arena.

'Engineers have a similar training, you have been through courses of similar difficulty, I think that is why you feel like an engineer, you have made it, there are several who don't think they will make it when they start on the programme, because it is really hard work. Very few really make it, and that is perhaps why you feel that you kind of are of the same kind' (29)

C. The relationship between Higher education and work: An analytical comparison between study programmes

Psychologists

The Psychology senior students emphasise *personal involvement* as important feature of their learning in the programme. The students conceptions of what constitute the core of the professional psychologist is the ability to view, analyse and describe psychological human problems from several viewpoints, theoretically or different levels as the individual, group and society level. Psychologist novices' experiences of the relation between the psychology programme and work life can be described as being closer than expected of them as students. There is a strong emphasis on *substantive* transfer and application of a knowledge base acquired within the study programme.

Analytically, the transition from the psychology programme to work life could be described as displaying continuity between the contents and forms of the study programme and the professional work. The main character is transpositional, it is a matter of contextualising by giving evidence of the knowledge acquired within the educational arena as a contribution to the professional arena. The *generic* skills acquired within the programme, besides the substantive knowledge, could be described as the capability of working independently, taking on professional responsibility, to host and manage difficult personal problems of clients without compromising their own psychological welfare. The relationship between the study programme and the professional work life as a psychologist could thus be described as *rational*.

Mechanical engineers

Engineering students' experiences of the transition into work life are different. The experiences of the study programme display an emphasis on complexity and demands on highly analytical skills. From the interviews with senior engineering students we know that the typical answers to the question about what a good engineer is good at *a set of generic skills* is mentioned. Logical thinking, problem solving, and calculating are mentioned as examples of such skills. Besides this, the senior students also mention *a certain way of thinking* the nature of which the students do, however, have difficulties verbalising. Engineering students also emphasise learning in the programme as *coping* with their studies.

The emphasis on complexity and analytical skills is transformed to a more restricted focus when entering work life. The novices describe that only parts of their full competence is utilised. The transition from education to working life could be described as moving from the 'intellectual gym' of the university studies to the fulfilment of concrete and delimited task as a part of a common project in work life.

The transition from the engineering programme to work life could be described as a kind of discontinuity or reduction of the professional competence outlined during the study programme. The relationship between the educational programme and work life could thus be described as *ritual*.

For all groups, the shift from a 24-hour identity as a student to a part-time identity as a professional is discernible, even if there are some indications that taking on a professional role as a psychologist also means to take on a social responsibility of representing the profession also outside working hours.

Comparison between study programmes

Professional identity and work

There are similarities between the three programmes regarding to which degree they feel professionally competent. The psychologists claim they feel competent in various situations, which leads to a strong professional identity. At the other extreme we find the political scientists. They have a broad working field and this makes it complicated to develop professional identity. During their studies they have struggled to find role models and as novices they still have problems to find their professional role and identity.

Among the mechanical engineers we find those who have a strong identity as engineers and some that still struggle to find their professional role and identity.

The psychologists have work tasks which they were expecting to meet in their coming work life and it seems that their study programme were preparing for these tasks. The novices' express that they feel like competent psychologists during their first year at work and they experience also that their colleagues have the same opinion about their competence. If we compare the situation with the political scientists there is a quite different working environment. Many of them feel they are more qualified than their work requires. Some of the mechanical engineers have a work situation comparable to the psychologists, they feel competent and they can and need to use their knowledge. For some of the mechanical engineers the situation is comparable to the political scientists.

The squeezed tomato

Many of the political scientist and psychology novices' are working in political governed organisations. These novices describe their situations sometimes as squeezed tomatoes, that is a conflict between the politician's interests and their clients/the public. They have to negotiate and decide on which interest they should look after. For some of the psychologists we found more or less the same situations despite they are not working in political governed organisations. They

have to decide on which side they should stand on the client or parents/colleagues/employer. These squeezed tomato situations have not occurred in the mechanical engineer group.

Generic skills

There is an obvious similarity between the three groups of novices regarding the way they emphasize the importance of generic skills, and these skills are traditional academic ones, such as critical thinking, analytical ability, communication skills and problem identification and problem solving.

2. Norway

2.1 Political Science

A. Entering work life: Novices' experiences of work

The nine novices interviewed have all entered the work life. Four of them have got positions within public administration/ public service, two have jobs related to media/journalism, one is a faculty member in higher education, one is working in the private sector and, finally, one is working in a voluntary organisation. Four of the novices have had part time jobs as students for at least one year at the same working place they enter as graduates. The rest of the group, with one expectation, got their jobs through applications.

The professional activities among the novices within public administration can be characterized by researching and reporting on administrative cases. The activities within the other areas differ, but include leadership, teaching, consulting and information work.

Two of the senior students had not got any jobs at the time when the interviews were conducted and have consequently not been interviewed as novice workers.

Being a newcomer

Although the novices view their jobs at the moment as temporary, they are quite satisfied to be working. To get a regular income is expressed as rewarding.

Great!... It is so good to be in a job and to use what you know, and to see that you have learnt something that can be used. (John)

Some novices describe the life as a student as characterised by loosely held limitations for time on task, with no clearly experienced demarcation between work and leisure. Starting to work therefore means to learn new boundaries for time and responsibility.

But of course working life gives you quite different challenges, quite other matters you have to deal with. In the profession I work in now it is what you produce every day that counts. As a journalist I have to deliver on dead line. And it is the results that are important. As a student it was to produce once every term. So what is most liberating in a way is that you earn money – you earn money. And you have time off when you have time off. You don't have it over your head all the time - every day. (Lars)

A little more freedom and a little more obligation. It is to get up early every morning and to be at your work and to do the tasks that you should, in stead of – well I'm the kind of person who prefers a big haul now and again (skippertaksmenneske). While I was studying it was much easier to postpone or at least to wait till the last minute before I did things. But now you have to structure yourself a bit more. (Torill)

Although the novices describe a more restricted time structure, one informant expresses very clearly that to write a thesis and manage the exams is much more demanding than working “There are a lot more heavy hours when you study than when you are in a working situation” (Jenny).

The informants describe their *experiences as newcomers* in somewhat different ways. The four who continue in jobs they already had as students, do not describe themselves as newcomers although two of them describe some new expectations that include taking a greater responsibility.

One of the novices in public administration describes his experience as a newcomer in very positive terms. He was “very well included” and “taken care of”. Another one, working in the same sector uses similar terms, although he argues that the tasks he was working with in the beginning were not challenging enough. Being a newcomer in the bureaucracy means that you still are in a training position “I think that from the leadership’s point of view, I am still in training “(Paal)

This position, being a graduate and a novice, may also create some tensions. One of the females tells us that she was struggling in the beginning. In order to be included, she says

You have to be humble... but at the same time not ask too much. If you want to be regarded as good right from the start it is important that you try to keep a façade... I've been very open and I've been humble in relation to asking all the time. I have as a matter of fact just waited to be able to use my knowledge, without it seeming as uncertainty – that's how it has been really. And it has taken a little time until I could find my role. The most important was in a way to manage to get good social relations. (Jenny)

She tells us that she is the only one in her work place with a higher degree from the university. She believes that her theoretical competence may make her colleagues sceptical. Being a newcomer indicates that you have to make your colleagues around you feel safe. However:

It should have been the other way round, shouldn't it? When someone new comes in, they should be the ones to make you feel safe, and then it was really the other way round, that you come in as a new one, something new, something strange, in their habitual environment. (Jenny)

Another informant points to the need of acting in a strategic way:

And I have thought about it – how do they look at me and what do I do wrong and maybe what should I be like? So I've tried to be a little more, a little more social and to be very careful with what things I say and don't say. After all I'm not in a permanent position here. So it is in fact something about trying to be a bit strategic as well. Talk to the right people and not provoke unnecessarily. (Thomas)

Although the students talk about the challenges they met as a newcomer no one expresses an experience of “a practice shock”. As novices they see themselves as still being in a learning position and that is how the work place defines them too. The informants do not focus so much on problem solving difficulties related to working tasks, but they tell us about their struggle to become socially accepted and integrated at the work place.

Knowledge, learning and competence

The newcomers emphasise that they are learning a great deal. “I am learning new things every day” (Kari). They talk about learning procedures, facts and routines. To learn the importance of

collaboration is emphasised by half of the novices. One informant underscores that she has learned that you may have a great influence if you are able to present your case in a proper way (Jenny).

When it comes to what sort of competence they believe are important in order to do a good job, most of them underline the importance of the formal competence of having a higher degree; however whether it is in political science or other disciplines is not relevant. For those employed in public administration/service analytical and critical competence is mentioned as vital. They define a good political scientist as someone who is able to analyse the consequences of political decisions in a comprehensive way.

While some of the informants underline qualifications such as the ability to listen, communicate and cooperate as important in their job, only one links it to the competences that are important to be a good political scientist.

With abilities I suppose I think that willingness to cooperate is very important and human insight in relation to the supervisor and all that. ...To be able to communicate is important of course. And yes you have to be a bit pragmatic as well. At least it doesn't hurt to be. (Thomas)

Moral and societal responsibility and dilemmas

Some of the novices give examples of moral dilemmas in their work. The two informants who are working within media tell about some cases where they questioned whether they had used the information they had got in an ethical way or not. An informant working in a private company makes another comment

Well, there is talk about ethics and how you should use the information you have all the time ... I don't think this has been a problem for me, but there are many who are tempted to take short cuts. And that is why there have been a lot of changes in personnel, because if you don't follow the routines for the work, then you have to leave the place. (Per)

Two of the informants working in public administration frame a tension between on the one hand the obligation of presenting objective data and on the other hand the obligation of taking a moral standpoint.

Being educated at the university you may say that you have an obligation to fight actively for issues that you yourself think - and that there is a general agreement about - are morally right. Or should you distance yourself and take a more scientific observation perspective on it all? That is, should you have an active role in the direction of what you stand for, or should you just seek the truth more actively, to put it that way. (Paal)

However, not everybody see this as a tension. "If things appear in a way you maybe think are a bit wrong" John argues, "then you have a moral responsibility to contribute to the debate and to be able to correct the biases that you see".

The journey: Developing professional identity

The novices gave very interesting comments on whether they see themselves as political scientists or not:

I feel maybe that I don't carry out the role of a political scientist to a very large extent, but still I am very clear that this is my professional identity. I am in no doubt about that... I see that many people with very varying educational backgrounds could have had my job. But I think that I do this job in a way that is a product of me being a political scientist and that I am a political scientist flying this flag high, to put it that way. (Paal)

One of the novices who were the only social scientist at her workplace describes her situation like this:

I think that first and foremost I do it because I am absolutely nowhere near of having anything in common with any of the others ... if I had been somewhere else where there had been more political scientists for example, the maybe it would not have been so obvious. I'm completely alone ... In this job I'm on my own. So, yes, I suppose that I do think as a political scientist. (Kari)

Another informant, however, presents another perspective, viewing political science as a general education with no professional focus. Although she formally is a political scientist, she does not feel it that way

No, I don't really think I do. I suppose I feel that to be a political scientist is a bit fuzzy in a way since you have a curriculum that is not all that focused on one thing... I am a political scientist, but I don't really feel that I am one, I don't feel that. (Torill)

B. Novices' appraisal of their study programme after work-life experiences, and comparison with their opinion as seniors

The novice informants appreciate that they have learnt to work independently and argue that the study programme has given them an analytical and critical competence. They also emphasise the importance of the master thesis. The time as students at the university is valued positively, however some of the informants say that they were more than ready to leave.

They make some critical comments when it comes to how the programme was organised. One informant for instance argues that he did not get any responses on his thesis work. He is therefore quite positive to the ongoing reforms in Norwegian higher education where frequent feedback to student's written work is a central aspect. Another one argues in a similar way:

All the time I have thought that the very, very free and independent situation that we had, and that I had when I took my bachelor degree, wasn't very worth while really. So I think that the reform that has come now is very good. I think it is very important with closer follow up. I think it is very important with training in writing. (Lars)

Although some of the students argue in favour of a more structured study programme with more required work and better follow up, they also make comments in favour of a loose structure. It gives them the freedom to organise their own study (Paal).

Most of the novices say there is a correspondence between what they have learnt in the programme and the competence they need in their work. Our impression is that although they have some critical comments, they are generally satisfied with the programme and the education.

In the interviews made when they were seniors, the students commented that the institution was mainly concerned with organising lectures and seminars, providing available space in the study hall, library and internet facilities. Most of the senior students said that they had to find out a number of things for themselves, such as finding a tutor. "The department itself hasn't done so much in this respect" (Linda). However, there are not many complaints in the interviews. The seniors seem to be very loyal and unwilling to criticise, they rather find excuses for the situation. "So it is OK, I don't really think it is so bad anyway." (Torill).

2.1 Psychology

A. Entering work life: Novices experiences of work

The 12 psychology students who were interviewed in their senior year were also interviewed as novice psychologists. Nine were women and three were men. Six worked as clinical psychologists in child psychiatry, adult psychiatry and in school psychology. One worked in an administrative job in social services for children and one worked as organisational psychologist in a private consultancy firm.

Being a newcomer

In the main the novice psychologists found that it was a positive experience to start working; they like to earn money and to work regular hours. Most were content and thrived in their jobs. For those who had been working part time as students, it was a relief to just have "one job".

It is good to have an income...It is exciting and rewarding, but rather exhausting as well. And you lose a lot of the freedom you used to have (Hanne)

It's good to be allowed to practice what I've studied, to be allowed to go out and do something. Contribute. Work. Earn money. Live a normal eight-to-four life (Alf)

It's fun – and less frightening than I had expected (Irene)

I manage better than I expected. More difficult because it is so exhausting. (Elise).

Working life was mostly as expected, with few surprises. However, for several of the novices the responsibility in their job weighed heavily. Some of them also said that they made efforts to adapt, while others chose to take the role of "the strange bird" or "the young one" with the leeway this gives to act a bit differently. Both groups felt that their strategy was met with positive response.

On the one hand it is easier. Having regular working hours helps me not take a guilty consciousness home with me. On the other hand it is burdensome and tiring because there is so much responsibility involved (Elise)

I was a strange bird. I wondered if I should adapt to their dress code for instance or .. but no, I'm an adult now so I'll go on being myself. There comes the Oslo babe! So I was different in most ways and thought that give them time, they will find out that I'm OK at the bottom (Elise).

Knowledge/learning/competence

The psychologists seem to take it for granted that the theoretical knowledge from their studies is important in their practice. This includes a wide general knowledge of the field of psychology and a broad outlook. They also see the need for therapeutic skills and strategies. Emphasis is on empathy, communication and creativity

I think social competence is very important in this system. And I feel confident in dialogues, I have some techniques related to make the youngsters talk and to help them (Irene)

I feel have a sufficiently broad overview of the field. That is an advantage in our education. A weakness is that we have very little specialisation. (Elise)

It is important to have – or to give the impression that you have - room for what others have to give and in some way or other receive it in a manner that does not make the experience of have given it too awful. (Irene).

Learning such skills and competencies starts as part of the study program, but to master them depends – according to the novices – on practice, on making their own experiences.

Moral and societal responsibility and dilemmas

The novices are aware of their moral responsibility, but this is directed at their clients – whether they are children, pupils or adults – not at society. This responsibility weighs heavily on many of the novices.

Dilemmas are related to how much they need to pry into their clients' lives and to drawing a line between their helping role as professionals and as private persons. One of the novices mention a feeling of moral responsibility for making psychology known to the public, to make it less "dangerous" and another feels a moral responsibility for alleviating conflicts in the working environment. The general view on this aspect is much the same among the senior students as among the novice psychologists. However, for the novices it was no longer just an abstract issue, but a field with a number of real challenges and dilemmas.

You have to be conscious about what you need to know and have to know – and not just what I would like to know for myself. Because really, they [the clients] will answer everything I ask about and I feel it is my duty to find out where their limits are. I experience it as a tremendous responsibility (Irene).

She would not have said that about her daughter to me if I was an ordinary mother, but I don't want to get involved in that way. (Irene)

The journey: Developing professional identity

It seems as if getting their diploma and landing a job as a psychologist, also denotes entrance into the profession and role of psychologists. The professional role is associated with self-reliance, consciousness and empathy. Most of the novices express satisfaction, they are happy about their choice and feel comfortable in their new role.. They feel they are expected to have the knowledge

and skills of a psychologist, and most of the novices experience that they in fact have the necessary competencies. Meeting the expectations and coping in their job seems to feed back into the development of a professional identity. Part of developing the professional identity is to discern between their professional and private roles. Several of the novices say that their professional identity is not yet fully developed, but that they feel that they are under way.

I really feel like a psychologist... I am so pleased to be a psychologist. And I think it is wonderful to have the authority that goes with it. When I say something, people listen because I am a psychologist. It's absurd, but that's the way it is. (Irene)

The education gives you a theoretically broad perspective. What you get along the way is more the general experience, the knowledge you get about being in the role of a psychologist and how you affect others. You don't know who you are until you are there. I don't think others know what we can, we have to become more assertive about it. As a professional I feel much more confident and little more resigned. I'm not really disillusioned, but I'm surprised about the number of difficult life stories, so many more than I imagined. As a person I feel more divided. I have less energy to use the parts of me that I have to use at work, in private situations. I wish I could be as forthcoming "over the garden fence" as I used to. But I feel I can't. (Elise)

I used to be scared stiff, really. But now I feel I'm on my way to being a psychologist – as an effect of the work one does all the time. You develop. I hope I don't stop doing that. (Elise)

I have become more conscious about things - such as my own limits, responsibility, morals. If I seemed confident and secure when I started it was more an impression I gave, not inside me. Now it is inside as well. I am not on safe ground yet, but I feel much more confident and secure. And that has mostly to do with the experience one has... As a person I have more insight into my own limits and resources. (Elena)

You suddenly have a position of power. Your word counts a lot. (Kaja)

Some, however, feel the responsibility of an acting psychologist as almost too burdensome and they struggle to find their own standards for working as a psychologist. It is also noteworthy that some of the novices already feel a pressure to specialise. They feel that in order to develop their professional identity, they need to enter a training program for specialists before too long.

B. Novices' appraisal of their study programme after work-life experiences, and comparison with their opinion as seniors

The novices have enjoyed being students and were in general favourable in their views of their study program – even though some would have preferred more practical training. Some note that their views may be a bit nostalgic, remembering the good parts best.

I know I now have something to contribute and I'm glad we had so much biology because I now understand what the doctors and psychiatrists are talking about... I'm much more positive to my study program now than when I was a student... it is becoming so distant that it appears as a fantastic program (Hanne).

I appreciate most the therapeutical experience I had, where I saw a client two times a week under supervision. That is clearly what has been most useful for me ... I think surprisingly little about my studies. It is very much a thing of the past. But when I do, I think it was a good education. ... I feel it has met my expectations (Guri).

I used to be very critical, but now I see better the advantages of our broad training... Our education is probably better than I thought at the end of it. We know a lot more than I thought. On the other

hand, I'm even more convinced about the part about not following us up and taking care of us as students... I am really very glad I took that education (Elise) .

All the novices in psychology give positive comments, but most of them are critical or at least question the way the programme is organized as a professional programme. They are quite negative to the way theory and practice is integrated in the programme. Most of them argue in favour of a programme where the students meet practice at an earlier stage.

I do think we had too little practically oriented work, but I also see more clearly than before that the theory we had is worth gold (Elise).

Of course they gave me the knowledge in a broad sense and different theories and techniques, but there was not enough focus on being a psychologist. So for me it has been a major transition. There should have been closer connection between theory and practice (Elna).

On the other hand, when asked what they would leave out of the programme to get more room for practical training, the novices find that it is difficult to point to elements that they might do without. It is rather the *place* of practice than the *amount* of it that they find should be changed.

When comparing with their statements as senior students most of them at that moment also criticise the profile and argue in favour of a more practically oriented programme in order to be prepared to become good professionals. Some students argue that the clinical part of the programme starts too late (Irene). One student argues that it is through discussions with other students that she learns and gets the necessary feedback. The formal programme, she argues, does not give her this type of feedback. In addition, she highly values the main practice period off campus; here the feedback from clients as well as from professionals is essential in order to become a good psychologist.

The importance of peer students are emphasised also in the novices' interviews when they look back on their study time:

But I suppose the most important was the collaboration that was encouraged between us students at the end of the study programme. The programme promoted group work and was set up to give you chances to try out things and to get feedback on your attempts (Alf).

2.3 Law

A. Entering work life: Novices experiences of work

Eight persons were interviewed as senior students and again as novice lawyers. Six of the lawyers were women, two were men. Two worked in a lawyers' office, one worked in the legal department in a big company and four worked in public administration (three in jobs related to taxation and 1one in a job related to immigration). One worked in a non-law related job, i.e. in organisational development.

Four of the novices were in permanent positions, the rest in different kinds of temporary jobs.

Two female senior students were not interviewed as novices because they did not have a job by the time of the interviews

Being a newcomer

The novices all express appreciation of having started to work. "It's lovely" is a common description. To have an income plays an important part, but to work regular hours and not always feel that they should study more, seems equally important. Defined boundaries between work and leisure seems to outweigh the loss of freedom to organise their day according to their own preference.

Oh I think it is really lovely to be working, to be finished with my studies, oh it is very lovely. To earn money, that's a big advantage. (Tore)

All the novices seem to have had a satisfactory start in their jobs. This may be related to the relief of having got a job at all. There is an undercurrent of disappointment for those who have not landed a job where they need their law qualifications. If the job is considered interesting or challenging all the same, this disappointment is lessened.

I was most disappointed that it took so long to get a job and that it in fact is so difficult to get a relevant job. But I'm very glad that I have a job. (Mona)

The start was experienced as having varying degrees of difficulty. Some were surprised that they were left to manage on their own or had so little systematic introduction or on-the-job training – others had assigned mentor(s) and introductory as well as follow-up courses.

It was OK to be a newcomer. I felt I was well received...Difficult to orient myself of course. Everybody really has too much to do in this organisation. So there is nobody who has time to take you by the hand and show you how we live here... I found out by asking those who sat nearby and whom I work with as well as people around in other parts of the house. (Anne)

There are also examples where the novices seem to be surprised that they actually are able to handle all the different working tasks:

Well I feel I've had a lot of such challenges. For example this thing about talking to large audiences, I've always hated it. And then I thought what will it be like when I have to be in court? And there's this poor client next to me and I am supposed to help. And everybody looks at me. And then I have to swallow and pull out the whole thing. Oh no. But in a way it has worked out fairly well. A certain kind of calm comes over me. When I stand there and I've arranged the desk in front of me, then it's ok, because then I really just have focus on a small area after all. It becomes like a little bubble. And then I become surprised by myself, that I can actually cope with it without falling apart completely when I think it is just awful... All those little details that make it possible for you to focus; regulating the desk, pouring water into the water glass. I think things like that make you calmer... In addition there is the responsibility for the client next to you. I can't reverse!

Some of the novices feel that their job experience has changed them somewhat. They feel that they have coped with the challenges they have met as newcomers and that they have become more self-confident and assertive as a result. Others do not feel that they have changed.

I don't think I'm all that different (Anne).

Quite a lot has happened, to be honest. I think I am much more self secure. Just to discover that I'm in fact right, when I discuss with a more experienced lawyer – that's great fun! (Mona)

Knowledge/learning/competence

The novices note that they have to know legal method and they have to gain insight into the particular area of law that they are working with. However, the need for knowledge of human behaviour and human relations is also strongly emphasised. For this to take place knowledge of laws is not enough – they have to have an understanding of their clients' life situation and cares as well. This also includes understanding their own role as lawyers in society.

It is very important to have knowledge of society. And it is important that we know the legal method. And it is important that we know the laws and rules we are there to administer in the situation we work. ... For example if you don't understand the basics about who make the laws and who put them into practice and that kind of knowledge about society, then you can easily go wrong. That is one part of it. The other part is social competence. You meet people in very unhappy circumstances and you should be able to read the signals in order to cope with the situations you are in (Mona).

In fact I think compassion is very important, because you meet people who are so different. Whatever kind of job you have as a lawyer, you will meet different fates (Tore).

The novices feel they have learnt a lot since they started in their jobs. This has been necessary in order to cope with the new challenges. Learning has been especially related to legal knowledge in the particular area they are working.

Well, the learning curve was been relatively steep to begin with – now I think it is beginning to level off a little. Now I'm ready for more challenges. (Anne)

Learning has come about through practical experiences on the job. When they have been uncertain, they have asked colleagues or people they collaborate with in their job – being careful not to ask too much so as not to display undesired uncertainty. Most of the novices have also found it helpful to read more about the particular field of law that they are concerned with in their job. Some have had the benefit of training courses in their job, but the courses were not always offered at the time when they would have been most useful.

Learning has also been related to human understanding. For some this has meant an added respect, for others a more cynical view of other people. This kind of learning has come from the contact they have had with others in their job. Human understanding also relates to consideration of their own behaviour for instance in understanding the need to adapt to clients and colleagues.

I've learnt that people can make up the most incredible things, more poppycock than I can ever understand that anyone ever could manage to cough up! That I have learnt. I suppose I knew this in advance, but it has become very evident. And I have learnt that people can do a lot of foolish things, when they are under pressure. And I have learnt a lot about the practical management of insolvency. (Anne)

I have learnt to adapt to a greater extent than I may have been used to – be more considerate. As a student it was just me, and that wasn't much to consider. Another thing I have learnt: I didn't have to use so much data as I do now. (Mona 5)

In this job you need human qualifications - to know how people react. We need to understand human nature because we are so much in contact with people. Some of the people here just sit in their

office and talk on the phone. They don't meet people... they become very rigid and only go by the rules. There is no understanding of human relations (Tore).

The novices note that the specific competence they need in their present jobs is firstly related to knowledge of law (method, general and specific laws and rules). They should, however, also be able to administer their work and be able to tear problems apart to analyse them and to find the best way to resolve issues. Another area of competence is related to handling human relations (communication as well as collaboration) and to their own self-confidence and flexibility as lawyers.

I need an understanding of economics and I need knowledge about the laws, rules and regulations and how they function in this field. And then I need audacity. To be able to go to a customer and say that I know you have been in the papers, that everybody in town salute you, that you are probably member of Rotary and the Royal Yacht Club: It doesn't matter, we don't believe you! In other words, not to be too anxious, or have too exaggerated respect for authority. (Anne)

You have to show independence, that you can manage to think for yourself and handle the tasks you are set to deal with in a good way. Not having to ask about every little thing all the time and be able to make your own decisions. (Tore 10).

You should be able to see things from the other person's angle. That helps because many people have a lot of sensible things to say. Of course, you have to know the subject matter and then you have to be able to see which possibilities there are within this field. How can I stretch the limits a little to make it good for me and for the other one? (Tore)

Moral and societal responsibility and dilemmas

Human insight and compassion appear as a necessity in order to do a good job, but also almost a moral obligation; people who are dependent on the lawyer should be treated with fairness. Respect for the client is a central focus for all those who are concerned with the moral aspects of their profession.

I think about the responsibility for the client of course, who some times can be a little difficult to take care of. And maybe you don't always understand what is the best for the client morally speaking... and then there is the moral issue involving myself, that I in a way have to take care of myself in all this. Because it is a little scary, when you start to push your limits. And then you have pushed them and pushed them and pushed them and you feel just as ethical, but in reality you have moved yourself a great deal. And I am very afraid of that. At the same time I think that maybe my moral code was too high in a way, I mean in a way unrealistic... I have in a way to face the fact that the world is not such an ideal place and that you can't expect it to be so either. (Lisa)

When it comes to the relation between responsibility for society and for the client, the client has priority. The novices do not feel that they have a particular societal responsibility just because they are lawyers.

I think it is important to have some general human insight and to understand that you are the keeper of a set of rules that are intended to make society function. The rules are not a goal in themselves. I believe it is important to understand this. (Anne)

I think it is important to understand that we in fact make decisions that affect people, that is not an objective matter! (Mona)

Deliberations over moral and societal responsibility are related to the development of professional identity. The way some of the lawyers distance themselves from attorneys is an expression of distancing themselves from a focus on money and profit which in some circumstances represent a conflict with professional ethics. Profit should not be allowed to overshadow concern for the individual human being, you should have the opportunity to show empathy and treat each client in a respectful way.

The journey: Developing a professional identity

The novice lawyers notice that the knowledge they attained through their law studies is very valuable in their job.

I think I'm out of the role of new and inexperienced and more into a role where - if I'm not experienced - at least people take me seriously! I dare to do things that I would not have dared or done a year ago, that I might have hesitated to do then. (Mona)

Since I know what it is to practice with real people involved, I think I am more thorough now and more concerned to arrive at a good result. I feel that I have developed through the responsibility I have been given and that I have had to take. I've become more dynamic and show far more initiative (Per)

The novices reflect on their professional identity in relation to other professionals and remark that they have a different approach to work related issues than for instance economists or police. On the other hand, they also make the distinction between themselves as lawyers (people who have studied law) and not as attorneys (people who practice as barristers) which none of them are as yet. For some this distinction also implies that they want to distance themselves from the attorneys that are prominent in the media or have got a slightly tarnished reputation in the financial world.

I see a big difference between us who are lawyers and those who are economists in this job. I notice that we lawyers meet the challenges in a more effective way. Maybe we also reflect more on what we are doing, while the economists think in numbers, numbers, numbers. (Mona)

When you participate in courses and when you are at such gatherings, then you notice it because then there are those lawyer things – it is safe and comfortable. We know these people. And here we have almost the same background and stuff like that. We become a little clan. (Lisa)

B. Novices' appraisal of their study programme after work-life experience comparison with their opinion as seniors.

It appears that what novice lawyers appreciate the most from their studies is to have learnt 'The Method', to present a case in a systematic way and to express your opinion in an effective way. Particular areas of knowledge are not readily mentioned, maybe because this is taken for granted. Another reason is that most of the novices have found that to do a good job in the area of law where they are working, they have to know more than what was covered in their curriculum. Yet another explanation is that knowledge of particular laws is easily outdated when new laws are passed.

I am most pleased to have learnt method, that is what I appreciate most... Because that is the analytical tool, so that when I now meet a field that is unknown to me or a completely new set of rules, it is easier for me to find out about it. (Mona)

The best is to have learnt to formulate things, to be able to express oneself in writing. You have your back covered when you are able to express yourself in a good way (Tore).

One of the novices argues that

Somehow or other they should manage to put in some kind of practice (in the programme). In most of the professions where you are going to work with people, they try to check out people a little. And that is not done at all (in law). In addition, the course in ethics, that should of course have been immersed in the curriculum all along and not just come as a kind of two-day-block suddenly right at the end... And I also think it would be good to have some group work included as well. (Lisa)

When comparing the novices' interviews with the senior student interviews there seems that there are less critical statements among the novices. However the novices remember that there was too much distance between students and faculty.

And it is frustrating the way it is organised with the professors more or less at a distance. They stand there on the podium. There are three or four hundred students attending the lectures. You never get any good contact. (Bente).

This corresponds to a statement Tore gave as a student:

Law is actually a self study programme. They do provide lectures, and they really have good lecturers, but ... (Tore)

C. The relation between HE and work: analytical comparison between study programmes

A coherent journey?

When comparing the data from the seniors and novices for all three programmes it seems as if there are no fundamental changes in the informants' views about learning, knowledge, competence and moral and societal responsibility from the time they were interviewed as senior students to the time of the interviews with them as novice workers.

In *political science* the *novices* share an understanding of the profession as open and not well defined. This is what traditionally characterises a liberal programme in contrast to a professional programme. Writing a thesis is viewed as an in-depth learning process among the *seniors* who underscore the importance of the reconstruction of knowledge. Even for the *novices* the thesis is an important hallmark in order to describe their competence and their professional identity. The aim is not to produce specific skills and competences; rather the purpose is to offer a general academic "bildung".

Academic content knowledge, including general disciplinary knowledge, knowledge about the main theories, knowledge about political systems, structures and how they work, and factual knowledge and analytical knowledge, is what the informants as seniors as well as novices conceptualise as important knowledge in order to become a professional. For the seniors professional competence includes theoretical/conceptual competence and analytical competence. Analytical competence is explained as the ability to look at a case from different angles and viewpoints. For the novices there are no critical moments that change this perspective, although the focus on generic skills has become more articulated.

Like the seniors, the novices do not support a conception of the political scientist as a person with a greater moral or ethical responsibility than common morality requires of everyone. They argue that this moral requirement is equal for all persons. However, both groups also underline the importance of societal responsibility and of being "diplomatic and neutral" in order to handle ethical dilemmas in a professional way. Having gained the unique knowledge of political science and having learned the analytical method in order to rationally analyse social and political structures and systems, implies taking a societal responsibility. This responsibility is based on their knowledge as academics and on an academic attitude.

In *psychology* the senior students as well as novice psychologists express an understanding of knowledge and competence which puts emphasis on the client or the individual patient. The integration of theoretical comprehensive knowledge which is linked to the academic discipline and knowledge about human relations and therapeutic work make up the core of professional competence. It seems as throughout the journey most of the informants give a very positive picture of the time they were students. This positive memory relates strongly to the students' experiences in the practical part of the study. It also seems that for the psychologist the meaning of professional responsibility has become more real and challenging as they move into professional work.

Neither do we see any drastic changes among the novice *lawyers*. Their perspectives on knowledge and competence are drawn heavily from the content of the study and particularly the legal method. Although the informants as senior students mentioned the lack of practical orientation in their studies, it seems that the novices handle this lack in an acceptable way. They

seemed content to have learnt the legal method in their studies. Much of the factual knowledge they need in their different jobs, they will anyway have to learn in relation to their practice.

Most of the informants in both interviews emphasise the moral aspects of the profession. Both as seniors and novices they express tensions between what they see as the right moral code of the profession and what they experience as the unacceptable moral practice of some professional practitioners in the society. They consequently may experience some uncertainty about their own moral values and whether these are too idealistic.

To *sum up*, none of the groups seem to change their perspectives fundamentally in the transition from senior students to novice workers. They are mostly positive to their new positions in working life and the preparation for it that they have got through their study programmes and many of them show an increased self-confidence. Hence, expectations as seniors seem to be adequate in relation to what they experience as novices. None of the three groups describe any 'practice shock'.

Although our informants were selected according to a set of criteria, the sample represents very different life stories. Some of them have children to take care of, some have years of work experiences before entering higher education, some have been studying abroad for some years, some have defined themselves more as part time workers as well as full time students, and some invest a lot of time in political and voluntary work. All this influences their perspectives as students. The concept of the "student" therefore becomes quite blurred and their journeys differ in significant ways. What sort of impact an educational programme has on its graduates will accordingly differ. Incidents that are critical for the development of professional identity may for some students originate from educational events while for others it is their experience in part time work outside the programme that makes the difference.

Our study shows that the educational programmes through their regulations create structures that define the discursive practice among the students and their perspectives as novices. But it also shows that the informants, as students and as novices, through meaning-making and negotiation cope with and challenge this discursive practice.

Professional identity – what does it mean?

The influence of the educational programme on the novices' professional identity seems to differ between the three programmes. The novices in psychology to a greater extent than the other groups seem to define themselves as part of a professional community. They become psychologists through participating within a relatively defined and exclusive educational programme.

On the other extreme we can place the political scientists who as seniors articulate that the social role of the profession is highly linked to having a higher university degree within the broad category of social science. They see themselves as being *graduates*. Interestingly, however, as novices it seems that the development of a professional identity as a political scientist can be understood as a need to define your self *in contrast* to other groups such as economists and lawyers. You need a label in order to show your environment who *you are not*.

The development of the professional identity as a lawyer seems to imply the need to make distinctions from the ways *other* professional groups think and work as well as to differentiation themselves from subgroups within their own profession. The educational programme and your graduation papers give a strong signal as to who you are as a professional person in the field of law. However it is among the lawyers we find examples of the need for distinguishing yourself from other particular types of practitioners within the profession.

In order to analyse the transition between education and work and the development of professional identity we need a broad analytical approach that links the life stories of individuals to socio-cultural structures and institutional regulations. The differences between the programmes

are not established by coincidence nor can they be explained by some “natural development process”.

The process seems to be one of interaction between the attraction and selection of individuals to the different programmes, the structures and processes offered in each programme, the different contexts where they start working and the way that each individual – with their individual life stories – adjust to and adapt the programmes offered and their communities of practice.

3. Poland

3.1 Political Scientists

The present report is the result of interpretation of the data gathered from novice workers broadened with the results of CDA.

A. Entering work life: Novices experiences of work

As a starting point, it is proposed to take into account the discursive structure identified in the field of political science. Discovered discursive formations and especially places where they criss-cross (labelled by us in the previous report 'critical moments') revealed the schizoid coexistence of a strong elitist conviction ascribed to the political scientist with a notion of vague future regarding the job perspective. Analysing the expectations and plans regarding the 5th year students' presentation or future work, we could already observe deep uncertainty and fear about the coming years. At that stage, it was interpreted as a strong contradiction between their idealistic general viewpoint on the profession and the real situation on the job market. If we complete this picture with the relatively low level of professional competencies acquired by the respondents during their studies, it seems obvious that the practical logic of the respondents, in contrast to the theoretical one, leads them to professional fields that have in many cases nothing in common with political science. As suggested in the previous report, this discursive collapse reveals the accidental nature of the professional activities of our respondents.

Their professional activities declared by the respondents include:

Seven respondents work in the private sector, three in the public one. Their professional situation can be labelled as stable, which means that everybody has permanent contracts. However, almost everybody declares very low job satisfaction.

- a. selling goods and services - 6 people;
- b. teaching - 1 person;
- c. job consulting - 1 person;
- d. management in an association – 1 person

Their typical forms of activity in the workplace are the following:

- e. learning – results from the need to build competencies necessary to take up new forms of activity
- f. marketing – selling goods and services; great role of contact with consumers;
- g. organisation and assistance (administration, minor accountancy, menial work)
- h. management
- i. consultations
- j. education.

Their activities are steered mostly by external rules related to the organisation of the work environment, character of the job, and procedures to which the agents have to adjust their behaviour. This strategy characterised them as students as well.

How I learn about the rules? Every single day my boss comes to us explaining that we should be more efficient and better than the previous day. (POL, 6, N, F)

Sometimes, they do so 'spontaneously':

Sometimes it happens spontaneously when working on something, but normally my boss tells me what he wants me to do or how to resolve the given problem (POL,7, N, M)

It is obvious that now when you start to work nobody comes to tell you what should be done. The time of your studies was the good time to learn how to work. Now we are too old to expect from someone to explain us all the rules (POL,8, N, M)

As requirements of the employers respondents mention:

- a. Competencies, mainly interpersonal (good relationship with bosses, co-workers, clients)

'Good relationship with colleagues, boss and clients are expected' (POL,10, N, F)

- b. Subordination:

'First of all I should follow the given rules and also what I can say can be perfect subordination – do not argue with bosses' (POL,14, N, F)

- c. Effectiveness in acquiring consumers, power of persuasion (appearance, communication skills etc)
d. Increase in competencies (professional training, see: forms of agents' activity – learning)

'What is absolutely necessary is the constant increase of my professional competencies so, I need professional training and the certificates testifying my competencies' (POL,11, N, F)

- e. 'Material' competence (knowledge of the sold products: goods and services)

Competencies required in the workplace are:

- a. Social competencies: interpersonal and communicative skills, appearance, adaptive (conformist) attitudes to the social context requirements, self-assurance
b. Generic skills: creativity, flexibility, problem solving capability, organisational talents,

'I have to be competent, creative, and responsible for given tasks. I have to treat my work seriously' (POL,6, N, F)

- c. Attitudes: loyalty with regard to the company and superiors; independence in realisation of given tasks; orientation on effectiveness

- d. 'Material' competencies: foreign language, general knowledge, rarely – specialised knowledge:

'Now I have to put into practice what I learned during my studies, about EU, structural funding and so on. English is necessary as well.' (POL,7, N, M)

- e. Formal qualifications

What can be interpreted as quite surprising is that only one person talks about professionalism (the case of manager/ musician who sets his own goals and standards). Loyalty towards the employer, honesty, soundness, positive thinking, independence, responsibility are mentioned as required attitudes. Strong conformity of respondents in social relations in the professional field is also visible:

I have to deal with all problems myself. It is the question of survival (POL,6, N, F)

Only one person manifests the nonconformist attitude:

I'm not obedient and even at the beginning I tried to change something in my workplace, teach them (peers) something. But what I encounter was more or less hidden envy or attempts to marginalise me. (POL,14,N, F)

Their interpersonal competencies (esp. the ability to quickly adjust their behaviour to the demands of the situation) on the one hand, and on the other the character of work that doesn't demand any previously gained professional/ specific competencies, in many cases seem to facilitate the entrance to new fields of activity. Therefore, when describing the first day at work, the respondents didn't find themselves in troubles. For most of them that day was easy:

'It wasn't difficult, my first day. We were all new' (POL,6, N, F)

Only two people stress difficulties related to the status of being different due to the university background or age. The second marginally presented problem was that of nonconformity in the workplace:

"I'm a kind young, so I can't be seen as competition to anybody" (POL,7, N, M)

In addition, the character of work (esp. in trading companies) with its strong emphasis on effectiveness creates the ambience of relatively great personal independence in the professional field. The strategies of carrying out externally assigned tasks, sometimes individual setting of goals or individual decisions on working hours, are however embedded within the sphere of externally determined rules:

"I'm independent at work, it is the core of my job description" (POL,6, N, F)

"I may organise my working day independently. I have flexible working hours. All that counts is my effectiveness" (POL,10, N, F)

We may say that there occurs a sort of coexistence between the conception of students' competence and the nature of competence required within workplace contexts. In both cases interpersonal and communicative skills, as well as generic skills, constitute their cores. As well, this congruency relates to subjects' adaptability to differentiated social contexts defined in terms of conformism and/or subordination.

In both academic and workplace contexts respondents benefit from the role of 'hidden curriculum' of academia in acquiring social and communicative competencies. There is also a shift in ascribing a value to instrumental types of competence. Its importance will rise with time, while the lack of such competence may be ascribed by the respondents to the dysfunction of university education (incompleteness of education).

It is possible to say that the significance of these forms of competencies that were acquired / valued during the studies through the curriculum, decreases in the workplace environment. A basic shift within the sense of competence presented by the respondents can be observed. During the process of transition (beginning with the

1st year of the study) the 'level' of self-estimation of subjects' competence as adjusted to institutional context (university, workplace) visibly declines.

In the answers to the questions about co-operation, responsibility and learning it was possible to observe that: Co-operation, in contrast to certain aspects of their activity as students when the need for co-operation was visible, is not an important value in their professional fields. It means:

a. Peer assistance as a sign of adaptation to the social context (common language as a sign of mimicry)

"We work together, sometimes we help each other in difficult tasks. We learn together participating in organised professional training" (POL,6, N, F)

b. Sometimes co-operation in problem solving

"we have to collaborate with others to solve the given problems. This is the big difference in contrast to my studies" (POL,7, N, M)

c. Relationships with consumers

d. No need for co-operation

This new orientation of the respondents (relatively poor level of co-operation no longer expressed as a need but rather as necessity) can be explained by the fact that they are involved in new, highly competitive and unstable (rotation of staff) vocational fields. It is therefore possible to interpret this change as an attempt to reconcile and balance the demands of job description and procedures (necessity to collaborate with clients and especially with co-workers) with the security of position within the given field of employment. In this context it is obvious that the necessity of collaboration is no longer expressed in terms of fun. In other words, this social relation lost its positive meaning of shared emotions seen in the utterances of 1st and 5th year students.

Responsibility, previously related to the social duties of the political scientist, at this stage is generally related to the externally manifested loyalty towards the employer and means above all responsibility for:

a. The shape of the relationship with clients

b. The image of the company:

"I have to be responsible for good relationships with my clients, which builds the good image of my company" (POL,6, N, F)

c. The given tasks (material including)

We can say that certain features of social responsibility of political scientist find their continuation in professional fields, especially the competencies related to the image of political scientist as 'paid demagogue' who takes care of someone's image construction.

Despite the declared laid-back and relaxing ambience and so-called independence in the workplace, the traces of power relations are strongly marked in the utterances of the respondents. Power relations in many cases take the shape of:

a. Strong vertical hierarchy which forces conformist attitudes with regard to horizontal relations

b. Vertical relations: oppression, maintaining atmosphere of insecurity, redundancies

c. Horizontal relations: mistrust due to 'over competence', envy, and attempts to dismiss the agents from the occupied position

"I tried to change something in my workplace, teach them (peers) something. But what I encountered was more or less hidden envy or attempts to marginalise me. It was due to my better university background" (POL,14, N, F)

LEARNING

Learning is practically embedded within the frame of the workplace and related to problems of work:

a. Workplace learning – the role of the social context: training, problem solving, using the experience of the others; knowledge and ability to realise certain types of tasks.

“We learn from each other about new products, about the procedures. Every day I learn something new” (POL,6, N, F)

- b. Development of social competencies (interpersonal); embedded within individual perspectives
 - c. Learning seen as acquiring attitudes within the social context imposing certain conformist or active attitudes, or mistrust
- The importance of social and communicative skills acquired through social learning repeats the pattern noticed in the senior students interviews.

The change of patterns of learning assumes the following dimensions:

- a. The shift from recognising the significance of academic forms of learning as well as life-world learning, to the rising importance of differentiated forms of workplace learning such as: vocational training, problem solving activities.
- b. Rising importance of learning as personal change could be witnessed. Herein, the content of the change (frequently defined by our respondents in terms of ‘money making’) is relevant to further development of social attitudes that were presented in Wp1. These are characterised by cynicism, mistrust, conformism, and activism.
- c. Rising importance of learning activities motivated by institutional (academic or workplace) demands.
- d. Continuously increasing importance of learning abilities. The stress on such abilities as fast, efficient learning of new tasks as well as learning through problem – solving is typical of the group of novices.

KNOWLEDGE

There is no significant difference between the conceptions of professional knowledge in the two groups, although novices perceive professional knowledge less employable.

We have noticed that:

- a. There is a radical discrepancy between the forms of knowledge acquired as a result of the official academic curriculum and those that are useful in the workplace context. It is tempting to conclude: the more specified the acquired body of knowledge, the less useful it is in a workplace. Then, some of the respondents rate the significance of general knowledge resulting from their academic education relatively high. It is still seen in terms of ‘broad horizons that impress the others’, and only one of them indicates the significance of specialised forms of professional knowledge acquired during the studies.
- b. Workplace contexts demand acquiring new forms of specialist knowledge and skills. Although the subjects complain about insufficiency of ‘practical knowledge’ as a result of academic training, some of them value the significance of generic skills (creativity, adaptability, mind openness) as the result of academic education that construe a base for acquiring bodies of knowledge required at the workplace.
- c. There is a discrepancy between descriptive as well factual nature of academic knowledge, and procedural knowledge that is serviceable at the workplace.

We still observe loosely defined relation between students’ conceptions of academic knowledge, professional knowledge and knowledge employable within a workplace context.

As final remarks related to the novices’ experiences of working life, we accentuate the objections and professional satisfaction expressed by the respondents.

Their *objections* are focused above all on:

- a. Excess of duties, limited freedom, everyday ‘ordinary’ rhythm, routine, stress resulting from duties

“My job is full of stress resulting from duties” (POL,6, N, F)

“I don’t like the new rhythm of my life: waking up every morning, going to work, and finishing at four o’clock. (POL,10, N, F)

- b. Low level of interest in work (conviction about a provisional character of the job)
- c. Social stress (poor relationships between co-workers, alienation)

“You enter a new world, you don’t know anybody, everything is strange to you” (POL,7, N, M)

Their professional *satisfaction* is expressed mainly as:

- a. The fact that they have jobs and a relatively stable situation (salary etc.);
 - b. "Numerous contacts with new people, nice atmosphere of work, great peers" (POL,7, N, M) (social relations);
- There are also less frequently represented ideas:
- c. Personal growth: 'Lack of monotony, every day you learn something new" (POL,7, N, M)
 - d. Pleasure
 - e. Security resulting from obeying superiors: "I'm not a person who could be a boss. I feel good, safe when I can obey someone" (POL,11, N, F)

Professional perspectives of our respondents are unclear, uncertain and in many cases not related to the present workplace. Some of the respondents dream about working as political scientists, and this attitude seems to confirm once again their immaturity. Some of them hope for promotion or would like to take up further studies (economics, music)

'First of all I hope to have any job, it is the most important thing. But I would like to work here for not more than two years. Maybe later on, something will change in the job market' (POL,14, N, F)

'In five years I hope to be an independent person and finally start to work as a political scientist" (POL,9, N, F)

'I don't fear losing this job, I rather expect promotion' (POL,7, N, F)

B. Novices' appraisal of their study programme after work-life experience, and comparison with their opinion as seniors

In case of our political science sample, one clear distinction should be made. The field of professional activities of the respondents is *not* the field of political science. This perfect divide may suggest a paradoxical interpretation that the respondents *were* political scientists during their studies, which means that the university field was at the same time a simulated field of their 'professional activity'. This interpretation may be supported by their highly valued time at the university and their present weak identification with the profession, in contrast to a stronger one in the past.

Their esteem of the study programme is carried out from an emotional and rather immature perspective with strong emphasis on social life, carelessness, youthfulness, clubbing, free and relaxing organisation of time (see: discourse of jamboree academism). They are not very critical about the study programme, describing some aspects related to discourse of education as incomplete.

Changes suggested by novices in the curriculum are:

- a. More practical knowledge
- b. Updating the content
- c. Change in teaching techniques
- d. Introduction of optional courses
- e. Dismissing and replacing some of the academic staff

Their criticism is focused on:

- a. Outdated content
- b. Unsuitable teaching techniques
- c. Insufficiency of practical content

However, in contrast to their utterances as fifth year students, they rather do not elaborate on this subject (see: discourse of education as incomplete) treating that time not necessarily as preparation for professional career. [Studying should be fun and pleasure. You should learn something, but not too much. It is a five-year period of rest, the best years of my life. – Quotation from the previous report]. This common attitude may explain the fact that, generally speaking, they do not complain about the incompleteness of their education (their criticism is rather weak). On the contrary, the respondents have a tendency to treat that time as a 'paradise lost'. So, probably their criticism will decline with time as well as their tendency to idealise the university years will deepen proportionally to their low position in the workplace.

However, the competencies acquired during the studies *are* used in the professional fields. As mentioned above these are among others:

a. Social competencies as a result of a hidden curriculum (social “grace”, ease to communicate, self confidence)

‘Thanks to my studies I can have good contacts with our clients: I have ease to communicate with people, I’m open to them and so on’ (POL,14, N, F)

b. General knowledge seen in categories of broad cognitive horizons impressing others

c. Generic skills: creativity, openness, and adaptability:

‘During my studies, I learned a lot of useful things: creativity, openness. I learned how to look for new information, for new contacts with people’ (POL,7, N, M)

Only one person uses the professional (specialist) knowledge:

‘Now I can put into practice what I learned during the period of studies: about EU, structural funds and so on’ (POL,7, N, M)

What must be stressed is generally a very low level of using the competencies acquired during the studies through the official curriculum. Moreover, the respondents had not expected that these competencies *would* be useful at all. Therefore if they complain about something it is not the lack of professional competencies; they are sorry that the wonderful time is over.

C. The relation between HE and work: analytical comparison

The transition from university to the field of profession is marked by:

a. Changes in the organisation of life (new rhythm of everyday life) as the most important feature – see: discourse of jamboree academism

‘It is the end of a carefree time, now you have to go to work every day, no free days during the week any more. Sometimes you are preparing something working the whole night and nobody will pay you for it’ (POL, 9, N, F)

b. Personal change (existential, maturity, responsibility):

‘The most important thing was the confrontation with hard reality, the fact that suddenly you can become a responsible person: looking for a job, paying taxes, being independent etc.’ (POL, 6, N, F)

c. Life style changes, new social environment, new experiences

‘The most important thing was to find your own place, the job you would like, nice people. Then you would like to create something new’ (POL, 8, N, M)

d. Change in the way of thinking (pragmatism or realism instead of idealism)

‘The period of studies was a time of total irresponsibility. But in contrast to the present situation you were not obliged to accept the consequences. Now it’s different’ (POL, 7, N, M)

As we can observe, the main changes are focused on ‘reality’ and everyday rhythm of life the respondents have to confront, in contrast to the previous life in a ‘simulated’ world, fun, and extraordinary ease. However, it is

interesting to notice the second important feature, which is the lack of changes within the conceptions of profession of a political scientist. The idealistic vision of profession conceived before as well as during their studies seems relatively stable and persistent to changes caused by the experience of work. However, being employed far from the utopian sphere of political scientist's destination, they do not find a possibility to confront the vision to the reality. In the light of the clash between the concept of profession and their actual occupation, the conception of profession might be seen in terms of 'predestination to another reality'. In other words, the factual impossibility of confrontation with the 'real' (professional) field of political science protects the 'idealistic' vision of the profession elaborated during their studies. In brief, the heritage of academism seems to be reinforced by the lack and impossibility of professional experience.

The above mentioned changes concerning learning, knowledge, and competencies seem to be resulting from coexistence of the 'utopian' character of political science profession and factual occupation of the respondents, having in most cases nothing in common with the field of political science.

3.2 Psychology

A. Entering work life vs. novices' experiences of work realities

PROFESSIONAL KNOWLEDGE

Professional knowledge is understood as unified professional competence. *The distinction between theoretical and practical knowledge (as Seniors presented it) is not drawn any longer* because theoretical knowledge is updated in practice and there is no significant discrepancy.

Theoretical knowledge is "still there" as a tacit foundation of competence, although it is not mentioned as a conception. It includes basic knowledge about mechanisms of people's behaviour, emotions, personalities, development and social psychology (accordingly to the academic transmission).

This is knowledge on the functioning of human psyche. It is called general psychology or simply human functioning [...]. A psychologist works with other person and it is the basic instrument of his work (PSY, 12, N, F)

Operational theory ('theory in use') – is a conception of knowledge which characterises the psychologist (professional practitioner). Such knowledge is a professional competence, which is a source of activity. Operative knowledge allows - as the base – to plan and execute task put before the employee and gives an ability to cope with different situations (problems) related to tasks and social relations. It is a source of personal wisdom.

I extract certain knowledge from my head sometimes and I'm surprised so much that I know something like that. I mean, that I can accommodate it in reality and there are different things. (PSY, 2, N, M)

When I run some training or a workshop, I must have knowledge on working with group and all. Not only on the topic I teach about, but also on the dynamics of group and how to prepare the workshop properly and make it effective. (PSY, 12, N, F)

LEARNING

Lifelong Learning is understood as natural personal condition (not necessarily related to the profession) and it is the only way of becoming adequately competent. The main problem described by Novices, occurring in their reflection about LL, is tied with their poor social and economical status, which shows limitations in accessing too expensive forms of education in the field of their interest:

Due to my latest financial problems I try to learn myself, alone. But generally I look for different possibilities to permanent learning and additional training to gain some new skills (PSY, 12,N, F)

What are the possibilities to achieve the competence in therapy? I deeply thought about it exactly lately, and I have come to a conclusion that I could go to school of psychotherapy, but the price shocked me. They want about 20 thousand zlotys for three-year training, in Warsaw (PSY, 11, N, F)

Learning from the others occurs as a cheap but significant strategy of learning because the process is located at the workplace, highly appreciated by Novices. Its social nature brings the social knowledge (experience) from the basis of practising with and on other people (co-workers and their service recipients), and helps them to adapt themselves in the workplace. This way Novices train and develop their interpersonal competencies and maturity. Learning from the books lags behind in relation to this source of learning:

(...) During my work, I could use the opinion of other teachers partially and get advice from them, what one should do, what is good or what is not and so on. So they led me to my excellence this way (PSY, 6, N, F)

Learning by tracing – following academic teachers’ steps, which is also a reproduction (and distribution) of gained academic knowledge. It occurs in the utterances of a doctoral student employed at the university:

I'm basing on what I have achieved in five years of my studies only. I try to continue that what I liked and reject of course what I didn't like.(PSY, 10, N, F)

PROFESSIONAL COMPETENCE

The focus is on cohesion between competence required at the workplace (the good employee) and the professional competence in general, probably because of the fact that the majority of probed work contexts is connected with psychology.

Self-activity – involvement remained high, as in case of Seniors, as they had learned that it is necessary to do more than a set program:

a/ features of activity linked to the duties at work: reliability (appropriate doing one's duties, leading to the best result)

it's vital to do your best in what you do (PSY, 12, N, F)

b/ activity exceeding imposed duties, wider social action (e. g. being a volunteer)

(...) Sometimes we work for free as a volunteers but sometimes we really get some money. These things are mainly odd jobs, from project to project. Sometimes we've got a lot of work, later, in the following months, hardly any. What happened to me was working with my supervisor, who is dealing with dyslexia, in which I specialise too – it occurs to me to do something with her or for her. As an example: I used to diagnose children in a British school because in Warsaw it was difficult to find a psychologist specialising in dyslexia, who would know English as well. With the professor we worked out the set of texts possible to use in cases like that (PSY, 12,N, F).

- Independence

(...) Despite the fact that I can count on consultation with other workers, I am the only person responsible for what I do. So there is no typical group work – rather everyone is unaided and has to be independent in it. I have to decide what I do and do it myself. (PSY, 7, N, F)

- self-presentation

(...) to try to be the most competent and show it skilfully [...] there's an ability to give a really good impression to show that what I'm doing, I'm doing well (PSY, 12, N, F)

- discipline: internal (self-discipline) along with appropriate work organisation, but also external: punctuality, subordination to the group and organisational norms, etc.

(...)Yeah, self-discipline... because that's a work on your own, nobody tells at what time you should prepare the papers to a course or training so you have to organise the time by yourself – it's crucial to find a moment for everything necessary, while it's difficult to mind yourself. (PSY, 12, N, F)

You have to do your duties, you have to be on time, and you have to be the person able to solve any situations or to co-operate (...). Where do I know it from? That's a kind of knowledge maybe from parents, maybe from the system of work itself – that the work means responsibility etc. and you are obliged to do it. For sure, the director partly pays attention to the fact that we are punctual, not late for work etc. and surely expects us to deliver it all. (PSY, 6, N, F)

- being communicative [as in case of Seniors]: the ability to contact with people, making relationships etc. (everybody talks about it)

- using knowledge (of the expert type – confirmed by a diploma, as in case of Seniors), displayed in:

a/ *helping people (all)*

b/ *the open cognitive attitude (as in case of Seniors; intelligence, disbelief in infallibility, a doubt in their own diagnoses, etc.)*

All what is connected with comprehension, tolerance. Q: Why quite so? A: Why? Because you can't help people, you can't do much for them if you do not accept them the way they are. (PSY, 4, N, F)

- manipulating people:

In this work, first of all I must maintain good contact with people both individually and among the group. It should mean inculcating the employees in some ideas naturally, to make them adopt it as theirs (...). So in fact – a kind of cheating – well, not really cheating but 'tricks' letting me not precisely manipulate the group, but rather lead it in desirable way. (PSY, 3, N, M)

- working against the stereotype (as in case of Seniors: not a puppet, not God, etc.) and working according to the stereotype (this is also a factor of acquiring professional identity which has not occurred among Freshmen or Seniors):

(...) There are a lot of stereotypes concerning psychologists (...) I suppose (what my experience so far says) that when I'll be working at school, I shall be expected to be the final oracle and to wrestle not only with problems affecting my job, but also with the teachers who require miracles from me. (PSY, 12, N, F)

PROFESSIONAL ROLE

Differently from Seniors, Novices do not see their professional role in a brightly prominent opposition: clinician – non-clinician (O&M - *Organisation and Management psychology*). Novices characterise the professional role descriptively, by priorities – without connecting it to the status of the clinician, helping others is the main feature.

Generally, a psychologist as a psychologist is necessary for helping people and as I said a consultant is needed to improve the organisation activity – all systems of that kind are created for people, to make them satisfied. (PSY, 8, N, F)

Another case of this type, though not identical in approach, is associating a clinician with helping and non-clinician with aiding (assisting). In one of the comments the clinician is being perceived as a 'different'

psychologist, descending from a special selection made up during the studies, busy with more responsible work (in which unintentional harming is conceivable) and for that reason involving more clinical practice during the studies. The questioned often combine the professional role with action of an educational character. The psychologist's professional role is spreading on *every* possible job taken up by a psychologist. The interviews say that you are a psychologist at any time, even not working in your profession. Therefore the professional preparation in this range makes up a kind of internal instruction functioning as a lasting element of the questioned' identity (majority). It seems to be confirmed e. g. in often-articulated susceptibility to work as volunteers:

(...) if I sometimes had a temporal or financial opportunity to do something not necessarily for money. I'd like things to be like that. (PSY, 12, N, F).

In this attitude 'being a psychologist' exceeds the confines of a workplace so that the profession 'fills up the whole life' of an individual. The internal character of this professionalism seems to bring psychologists closer to doctors, clerics, etc. That is explaining their somehow measure missionary attitude, disclosing in numerous statements.

THE PROFESSION

1. Status, social position – high, for the sake of people's ignorance; simultaneously psychologist possesses knowledge (about these people; it means they reign):

Does being a psychologist give you any special position at your workplace? A: Definitely it does, I feel it and I know it's like that. Because, firstly, people do not know exactly what the psychology is about, secondly, I simply do know more about some issues and I've got the knowledge which others do not possess. (PSY, 3, N, M)

2. Professional hierarchy – the experience of work has "evoked" in Novices a notion of profession's taxonomy and they try to find themselves somewhere on this ladder:

Q: What in your opinion is the status of a psychologist in the society, and yours as well, what do you feel about it? A: I think it's pretty high. On the one hand there is a psychologist of a very high status, who usually is a university professor, expressing her or his opinion on the radio or on TV; on the other hand there is a common school psychologist - educator, who is perceived a little bit worse. What about my status as a psychologist? I suppose it's ok, above the average. I don't know in what way people see me but the fact that I do what I do, gives me very much. It all makes up a favourable image. (PSY, 4, N, F)

MORAL RESPONSIBILITY AND SOCIETAL OBLIGATIONS

The obligations include those of helping people and building social trust.

- The obligations to help people is conceived similarly to that expressed by Seniors, but it includes a new element - to anticipate social threats and needs. Psychologists should take up preventive and educational actions, actively look for persons who might need their assistance:

Psychologists must search for people who need help. Those who won't call for assistance themselves, those without financial resources, or possibilities... In a way, it is a kind of educational work. I was running workshops for girls at risk of home violence, and it was a preventive work, it was meant to prevent them from copying those patterns in their adult lives. In this kind of work you have first to sit and think who might need your assistance and would not call for it. Whom I might try to find and offer something (PSY, 12, N, F)

This conception is coupled with a critique of not meeting the obligation:

I wonder if psychologists could contribute to the improvement of teaching in Polish schools. Perhaps, perhaps they are not active enough... Perhaps it could help (ha ha). Something like that comes to my mind when I am thinking of social obligations (PSY, 2, N, M)

- The obligation to build social trust can be illustrated with the following quotation:

When it comes to running courses, or workshops, people have more trust in trainers who are psychologists, I think, because they trust in her or his knowledge and competence – I think so, but it might be just an impression. I don't know, it is hard to say if this is a particular position, or something... (PSY, 12, N, F)

- The responsibility is understood in terms of:
Responsibility before the patient / client, with the stress on the “*primo non nocere*” rule (like in Seniors).
An example of a typical quotation could be the following:

You just have to be very careful in what you do, what you say, simply not to make harm to people (PSY, 12, N, F)

Some respondents link the issue of responsibility to the general character of psychological knowledge that describes rules and regularities rather than concrete cases. It implies the need of careful and – in a way – modest counselling:

Sometimes, some people may take what psychologists say very seriously, [they may] apply it to themselves directly, and it takes responsibility not to say rubbish in such situations (PSY, 2, N, M)

- Responsibility before the profession.

The fact that I have this stamp of a psychologist means that I simply have to be more responsible (PSY, 12, N, F)

MORAL DILEMMAS

- Being charged with power. To make decisions that change people's fate' (ultimate consequences of relative diagnoses and opinions etc.) – the burden of power [like in Seniors]:

I could never make decisions on things like whether the child should stay with his father or mother. What they tell you is always fragments of what it is, they are gaming, like I spend more time with him, no it is me, I love him more, she's a bitch, she drinks, and so on... It's a nightmare to me. I wouldn't be able to sleep of fear that I make wrong decisions. (PSY,11, N, F)

- To judge people (the opinion-making character of the psychologist's speak) and feeling the borders of interference, e.g.:

A witch – she doesn't introduce herself as a psychologist in the office, it would spoil the relations with other people, and they would 'close' then. (PSY,11, N, F)

- Loyalty to the employer vs. following the common practices of the employees. This dilemma did not occur in Seniors. It seems to be specific to the context of particular workplace (here: trade organisation):

I have had a moral dilemma that concerns me personally. We have this subsistence money we use when we travel – for instance when we take a hotel. We can charge the company for it, unless the hotel is providing the meals. They usually do, but it has become common, it is part of the organisational culture, that people claim these expenses anyway. It is very usual, and I have this dilemma what I should do. I am aware that being part of the team I can't start acting otherwise just like that, [...] I will probably solve [this dilemma] in a way that is against my feelings, that is I will follow the group. If I started acting otherwise I would put the others at risk. (PSY, 3, N, M)

WORKPLACE AS THE CONTEXT OF SOCIALISATION (RULES AND POWER RELATIONS)

There are many differences in approaches to the Novices in their workplaces. They play important role of a context for Journeymen's transition. Against them, Novices make various socialisation strategies active. We can say that the employers' approaches to the Novices are based on:

- Lack of care about a new worker due to his/her low status in a firm [*he does not produce the income.* (PSY,8,N,F)]. Its consequence is a consciousness of 'being a pupil' that is based on the likelihood of losing the job (easy hire – easy fire policy).

- Policy of 'self-assigned tasks':
At the beginning of this job it was mostly my own trials to sell everything that I have imagined (...) I did everything to be perceived as a professional worker. There is the expectation to do exactly what was offered before. (PSY, 2, N, M).

- Lack of system of adaptation for newly employed people. It evokes the feeling of aloneness:
I am able to rely only on myself (PSY, 12, N, F)]

and disorientation (estimation with no criteria):

... and suddenly, I felt I was estimated but I did not know what criteria were taken into consideration (...); mostly I was afraid that I am not in accordance to somebody's expectations (PSY, 12, N, F);

Commands with no hints on how to get things done and, even, with no possibility to be commented:

In a private firm:

There is no feeling of management, no support of the Board. There is only feeling that all the tasks are set, you are left with them alone and you have to report everything.[...] Everyone has totally different range of duties here that... Everyone is just independent for him or herself. Everyone is such a separated little firm.(PSY, 10, N, F)

In the academic milieu (lack of adaptation system is most clearly perceived here):

... There is no such practice that we meet each other in some place and talk about the problems that are familiar for all of us. There is only contact with professors, when I meet them on a corridor, nothing else. No room, for example staff, teachers' room where it is possible to discuss such issues. So, I am left here for myself (PSY, 10, N, F).

- Tutoring (adaptation procedure in order to build worker's identification with the firm according to the owner's expectation), e.g.: monitoring and estimation by the tutor:

I got a tutor and it was said that I have a right to learn everything during first several weeks. There was not an exam if I know or I am able to do something, but when they saw that I have the expected abilities, they threw me into deep water. (PSY, 7, N, F).

In bigger firms, private or public institutions, etc., such adaptation of Novices is systematically organised and becomes a consciously developed process of socialisation that is admired by the Novices:

People who were responsible for the programme of introducing me into the firm were absolutely great (...). There is some expectation here that refers to the feeling of being a part of this firm. This means that due to the programme of adaptation, I feel already a part of this firm and I think that all the people who work here feel the same. They [tutors] are also interested in private problems of people, not directly connected to their work.(PSY, 3, N, M)

- Unexpected change of rules of work in transition from volunteer to employed worker (after graduation from the university), the critical moment in the experience of transition:

I remember that my biggest problem was the lack of certainty of what to do. It was, additionally, such a place in which I worked earlier as a volunteer and I had good relationships with all the people there. Suddenly, it appeared that all my relationships are formal, so 'dry', and full of personal distance. And it was no longer simply said to me that I do something wrong or good. There was a great admiration of my work when I worked for free. Everything that I did was fantastic. And suddenly I realised that I am estimated and I do not know the criteria.... This is the most significant, the strongest impression, experience of my initial work.(PSY, 12, N, F).

The workplace for Novices becomes also the area of attempting, trials of their own socialisation strategies that are expressed by the emotional engagement and feeling of identification with the profession and the firm. This is perceived in different layers of the context in which the Novices act:

layer: The firm as "us"

It is not easy, it has to take its time (...) to start existing as a part of the firm. There is a procedure of adaptation that is rather complex. But I do not participate in the social events, which are organised mostly in the weekends. There is almost a 600 km distance from my place to the place of my firm and weekends are really saint for me – as the person who works for whole week outside home. So, I have decided not to participate. But my direct co-workers, department of human resources and staff counselling in which I work, participate systematically. I feel a part of this department, I am composed in it in a nice way, they all are wonderful people, I enjoy working there. (PSY, 3, N, M).

layer: The firm as “me”

The girls whom I have met have worked here for several years and I have the impression that they have more problems than I in saying what they really think to our boss.(...) My approach is more partner. Besides, I like this firm very much, I enjoy working here There are wonderful people, from whom the majority is made by the group of people hired by me. ‘Hired by me’ means that I interviewed them. It would be a great pity if I were dismissed from this firm. And I am always emotionally connected to the places in which I act. Do you know? I treat this firm a little bit like my own business and I care about its best interest. Yes, of course, I realise that I could do something different in the future, something better, closer to my profession, although I am not looking for it, yet (ha, ha).(…) I am perceived as a woman who is more certain about herself, more strict, and I think I am perceived here as very influential person, who influences the boss or the life of our firm, as well. (PSY, 4, N, F).

WORKPLACE AS THE CONTEXT OF NOVICES’ OWN ACTIVITY AND DEVELOPMENT OF PROFESSIONAL IDENTIFICATION

The interviewees indicate A significant role of space in professional performance in their workplaces. It seems to be directly connected to professional identification (*I work arranging the work-space in this way... It is mine..*). This is what Novices talk about:

- making their work meaningful and reasonable through re-arrangement of space of work (defining professional role by special ‘geography’ in the social context), e.g.:

We share room with a lady counsellor, it is a little bit uncomfortable...(…). Well, the first change, surely, was... (...) There is a desk for both of us, a table with several chairs around. So, when somebody comes the counsellor talks to him or her sitting there. And this is simply bad. I know, having learnt just here, familiar with this exactly through my psychological knowledge, that such a practice makes obstacles bigger and really does not help. That is why my first step was to move the chairs and place them - while I am working – in the opposite sides, and this table I always move close to the window. Well, this is the way I talk to my pupils. In such a way I work. I do this for a while, for limited time when I work in this room. When the lady counsellor comes, she re-moves the chairs and the table because she prefers them like this. So, that is why this is... Well, but... she never had the doubts referring to my behaviour because it is mine and I may work like this (PSY, 6, N, F).

B. Novices' appraisal of their study programme after work life experience and comparison with their opinions as seniors.

Relevance/impact

The assessment of knowledge gained during the studies stresses the importance of “operationalised theory”. This value results from the practical contextualisation of theoretical knowledge. Novices tend to assign a bigger value to academic knowledge, and this tendency relates to its merits rather than to some sentimental memories. The postulate of “more practice” is still there, but it does not mean that anything should be deleted from the study programme.

It is important that this knowledge is broadened, that we gain new experience – for it is a matter of experience rather than declarative knowledge (PSY, 12, N, F)

Maturity means here “understanding theory from a practical point of view” (PSY, 10, N, F). Anything gained during the studies can be useful, including the areas that had been resisted before:

I think that most of the things I learnt during those 5 years somehow bent me, or shaped me. And now I am making use of it! [...] A good psychologist should be an improviser to be able to help himself. Draw

something from that personal collection of information about the human, use it, say something... (PSY, 2, N, M)

What I would delete, from the contents of studies? Even the things I had never thought to be useful, like developmental psychology, I am using in my work now and it is great. You never know what may work, so I would delete nothing (PSY, 3, N, M)

Importance of practical knowledge (like in Seniors). The respondents present it as more important than theoretical knowledge because of its possibility to accumulate personal experience, which is significant in constructing their identity. Novices try to identify themselves with particular domains of applied knowledge and they stress the lack of grounds for such identification in their studies. Therefore they appreciate practical experience and they return to the motif of the lack of practice in the programme of studies:

I still believe the studies were fantastic, but they did not prepare for practical work. Did not prepare to this confrontation with reality. We gained general knowledge, which is good because in a way we can search, but we miss practical knowledge. We are not specialists in any domain. We had classes, some practices, seminars, etc., but it is not enough. It gave us no practical knowledge. [...] If we want to specialise, we have to take extra courses and continue, continue, continue.... (PSY, 12, N, F)

Practical knowledge is gained outside the formal curriculum, through personal initiative and experience, often without any role played by the university.

Concrete things [...] I learnt outside school. Some extra courses, or just working. The university, in turn, gave me some grounds for this. (PSY, 12, N, F)

Usefulness of knowledge

Psychological knowledge is applicable in the context of everyday-life situations:

It gives you some general knowledge on the human psyche. It can work anywhere. Knowing some psychological tricks you can, for instance, evade paying a traffic ticket. (PSY, 1, N, M)

Professional knowledge gained during the studies is also appreciated as giving advantage over that of 'trainers' lacking academic experience. Academic experience also means greater adaptability and flexibility in learning:

I appreciate the adaptability. [...] The school taught me that, the ability to search for information I need. It is so easy. I feel no barriers of this kind at all now. In fact I can find any information I need. Second, the very knowledge of the human, on group or individual functioning, on cognitive aspects of learning – this is invaluable knowledge and I really appreciate it. It gives me a colossal advantage over other trainers who did not get such knowledge in their studies. Things that I take for granted and use everyday are like discoveries for them when I tell them, and it is nice, the feeling that this knowledge is ok. (PSY, 3, N, M)

The evaluation of the specialist training during the studies by novices actually surprises in terms of the "escape from the clinic" expressed by Senior students. On the other hand, it explains some aspects of the discrepancy between clinical and non-clinical orientations in the programme.

I remember now. There was something in the last-year interview, that those are true psychologists, the ones who help. Those after OiZ (*Organisation and Management psychology*) – we are taught how to manipulate something in management, but clinical and educational specialisation, well, as far as I know, they are real specialists there. We have great specialists in these two domains, not like in OiZ, there they really teach. I think those are real psychologists, those who know how to help people when they have problems (...) I think that except of two persons we have weak specialists in OiZ. What means is the paper you get that you have graduated from organisation and management psychology, and there is an abyss between the specialists in OiZ and those in clinical and educational psychology. (PSY, 1, N, M)

The appreciation of the clinical/educational psychology makes it almost strange that the tendency to "escape from the clinic" in senior students a year ago was at all expressed. Some light can be shed on this phenomenon by a graduate from the clinical line describing her own (in)competence in the field:

A good psychologist should be good not only in therapy but also in diagnosing. [...] They taught me how to diagnose, super, but what to do about it – nothing. I think this has changed my attitude, it is very negative now (PSY, 11, N, F)

C. The relation between HE and work: analytical comparison

THE EXPERIENCE OF TRANSITION

- No critical moment – continuity of experience
I have had nothing like that. I worked while being a student, so I did not notice any changes. The only change is that I do not have to learn now. (PSY, 1, N, M)
- Transition as a stage in a previously begun process of coping with reality:
I know this has only been possible due to my endurance. [...] Many people graduate from universities now. They are young, apt, intelligent persons with a big scope of knowledge, and still they don't find employment. [...] It is a kind of selection, sorry to say so, but if you really want to find a job you have to go out of your way and you either get it in a year time, as I did, or you don't. It really takes endurance and engagement, you really have to know that you want it. It was one of the elements. I don't know what else, perhaps that I was gaining some experience all the time. I worked in several places, before the studies and during the studies. Endurance, some engagement in looking for the job, and some knowledge – this is it. (PSY, 3, N, M)
- Importance of generic skills (gained mainly in the studies):
I think that openness and flexibility in using the knowledge one has gained in new situations are most important. I don't know, what you need? A lot of courage, a lot of self-confidence, trust in what you know. (PSY, 12, N, F)

MOTIVATION AND EXPECTATIONS ABOUT PROSPECTIVE WORK

Novices like Seniors, present uncertainty as to their own possibilities in the work market. They are afraid about the future; they dream of stabilisation, permanent and full-time employment:

[My work] does not fulfil my expectations, I have not full time employment, yet. Whether I have it -- yes, if I have a possibility to learn more, make a Ph.D., okay, if I am able to influence my prospects, not being drawn wherever, yes... (PSY, 10, N, F).

Well, I do now what I always wanted to do. I wish I do this longer. Besides, I would also like just to have some permanent job. The main bad side of what I currently do is that everything is temporal, performed from time to time. So, it does not give me some feeling of stabilisation. (PSY, 12, N, F).

- The interviewees who are employed full time formulate their expectations more precisely and see their future as more clear than people who have not such employment. There could also be influence of organisational cultures functioning in their workplaces [e.g.: exact and clear career systems]:
I will work in a firm that has a big human resources department. I will be deputy manager or deputy director, or someone else but always close to such a hierarchy. In order to obtain this I need to gain a diploma of post-graduate studies referring to the legislation of employment. (PSY, 8, N, F)

COMMENTS

- Psychologists highly appreciate their profession and treat the work as a big value, 'the essence of life':

Good job, and such a job that lets us be self-realised, and always be with the people, this is the essence of life, truly speaking (PSY, 3, N, M).

Work is also understood as a civic value and duty that compose Novices' ego:

To work means feeling that you are the individual who... there is something, it is... – such a social satisfaction, it is something like this. The individual who has his/her own place and who is not useless. (PSY, 2, N, M).

- Novices speak of operational knowledge as often as Seniors did. It is the most common conception of knowledge. Psychologists appreciate theories but they treat them as a basis of their own experience that is most significant for them. Experience becomes a key-category in their thinking (compare answers to the questions: where do you know it from?). Novices hold up the importance of theoretical knowledge, but the accent is put on its operative value in finding practical solutions (*knowing in order to...*) Work activates and updates acquired knowledge and inspires Novices to independent research, but this is in terms of increase in experience and practical knowledge rather than sound theoretical one.
- The social context of learning and working (like for Freshmen and Seniors) is very meaningful for Novices. There is no possibility to find a single conception without such a context. One could say that all the thoughts of Novices are rooted in social issues.
- The economic status of Novices still has been limiting their access to postgraduate forms of education (payable) in the field of their interest (i.e. psychotherapy courses).
- The visions of profession are created differently than in Seniors and Freshmen– without opposition to the 'pure profession' of clinical psychologist. Clinical psychologists are not such a significant point of reference for Novices as they were for Seniors and Freshmen. The position of interviewees was described in their relationships to other professional groups rather than towards various orientations in a frame of the own profession.
- The experience of work evokes in Novices a 'professional taxonomy' and makes them find themselves somewhere on this ladder (on a high level in relation to laymen and on a low level among professional psychologists).

3.3 ICT NOVICES

A. Entering work life: Novices' experiences of work

Knowledge

Neither novices nor senior students recognise the division between theoretical and practical knowledge. From their point of view, there is no 'theoretical' knowledge as such, isolated from practice, as it was understood by freshmen.

Practical knowledge is necessary; so is theoretical knowledge (...) since it can be put into practice (...) Why practical knowledge? The underlying reason is that (...) it can be quickly used. It is possible to put theoretical knowledge (...) into practice, (...) If I were to draw conclusions, some fifty per cent would be for practical knowledge, twenty-five per cent for theoretical knowledge and twenty-five per cent for discovering new things. (ICT,N,6,M)

According to the novices, each form of knowledge can be put into practice, and they attach great importance to the legitimacy of its practicability, its usefulness (the ethos of utilitarianism).

The pragmatic criterion of knowledge division becomes prominent, the criterion of knowledge evaluation is of utilitarian nature. The division of knowledge into:

- useful, indispensable, necessary (to apply at the present moment as well as in the future)
- not used at present (or already redundant, out of date, or of potential use in the future).

It is thus visible that this division overlaps with the following criterion of knowledge topicality:

- current, up-to-date knowledge,
- the directions of changes, developmental trends in a given domain,
- out-of-date knowledge

and its durability:

- invariably practicable, basic, crystallised knowledge
- dynamic, fluid, flexible knowledge

Information technology is such a domain that even if one possesses certain basic knowledge, it is of little use after a couple of years. It is developing too fast, there are constant changes so one cannot maintain one's knowledge at the same level. One has to expand this knowledge all the time. And there is certain basic knowledge imparted to us in the course of our studies. Most importantly, how to find and make use of such knowledge, how to reach solutions to such problems, and not specific solutions, but hidden solutions to specific problems and to a specific stage. We are working in an entirely new environment now, (...) and this forces me to track down new bits of knowledge, (...) but I am already familiar with the basics, with how to make use of similar environments, how to inquire, how to arrive at such solutions. (ICT,N,9,M)

The division of knowledge in terms of the content:

- knowledge of information technology (tools that they use, technologies)
knowledge of a programming language, a decent technique and a tool which the person must be able to use (ICT,N,5,M)
- specialist knowledge of the domain connected with the project one is doing, e.g. an educational, financial or accountancy scheme
Information technology is such a domain that one needs to learn something about what one is expected to improve in the first place, some financial system, how to write a financial or accountancy system or, for example, programmes for printing certificates, for conducting a general research process, when one works for a firm which writes educational programming, one simply needs to learn about this domain. (ICT,N,3,M)

There is a necessity to specialise in a specific area of information technology imposed by the character of the workplace. The notion of knowledge of information technology is so broad that it encompasses virtually all spheres of human activity (this issue was already underscored by the novices when they were still students). Specialist knowledge of information technology is set within the context of specific applications. As for knowledge assessment, computer engineers definitely value the ability to operate knowledge above the content, know how is more important than know what. Operational, procedural knowledge has greater significance than declarative knowledge.

Q: And which form of knowledge do you find particularly meaningful to a computer engineer?

A: To a computer engineer (...) it is too broad a notion. (...) What is valuable here is not knowledge itself but thinking and the rate of learning, the rate of adapting to a working environment and in the sense of an environment, that is the tools which s/he uses to develop this software. It keeps changing quite fast and this knowledge is subject to constant changes (...) because of the speed of these changes (...) thinking is valued above knowledge and that's all. This is even more creative, it stimulates the development and introduces innovations. If one keeps thinking, one will come up with something in the end. (ICT,N,3,M)

The novices' statements are completely devoid of the issue of knowledge concerning hardware which was earlier highlighted by the students.

Learning

The novices still perceive learning as a continuous process (Life Long Learning), related to the dynamic technological advances. Development, the acquisition of new skills and knowledge becomes the criterion for selecting projects which they undertake (even if they are given a free choice).

Q: And when you think of work and I mention the term 'learning', what comes to your head?

A: I associate it with some self-education, some higher level of (...) needs, I can take some satisfaction from my job – I do not only what I can do, but I also learn new things. I am fully aware that this domain is developing quite fast (...) year in, year out (...) I've been working for one year only, and in five or ten years' time I will have to learn too. That's why I try to think not only of cash but also of something which opens up the possibility for development. (ICT,N,3,M)

The strategies for learning:

Problem Based Learning, that is learning viewed as solving problems which they encounter in their workplace, discovering or inventing new solutions. They search for information in an active way in order to be able to cope with the problem. If individual learning (a single-handed attempt at finding a solution in various resources, in the internet) does not produce good results, they make an immediate attempt at learning in real, face-to-face groups (from the other group members) – colleagues, friends from university or virtual groups – in discussion groups, from other computer engineers who have already confronted a given problem (these are also the next stages of the learning process).

Q: What do you do when you are charged with a task you are unable to tackle?

A: I go to www.google.pl and look for information in discussion groups. It is a mine of knowledge, there is no (...) single programme someone else wouldn't have encountered. (...) first I ask people from my own environment if they know something about it. Then (...) I don't usually refer to books. (...) Only to the internet. That's just (...) looking through discussion groups. There are lots of groups, a few dozen thousands, each of them deals with a different topic, I'm sure I will find someone who has already encountered a given problem and who will be eager to help. Some of them (...) have already helped and one only needs to read through the archive where they described the case. (ICT,N,11,M)

(...) there is a constant need for self-education, looking through various resources, mainly in the internet because it is the best way of acquiring knowledge nowadays and it helps me to keep abreast of everything. (ICT,N,9,M)

Talking about learning, the novices point to learning by analogy to what they have already acquired, that is relying on the knowledge they have gained so far and increasing it.

The thing is that at a certain moment, if you are already acquainted with a range of issues, you examine the next issues by analogy to the previous ones and you simply know what details you must pay close attention to and in this way you do it quickly. There was such a period during my studies when I simply had to learn new programming languages very quickly and I had only a couple of days for one language. Perhaps there is no such a frantic pace here, but on the one hand one must be selective about certain things, and on the other hand one must know what one needs to explore to be able to cope with it. (ICT,N,10,M)

Time is without doubt a central motif here – preference is given to the most effective learning strategies, that is those designed to solve a problem at a sufficiently high level in the shortest period of time possible.

Q: What do you do when you are charged with a task you are unable to tackle? Do you try to accomplish it on your own or do you ask for help?

A: I'd rather seek help from someone who is better at this domain than I am, but it's not that I surrender at once (...) First (...) I go to an internet browser, I search for something someone has written about it, and if I can't find it in half an hour or in one hour, it's a waste of time so I simply ask someone or some discussion group and I start dealing with something else. That's the way you do it nowadays, I can deal with something, try to solve it for five hours but it won't be solved. (ICT,N,3,M)

It is standard practice for novices and senior students alike to make use of ready solutions (ready modules) invented by other computer engineers.

(...) in some cases (...) I know I would have written it in a better way, but it is simply pointless writing the same thing one more time, it's a waste of time and effort. I prefer thinking of a new solution, of using what someone else has done and adapting it for myself to writing something which has already been written and invented. (...) I have made use of someone else's achievements (...) at least several times. (...) I could save more time when I simply adopted the solutions which had been put forward by someone else instead of finding my own ones (...). (ICT,N,9,M)

Competence

The novices point to the following types of the requisite competence for the job of a computer engineer (expected/required by an employer):

- having basic information technology knowledge (technical) and specialist information technology knowledge,

a competent computer engineer should demonstrate general competence and should specialise in something (...), for example in a given operating system; one needs to have the ability to operate it, control it, make connections between different systems, download everything (...) it is generally required to be able to get one's bearings, to strike up a conversation with other computer engineers. And one needs to specialise because there are too many branches of information technology. (...) Any good computer engineer must have general knowledge and specialise in one or two branches because it is impossible to be an expert at everything. (ITC,N,12,M)

- intellectual competence – logical, analytical thinking

Q: Which form of knowledge do you find particularly meaningful to a computer engineer?

A: (...) technical knowledge and (...) the ability to (...) hit on some great idea, how to solve something (...). And (...) being able to respond in a quick-witted way (...). Being able to predict (...) what might happen, how someone might try to use this system or (...) whether any problems might arise from the current situation. (...) And I haven't mentioned the ability (...) to learn, also individually, yet. (ICT,N,11,M)

- the ability to learn – self-education, constant development, the ability to find information

(...) first and foremost, I have to acquire knowledge and continue with the constant and dynamic self-development. I have to be (...) open, (...) dynamic, (...) have a flexible approach to any changes or to any new piece of information (...), I can't wait until someone gives me a book, I must work on it myself. (ICT,N,1,F)

First and foremost (...) one needs to learn and educate on one's own. (ICT,N,6,M)

- creative thinking skills, ingenuity – discovering new solutions, being innovative, a creative approach to problem solving

in my opinion, searching for new things is equally important. (...) This insight is really necessary for the job (...), otherwise (...) one simply becomes technologically backward. (ICT,N,6,M)

- social skills – being communicative, open, outgoing, able to work in a group. In this profession co-operation is often indispensable if one wants to fulfil a given task (projects are usually too demanding to be carried out by a single person), everyone has their own function in a project group.

Co-operation (...), or some communication; it means that two or more people can communicate as far as their job is concerned and they can do something more quickly than when everyone is working on their own and co-operation is the key to success here. Personally, I find communication the most important thing when co-operating with others. (ICT,N,3,M)

I have regained my faith (...) in social solidarity, which results from our group work. I believe that we can accomplish great tasks together. (...) this job has taught all of us that group work is more fruitful than single-handed one. In our case everyone is doing one's best so the ultimate result is good. (...) at the beginning everyone was somewhat sceptical about someone else's work and sometimes we had to put a blind trust in one another, but gradually we managed to work out a certain model and we simply know that if someone notices they won't cope with a given problem, they will ask the rest of us for help. (ICT,N,10,M)

- general professional skills, connected with meeting deadlines, performing tasks as precisely as possible, that is being prepared to work flexible hours, being meticulous, punctuality, reliability, honesty, conscientiousness, diligence, flexibility

Q: Which form of knowledge do you find particularly meaningful to a computer engineer?

A: (...) The ability to focus, acting in a quick way, being able to handle a serious problem. The ability to cooperate with others, especially when the projects are large a lot of people work on them, not only one person, the ability to establish effective communication. (ICT,N,13,M)

What kind of competence? Conscientiousness (...) above all else. Being able to complete tasks on time and, if necessary, to introduce (...) rapid changes, sudden modifications; I must be ready to solve the problem really quickly. (ICT,N,9,M)

- independence

A crucial component is the ability to organise one's work, to fulfil one's part of a project, the ability to reach decisions within the limits of one's competence (the ultimate result is important, and not the process of carrying out the project as such).

(...) I take decisions myself instead of going to other people for help. It makes me think of the decision making process. (ICT,N,5,M)

Generally speaking, the novices think that they meet the above-mentioned criteria, they consider themselves professionals, competent computer engineers.

Interestingly, their statements are devoid of the notion of the 'knack' for dealing with information technology, a natural innate talent, an aptitude for solving technical problems, which was mentioned by the freshmen.

Social Role of Professionals

Both novices and senior students feel indispensable since information technology continues to influence all spheres of contemporary life. Computer engineers perform the role of facilitators, furthering particular branches of economy, improving occupational activities and making leisure time more pleasurable.

A computer engineer is an integral element of any society. (ICT,N,9,M)

(...) to make life easier. That's the main aim of all this new technology. (...) I think it is designed to make life easier. One can call an ambulance from all over the world (...). One can communicate with someone from a remote place by means of a mobile phone or even online, and it takes only a couple of seconds. Making life more enjoyable and helping us, that's the aim. (ICT,N,3,M)

The job itself, however, no longer possesses unique qualities. This attitude is revealed in the novices' statements. 'They have lost their professional vocation' – they no longer feel that they have a special mission to fulfil, like doctors, they no longer regard themselves as an exceptional group with particularly valuable qualities (market conditions seem to be responsible for this; the job market is saturated with computer engineers, and the omnipresence of information technology in all spheres has diminished its value).

In the broad sense, this job is like any other one. Very demanding, more and more people are in contact with the job, it is virtually indispensable, every owner of a computer is in contact with information technology. (ICT,N,9,M)

I think that a computer engineer proves to be helpful in any field. Mobile phones have got some programmes inside, some microwave ovens, washing machines, computers, buses, lifts, everything relies on computers to a great extent. The computers need software and computer engineers become more and more useful and they are building the whole economy. Soon all types of work will be strictly connected with computers. Eventually information technology itself. (...) The society needs computer engineers, but (...) you don't get in touch with the computer engineer himself, only with what s/he does. You go to any website, and you pay more attention to what it looks like, not to how many people worked on it or how much time it

took them. To me a computer engineer is a colourless person in the society. S/he goes to some place, does various things. S/he comes and works more like a craftsman than a doctor who assumes responsibility for his/her patients' lives. (ICT,N,15,M)

Social duties

- making certain activities easier, e.g. for the handicapped

Should my programmes be aids to people? Yes, they should. They should aid people (...), disabled people (...), those with failing sight (...) or hard of hearing. Yes, programmes should help to break down certain social barriers. (...) For instance, they help to remove (...) the restrictions on access to education. Yes (...) information technology can be helpful, it can bring about certain (...) good things for a society. (...) It fulfils a certain social duty. (ICT,N,6,M)

- an obligation in a narrow sense of the term, loyalty towards the employer and the client

We focus our attention on our obligation to the company, to the recipient of the programmes, our job rather than the society in general (ICT,N,15,M)

- the lack of a social duty, there is only a desire to make profit

There is no social duty. Perhaps visionaries have it, but... I don't think this is a social duty, it's more like a desire to make profit. (...) No, I don't believe in it, there is no social duty in the job of a computer engineer. It's like any other job; similarly, there is no social duty in the job of a baker. Perhaps doctors have it, they have their own codes and longer studies, training. (...) No, it's senseless blowing it up. (...) A computer engineer... is more of a routine job. (ICT,N,12,M)

Moral/ethical/societal dilemmas

Like one year earlier, the awareness of ethical issues is delimited mainly to the code of job ethics which includes responsibility for the quality of the created programmes, their usefulness (an effective, user-friendly product) and being able to perform a given task on time.

Responsibility for what I do, that is reliability, I sign the product I created and it becomes a showcase for my professional skills (...). This is done in a reliable, responsible way; it would be good if someone were satisfied with this thing done on time. (ICT,N,3,M)

I don't view the role of a computer engineer as a social duty (...). It's not like the role of a policeman whose duty is to protect us. The only social duty is that the thing s/he creates must not be trashy. (ICT,N,9,M)

However, there is some awareness of responsibility for health and safety of people using the products created by a computer engineer e.g. in medicine or transport.

Information technology is present in virtually every sphere of life and knowledge such as medical equipment, aeroplanes, anything connected with human beings, anything which might involve danger. It is important to create software (...) which doesn't cause any injuries or accidents. (ICT,N,12,M)

But if I were to write a system which could kill a person by dosing them medicine, I would prefer not to do it. (...) Hospitals have already got such things. The error committed by a programmer might kill. The error of a programmer in a car can kill too. So can the error in a rocket and it often did. (...) A lot of things are controlled by computers. Minor, trivial errors, a comma might kill, a measurement miscalculation. (ICT,N,12,M)

The moral dilemmas noted by computer engineers concern the following issues:

- virus writing

So ethics, our moral principles, force us not to destroy someone's work, e.g. viruses which can destroy virtually everything. All the data stored on the hard disk, even the hard disk itself, they can even destroy the whole computer and then you can only throw it away. Actually, you can't call the people who write viruses computer engineers, but (...) the domain is the same. (ICT,N,9,M)

There is a certain group of computer engineers who can write e.g. computer viruses for someone by virtue of their skills and competence. It's a real nightmare and personally I find such practices absolutely unethical. If I tried hard, I could gain knowledge which would help me in doing this in a short period of time, but I have never wanted this and I find it unethical and I know that most of my friends take the same attitude, especially if someone has got a computer and uses it and sooner or later encounters a virus which destroys something and this is certainly very unpleasant. (ICT,N,10,M)

- breach of copyright

not to steal someone else's piece of work, because it's often very easy, one can do it unconsciously. In the internet, for example, there are a lot of examples of source codes where one only needs to introduce really minor changes and theoretically one can call it one's own piece of work (...) a minor change causes it to be yours and not someone else's. (...) The code of ethics is about not infringing someone's copyright (...), about not claiming that it's your own work. (ICT,N,9,M)

- protection of confidential information

And the ethical aspect of the job? (...) One sometimes works on systems which contain a secret and one must create them in such a way that the secret cannot leak out (ICT,N,6,M)

- writing programmes in direct conflict with one's own values, e.g. pornography

if I knew that I would create a pornographic window, I don't think I would do it (...). I'm really glad when what I write is not in conflict with my principles. (ICT,N,13,M)

- writing programmes with 'entrance gates'

when writing some banking system, theoretically my role is not to enter some gate and steal some cash. This is possible, but I say no. (ICT,N,3,M)

Both novices and senior students attribute responsibility for using a programme in an unethical way to the client – the recipient of the programme. Computer engineers do not assume responsibility for the results of using the products of their occupational activity for harmful, unethical purposes.

People write programmes for controlling nuclear heads (...) [Tomahawk] for example, some of them contain errors (...) and land in an immediately neighbouring country. Well, that's the job, it's about writing a programme (...) and how it's going to be used hinges on the person who presses the button. (ICT,N,6,M)

B. Novices' appraisal of their study programme after worklife experience and comparison with their opinions as seniors.

Since LLL, the continuous process of making one's knowledge up to date is an integral and necessary part of the job of a computer engineer, the novices appreciate the fact that their university taught them how to learn quickly.

I think that I learnt (...) two things in the course of my studies. Firstly, (...) good work is always rewarded, at least in the form of praising the effort, but still someone notices it. Secondly, I mean the rate of learning certain things. These are the two things I learnt and probably these two come out handy in my job. (ICT,N,10,M)

Generally, the whole programme during (...) our studies was meant to (...) awaken the ability to educate, master one's knowledge, keep learning something new all the time – on one's own. (ICT,N,11,M)

There is no doubt that the information technology graduates view knowledge acquired at the university as starting capital, which allowed them to establish their position in the world of information technology. At the present moment they have to begin to put this capital to profit, attract it, invest it in specific tools (different types of specialisation). The studies furnished them with the basics and gave them the directions for development; however, they need to develop further on their own.

The studies at the university were very general. They provided us with knowledge of virtually each field of information technology. It is a great revision of everything at a relatively high level, giving one the basics to realise practically everything, each type of work on the job market. These are the basics which could help to adapt one's skills to 85% job vacancies. If someone requires specific tools, one can complete one's education in a few months thanks to the basics. I think these studies are really valuable. (...) These are general basics which can be applied to virtually everything and this polytechnic education is very useful. (...) these basics are recognised practically in every single field. (ICT,N,12,M)

The studies are viewed as a solid foundation (they supplied the novices with basic, universal knowledge) which makes it possible to take nearly all jobs related to the domain of information technology. As for the job itself, however, one must focus on a particular branch and specialise in it. The studies enhanced the novices' flexibility, covered the basics on which they can now build up their specialist knowledge.

These studies play a substantial part in the curriculum vitae. They have been completed and they are quite good. I think they provided a sound basis for a great number of information technology branches I used to find unnecessary at times, and a certain view remains in memory for ever, certain pieces of information

concerning a great number of branches accelerate development in the field I selected and they also simplify communication with the other people who specialise in something else. I would say, they were really useful. Useful and quite good. (ICT,N,12,M)

The studies made me realise that information technology is an incredibly vast domain. Did they help me? In one sense they did – they gave us some basic knowledge. (...) As for details, one has to acquire them individually. (...) writing programmes forced us to look for solutions, to think how to solve something, to go through documentation. They prepared us for the job of a computer engineer (...) but only partially. (ICT,N,6,M)

Unlike the psychologists, who had implicit trust and regarded what was being imparted to them as important and useful, the students of information technology were more selective and critical of the content of the curriculum of their studies. They found many pieces of information redundant, whereas now, when working, they discover they were wrong and they did not appreciate certain significant issues before. As computer engineers they appreciate issues they considered to be of little use.

Perhaps the only change is that then [during the studies] I thought more things to be of no use and now I've seen in practice that certain things become useful at the most unexpected moments (...) I still believe though that there are subjects which were redundant or maybe the teachers were very bad. (ICT,N,10,M)

As information technology graduates they still emphasise that the methodology of teaching was a particularly weak aspect of the studies.

Compulsory training in some pedagogy in these studies is a waste of time. Sometimes the knowledge was imparted in such a hopeless way that studying for a credit boiled down to swotting. (ICT,N,3,M)

At the beginning I thought that during the breaks I would be sitting and copying from the blackboard what some heavenly professor wrote on it. It was over after the first week when it turned out that this heavenly professor keeps gibbering, and it's pointless attending his classes as he's gibbering (...) and it's incomprehensible. Actually, one must take the book and learn everything on one's own. (...) Attending some things was a waste of time. (ICT,N,6,M)

They also point to imparting out-of-date knowledge and the obsolete curriculum.

Sometimes we were taught simply out-of-date things. And some of the subjects are virtually obsolete nowadays. The school needs more money to rejuvenate the curriculum, so that it would be technologically up to date. (ICT,N,10,M)

The curriculum is arranged at the beginning of the studies and it doesn't undergo any changes for five years. As for information technology, it's a lot of time. (...) When we began studying, it was 1998 then, the prevailing system was Windows 95, (...) Windows 98 had already appeared, I had seen it at some mates of mine. (...) And we had lectures on Dos. Great, you must have some basics. But man (...) when we complete the studies we won't write programmes in Dos, only in Windows. (...) The curriculum should be adapted in the course of the studies. (...) it would require (...) a lot of work and effort on the part of the lecturers. (...) But they don't seem to be very meticulous. (...) they used to show us some resources from 1998 (...) and it's 2002 when I graduated. Four years is a lot of time as far as resources are concerned. I understand that (...) certain things do not become out of date, (...) one has to be familiar with the basics (...) but (...) for information technology four years is too long a period. Five years is a lot of time. (...) That's why the curriculum should be modern, it should keep up with the times. (ICT,N,6,M)

The novices find the information technology studies at the university prestigious. They identify obtaining the diploma with getting a guarantee of launching a successful professional career.

I think the studies were tough. (...) Did they give me anything? Yes. (...) I hope that I will get a degree. (...) A precious thing. They gave me the status, (...) a certain start into life. I don't want to insult anyone, but, after all, we are information technology graduates, and not mathematics or management graduates. (ICT,N,6,M)

As for their professional development, the graduates emphasise not only the value of the information technology knowledge acquired during the studies but also the meaning of experience they gain while participating in their occupational activity.

It seems to me that (...) the job (...) I'm doing or I'll be doing after the studies will help me to become a good computer engineer (...). Only experience (...) turns a computer engineer into a really competent one. (ICT,N,1,F)

C. The relation between HE and work: An analytical comparison

In the life of information technology graduates there is no definite boundary between completing the studies and beginning a professional career – these life phases overlap in the analysed group. The vast majority of the ICT students launched a professional career in the course of the studies so the transition was very smooth.

Q: What would you find most important after going from your studies into your job?

A: (...) I had the studies, I had the studies and the job, I had the job. There wasn't any particular moment of transition. (ICT,N,15,M)

Unlike the graduates of the other kinds of studies, the ICT graduates were relieved after completing the studies. They no longer had to combine education with their professional career.

The worst term was the fifth or the ninth one. It was a nightmare, I had to go there five times a week and sat there for a dozen hours or so sometimes, from 7 a.m. to 7 p.m. I had such a weekday. (...) It is sometimes better at work than in the studies. (ICT,N,9,M)

In spite of this, many people have difficulty in getting accustomed to the rhythm of work imposed upon them (working fixed hours). It can be easily understood since fixed working hours are not always conducive to creative thinking, the very nature of the job (project work, creative work).

Computer engineers with a couple of years' experience begin to distinguish between their professional career and personal life – mainly through time organisation: the amount of time spent with and without the computer. Professional career and personal life become discriminated in a definite way.

At the beginning you simply relish your job, practically you never leave work. If you start digging into a problem at work, you continue this at home. This is quite sick (...) that you bring some work and keep working on it at home, but luckily (...) I've got it behind me. You must carry on with your duties at work. (ICT,N,6,M)

I have a fixed scheme, I go to work in order to work, I come back from work, and I don't think about it at all. This helps me in a sense, because I know that when I leave work I've got some time for myself. I don't think, I'm not interested in anything, I don't solve, only sometimes when there is a really knotty problem I try to solve it, but not too much as I don't want to lose this free time. (...) I'm glad to be able to say that I'm proud of myself since when I sometimes come back home I don't feel like doing anything on the computer. I remember that during the studies it was my life, like an addiction. (ICT,N,9,M)

The sense of awareness of the irrelevance of their own expectations about the job market lowered the novices' sense of their market value. To their astonishment, the job market does not receive as many computer engineers as they thought when they were students. Their disappointment is clearly visible – they thought they could be fussy about job vacancies, whereas they had to confront the harsh reality of the job market.

I thought that if I am an information technology graduate, I will have lots of work, and in fact I didn't have too many options to choose from. (ICT,N,6,M)

When I was in my final year I had great plans, what I would do, how useful I am, and I thought I was in a way omniscient. And the job market verified my views. Everything is important, connections, skills, and not necessarily my attitude: I'm great, you've got to take me on. (ICT,N,15,M)

Those who took part in the survey are in the same life stage as one year before (but their condition is worse – they are no longer bold, self-assured senior students). Their job was, is (and will be?) the dominant element of their life (it structures their time organisation, helps them to identify with the specific professional group). A computer engineer – a programmer, e.g. website designer is the most common function performed by them in their workplace. Although they used to say as senior students that they would prefer to avoid carrying out such dull, routine tasks, the situation on the job market forced them to undertake these tasks. They are astonished and disappointed with the routine of the job they must do. Earlier they thought that as computer engineers they would have to face tasks requiring creativity, ingenuity, and now they have to do the job they find beneath their capacity.

Q: And what kind of competence do you need for your current job?

A: Now I think I don't have to show a high level of competence. People in the second or third year would be competent enough. It's not too impressive. (ICT,N,13,M)

However, everyone who began a professional career – has a job compatible with the type of their education. They hope that their career development in the future will enable them to make use of their creative potential they possess (in their own opinion).

Currently they regard themselves as minor elements of the social system – a year before they felt to be engineers, co-authors of this system, helping to regulate its operating mechanism, these days they think they are only 'cog-wheels'. The novices do not feel the sense of being indispensable, irreplaceable – they once thought they would create and change the face of the world – whereas at present they have to undertake only routine tasks.

At the same time they feel they are at the peak of their professional capacity, the peak of their professional career, but they are disappointed since they aimed higher. They would like to move higher up the career ladder, have a clearly defined career path and it turned out that the prospects are vague and limited; moreover, the competition enter the market very quickly. The novices participate in a battle for survival – for holding down the job, and not for promotion, as they thought beforehand.

They are afraid of being squeezed out from the market by younger computer engineers, trained in more recent technologies. They are fully aware that experience is not a top priority in this field. They are afraid they will fall behind with bringing their knowledge up to date, since their job is time-consuming and prevents them from observing changes which occur in this field, whereas their younger colleagues have got enough time to do so.

I have a problem with this whole information technology; what am I going to do when I'm over forty-five, I won't be able to think so fast, I won't be able to learn fast in this way. (...) There are no chances of promotion here, I will be doing [what I'm doing right now] till the end of my life. And (...) that's something I won't enjoy that much. I can't envisage myself as a coder (...) in thirty years' time. I would be fifty-five then. (...) A greying coder. And what would I be supposed to do? I can't certainly keep up with these young people. (...) Perhaps that society will be stupid, but I doubt it. (ICT,N,6,M)

They no longer perceive their professional group as an elite. The earlier sense of being someone better has been undermined and replaced with attaching relatively inferior status to their own professional group.

...I don't know whether it's especially respected. Perhaps there's an element of mysticism (...) actually nobody knows what they are responsible for. (...) I think there's some respect but... a doctor enjoys greater respect, I'd say. It's not the same, it's some three levels lower. A car mechanic – that's a similar level. (ICT,N,12,M)

None of the novices mentions getting addicted or burnt out. However, they speak with resignation, which seems to be a characteristic symptom of this phenomenon.

The studies were more pleasant. Now I've become a little sad. This life is so messy and actually its very sense has been questioned in a way. This routine is killing me. (...) I'm getting on in years. (ICT,N,12,M)

They strongly emphasise the motif of time – they function on the axis of time. The trajectory of their professional life extends in time, and not in space, it is placed within the confines of time, whereas it is not dependent on space.

They do not attach any importance to a geographical location (they consider getting a job abroad – most often in an English-speaking country – the lack of national identity) and they do not display any loyalty towards a given workplace (they do not feel attached to a firm/company, do not feel part of it).

Computer engineers get old in the professional sense very quickly, time elapses in this job – they are useful for a short period only. It seems that the market value of computer engineers goes down when they complete the studies. At this point the following question arises: what is the role of the studies in the professional training of a computer engineer? Is the regularity pointed out by young computer engineers a 'premature professional old age' typical of the analysed profession, simply a temporary standstill in a professional career or perhaps the reflection of the current economical situation and the related tendencies on the market place?

4. Germany

4.1 Psychology

Regarding the general outcome of the interviews there are some central aspects to be mentioned first and to be explained within single chapters later on: (As these include single issues of learning, knowledge, and competence the three domains will not be outlined separately.)

- The decision to become a psychology teacher is mainly influenced by *economic considerations*. There are more novices who work as freshmen teachers than suggested by former interviews.
- The *exotic nature* of psychology as a school subject leads to a high identification factor among the novices and to various forms of informal cooperation in smaller networks and formal memberships.
- *Learning* takes place immediately at work, in self-organised learning groups besides the regular seminars, and in cooperation with older colleagues.
- New *interdisciplinary* teaching approaches among some schools support the engagement and identification and lead to more personal satisfaction with the new professional role.
- *Social commitment* in the framework of the school-system is seen as a particular task of the teacher's profession. There is a strong awareness of *societal responsibility* among young teachers.
- The notion of the *praxis* term changed due to the experience of new professional challenges.
- *Academic knowledge* and former scientific approaches collide with school reality. Knowledge (and single areas of knowledge) is being revalued by novices from a formerly abstract to a rather concrete understanding nowadays.

Most of the novices appreciate their *personal study techniques* more intensive since they can see their usability in practical work situations.

The status of the respondents can be described by the following overview.

PSY	Teaching	Scientific involvement (PhD)	Add. Studies	Still studying	Other job-activities
1m					x
2f			x		
3f	x				
4f		x			
5m	x				
6m				x	
7m	x				
8f	x				
9m	x				
10f			x		
11f	x				
12f				x	
13f				x	

A. Entering work life: Novices experiences of work

The current job-situation and the general standing of the respondents

Initially, the professional situation of the respondents from wp2_2 has to be clarified. This group comprises mainly academic novices but since not everybody passed the exam there are also a few students among the interviewees whose data have to be interpreted separately. In order to get a better understanding of the work life situation of young psychologists, four interviewees who did not appear during the interview period of wp2-1 had to be added to the novices' cohort.

Delaying the entrance to work life

Three respondents have not finished their university studies in psychology yet although they had expected to be graduated within not exceeding one year after their first interview in autumn 2002 (wp2_1). The reasons for the continuation of their studies are manifold. In one case the student is in doubt about his choice of psychology as a suitable subject, furthermore, a couple of personal sorrows intensify his crisis of identity. He doesn't appreciate the idea of working in psychological issues; still being a university student does not suit him better on the other hand. In the first interview one year ago his view on learning was already extremely sceptical as he abnegated any positive results on his efforts. Taking everything into account he still does not know whether to drop or to complete his studies.

“Among other things .. because I don't know if my choice of studying this subject was good for me. Originally, I had planned to be ready in early 2003 .. I don't feel fine with that. Now there is no concrete date that I envisage. First I need to know if psychology is the right subject. Friends are surprised about this fact, they give me unpleasant requests. I feel a kind of pressure from all sides .. I went to a special consulting service for issues on higher education from the employment center but I didn't find any alternative solutions yet.” (PSY 6, male)

Another two female respondents (12, 13) miscalculated the duration of their examination period in winter 2002 and springtime 2003. But they are still students.

One female graduate decided to continue her studies in order to have a better career choice. Along with the degree in education, as an additional school subject, she hopes to have a great advantage in the field of teaching. Furthermore, she likes to spend some more time in her university as she feels very comfortable with her social situation in students' life and, moreover, with gaining 'more' academic knowledge. Hence, her attitude makes an exception to the common view.

“I decided to study educational sciences as an add-on subject. After passing my exam in psychology I knew that I like to become a teacher and for this I have better chances by doing a third subject. Personally, I like to participate in students' life, I love to learn new things and I benefit from friends of mine who are teacher on probation. I did all credits in just two semesters - my family really appreciates my efforts. I can start my school internship in Feb. 2004. I already belong for longer time to the psychology and pedagogy teacher association.” (PSY 2, female)

Novices as school-teachers due to economic considerations

Most of the academic novices are engaged in the school-teaching internship (regular duration: 18 months, ending with the second state examination). One male student founded a private design company by himself where he and his two partners innovated a method for photorealistic presentations of industrial objects. Drawing the balance after one and a half year he has taken aspects of economic security into consideration now and decided to start the internship on school-teaching which guarantees better social security. However, even if this novice is the only one who dared a kind of professional adventure it might be a representative example for the common work life orientation and attitude of former psychology students in Duisburg. Nowadays, the economic situation in Germany seems to give little scope for professional adventures or experiments. None of the respondents is engaged in off-the-job training or special professional trainings, such as gaining for professional counselling, socio-clinical, or therapeutically work. In many cases the respondents find the notion of being a psychologist difficult; being asked for their self-perception they say that they often do not feel as

psychologists, even though, they know that psychologists do not have to be exclusively involved in clinical issues.

“No, I don’t see myself as a professional psychologist, okay, maybe to some extent. It is my task to put certain contents across the learners. The image of a professional psychologist rather suits to a therapist. However, I have difficulties with this term.” (PSY 7, male)

As the novices rather have to deal with the image of a teacher than a therapist they see a great psychological pressure on teachers in the public.

Novices as school-teachers - social commitment and forms of networking

As reported before from previous wp2-1 interviews the clinical orientation is very rarely found among the psychology students in form of any deeper professional ambition. Thus the perspective of having a safe employment with a safe income is more and more attractive. To say that the social commitment of the novices in professional affairs is not very strong would put them in a bad light. As a matter of fact there are many ideas on social commitment within the professional role as a teacher (-aspirant) uttered by some respondents. Often they expressed their awareness as being on an “educational mission”, which includes intentions for providing the development of the personality among the learners.

“For me as a teacher it is important to help the pupils on their way to become mature citizens and to provide the development of their personality. I am a role model to the pupils, I like them to learn how to reflect on societal values, such as honesty and truthfulness and how to improve a general critical awareness.” (PSY 5, male)

Certainly, this mission is a legal content of the school’s curriculum, but regarding the strategies and notions of responsibility one can detect social ambitions which are different to those of common teachers. The psychology teachers (-aspirants) see themselves as competent persons in social issues and this again is seen as a result of their studies.

“The pupils look at me more intensively, there is more assessment because I am a psychologist and a role model to them. This challenge is not too difficult for me; because on the one hand I can use my psychological knowledge from my studies and on the other I feel prepared by my own personality.” (PSY 7, male)

Responsibility does not only refer to the interaction with students as common preparations and arrangements with colleagues are very important, too.

“When I think about my responsibility, first I think about the composition of my lessons with regard to the learners. But we are also reliant on the cooperation with other colleagues when we do common arrangements. At my school there is a strong interdisciplinary approach to learning.” (PSY 9, male)

A serious conflict is seen by the same respondent in the interaction with rather difficult and socially disadvantaged pupils.

“I learnt (by observations) that the handling of hierarchies will challenge me very much. You need to discipline the rather difficult and social disadvantaged pupils. I am not used to an authoritarian style.” (PSY 9, male)

The role of institutional conditions and exchange with colleagues

In this context the single educational institution plays a crucial role for the effectiveness of the social commitment and for the willingness to dare changes. Comparing the different types of schools there is a wide range of arrangements concerning the qualification level of the various target groups. On the one hand the psychology teachers are engaged in vocational schools for educational programmes in social work or in health subjects, on the other they teach in regular grammar schools. Partly, the schools modify their system with regard to a new interdisciplinary approach, as described by a respondent in a vocational school. Different forms of cooperation take place in the context of a common reorganisation of the syllabus. Mostly the novices get support by older colleagues at their school. A male novice compares his 62 year old teacher colleague with a mentor who takes care of him “like a surrogate mother” (5). He follows her advice and may use her materials for lessons whereas another respondent misses a similar kind of support.

“I am the youngest staff-member and I am the first teacher on probation at this catholic vocational school, the fact that I am the only one here is a bit difficult to me. I have no companion there, but we have regular meetings of former fellow students in order to help each other at the internship.” (PSY 8, female)

Independent from the type and geographical location of the schools the novices strive for close networks as they organize themselves in learning groups. Most of them say that it is very important for them to exchange their new experiences with former fellow students in the same situation of living. The interest in a network of colleagues seems to root in former study practices as they already associated themselves with others as junior and senior students. Priority is given to the exchange of school material and the intention on a better didactical preparation. The group of psychology teachers in Germany is small numbered due to the fact that psychology appears to be an exotic subject in German schools. According to the small appearance of psychology as a school-subject there seems to be a high identification-factor among this extremely limited professional group. Hence, it is not surprising that some of the respondents became members in the *Association of Psychology Teachers* even during their studies. The organization invites young teachers a few times a year to participate in nationwide conferences where the youngsters can meet representatives of different schools. Insofar, these meetings function as personal sections for a career prospect connected with several opportunities concerning offers of further education, such as workshops, seminars, and presentations.

B. Novices' appraisal of their studyprogramme after worklife experience in comparison with their opinions as seniors.

Psychologists and their relationship to scientific occupations

Many respondents reported that their relationship to science has improved during the last semesters in their programme and, especially, by writing their final thesis. The students' jobs in the psychology programme are

almost concentrated on the assistance in different scientific projects and tutorials. As a consequence thereof, many senior students have said (in previous interviews) they could imagine to work at university after completing their studies. A lot of them were indecisive whether to envisage the school internship or to apply for a scientific occupation combined with a doctorate programme. As this idea bears an economic risk concerning the limitation of possible work contracts and the duration of the occupation in a scientific project many seniors decided to do the school internship in order to gain a rather safe profession. From a long term perspective they uttered their interest in science and they suggested the possibility for a scientific involvement in the future. Altogether there are two female respondents who write their doctoral thesis, whereby one of them is involved in a university programme and receives a monthly salary as she is fully employed (4). Due to different problems she feels uncomfortable with her scientific activities. She said that she never got any concrete feedback by her professor and complains about “being left alone” with her work. Furthermore, she misses the pressure to deliver interim reports and all in all it is difficult for her to identify herself with the theme. The other PhD-student (11) is mainly involved in the school internship and follows her doctoral thesis with only secondary effort. She is rather ambitious to get an alternative qualification in order to increase her future vocational opportunities.

The changing notion of professional practice and the revaluation of knowledge

While the senior students appreciated the application of scientific methodology as the (experienced) nature of praxis during their studies they almost view praxis on the background of their teaching experiences now. Many respondents said issues of didactics are most important and realised that they often cannot use their academic knowledge - highly specialised on certain subjects - which does not appear in school curricula at present time. Some novices report they feel very challenged by teaching young learners in general subjects of psychology which only appeared during their introductory study period. Particularly, with regard to the different curricula the novices see an extreme discrepancy between university and school reality. While, for instance, psychoanalysis was not offered as a part of their study programme it is now an obligatory topic for the school-learners. This means that the novices recognise significant deficits concerning their knowledge and see the need to relearn certain psychological contents on the one hand and even to encounter new topic areas during their internship on the other in order to be able to build up an equivalent pool of knowledge. Another explanation for this assumption is given in the different types of addressees:

“There is an immense difference when you explain something to your lecturer or to fellow students who are more or less specialists and when you have to explain the same content to younger school-learners.” (PSY 5, male)

Hence, some respondents think that the learning demands within the first years as a teacher exceed the requirements of their university programme. In other words: the individual learning activities increase to more extent when they start to work in their profession. Thereby, the key-terms mentioned among new teachers are the acquisition of *routine* and *habit formation*. In this connection the offered *areas of knowledge* of the university programme are criticised by many novices. Due to the practical experiences academic knowledge is now being revalued.

“The didactics of psychology was too thin. You need to know more about the different paradigms, biopsychology, psychoanalysis, and holistic psychology didn’t appear enough in the programme. The whole curriculum should be arranged differently. It should be oriented to the basic paradigms.” (PSY 7, male)

Besides, *didactical knowledge* another feature gains in importance among the freshmen teachers in the changing practice term: While many students lose their interest in social and clinical involvement during their last years of study, they regard the afore mentioned educational mission as a basic element of their professional reality. Some senior students preintimated the meaning of the relationship between the teacher and its learners according to the inherent responsibility ongoing within the role of an educator. Meanwhile, the awareness of

the social aspect of teaching increased among the novices as they often accentuate the importance of mutual trust as a basic condition for processes of *social learning*. In this context a male respondent mentioned his psychological and social competence would result from his study performances and that he therefore feels well-prepared for counseling tasks at school. The confidence that possible counseling tasks can be easily mastered was based on a university course on “communication and advisory techniques”.

“First of all cooperation has to take place with the pupils .. I think I am able to become a counseling teacher because of my psychological competences. In this field I edge over my colleagues.” (PSY 7, male)

Appraisal of study techniques

The novices appreciate the quality of their personal *learning techniques*. They regard abilities, such as, data-recall facility, textual work, and “to become acquainted with new contents very quickly” as key qualifications. In retrospective the novices think the contents of their study programme are too specialised and often not applicable for further professional purposes.

“Knowledge at university is too profound, there is a huge discrepancy between the programme and the requirements at school.” (PSY 3, female)

Another important ability the psychologists gained at university is seen in the learning progress as described by the term of *learning to learn*. It is also mentioned that five or six years of studying have a strong influence on the development of the own personality with regard to *social competencies* and that their study years have helped to gain a critical view both on special and on rather general affairs.

“In a scale from one to ten, I would rate the studies with 6 or 7 (..helped to become a good psychologist). It was helpful as you gain a critical view on different things after five or six years.” (PSY 7, male)

“When I look back at my studies there are some significant key-qualifications I have acquired at university: At first, oral and writing skills, they are important for teaching in order to be able to develop useful methods and contents of learning in very short time (from a pragmatic point of view), and to know how to socialise with others, e.g., for exchanging materials, experiences and for making friendships.” (PSY 9, male)

C. The relation between HE and work: analytical comparison

Regarding the differences between the years of study and the experiences in professional life there are standing out some essential aspects:

The changing way of living

The main difference between studying and working is seen in the daily time management, in forms of a better feedback, more responsibility, and in the general financial situation which allows a better standard of living.

“In the beginning it was difficult to get used to the strict timelines, that is definitely different to study. The extent of responsibility is growing compared to university time. A similarity to studies is that you have to learn a lot.”

Increasing responsibility

During their university studies the respondents felt more or less responsible for only themselves. Different notions of responsibility, mentioned at previous interviews, were expressed on a rather abstract level. Whereas the novices now connect these notions to direct situations of work.

“My responsibility increased. Responsibility to my own learning efforts and of course to the classes. I think as a young academic you can bring new ideas to work.” (PSY 8, female)

Knowledge discrepancy

There is a discrepancy between academic knowledge acquired at university and the knowledge which is expected a teacher to have.

“The application of knowledge was not sufficient during my journey, but I learnt how to think scientifically and self-dependently and at least how to organize myself.” (PSY 8, female)

Identification with the profession

Psychologists often do not see themselves as real psychologists as they are mainly obliged to educational tasks. There seems to be a mental distance to the notion of being a professional psychologist even though they know that psychology is not fixed upon a certain application area.

“I don't feel like a professional psychologist, it is more complex. I am on the way to become a teacher so I am rather a professional pedagogue.” (PSY 9, male)

The following statement makes an exception to the majoritarian attitude among young psychologists as the female novice confirms that she views herself as a professional psychologist. She warns against the overestimation of psychologists' duties.

“Yes, I feel confirmed by my work, teachers always have to act psychologically .. Every job implies moral responsibility, psychologists are not better humans.” (PSY 8, female)

Indeed, many of the interviewees give the impression that they often act psychologically within their profession more than they avow themselves. On the one hand they want to be regarded as normal professionals, pedagogues, or teachers, on the other they stress their special advantage of having psychological

background knowledge. Latently, they resort to psychological competencies when they are asked about their working approach. The reason many novices do not dare to view themselves as 'real' psychologists is not been clarified yet. But there is evidence that psychology students have to cope with a rather difficult and sometimes mystical image of their subject during the years of study. At this period of time they are often confronted with the profound legitimation of dealing with human behaviour outside academic cultures. As many freshmen and senior students explained they do not want to be treated as "mind analyser", meanwhile the novices at large feel more comfortable with the becoming teacher identity. The conflicts they have to cope with now rather concern the general teacher image and the rarity of psychological interest in school-education.

"There are prejudices towards teachers in society and psychology is not taken seriously enough, even though it becomes more and more important. I am sad and angry with that, but I try to take it not personally." (PSY 8, female)

4.2 Educational Science

Overview of the general outcome:

- The employment status of the interviewed pedagogues is of complex nature. Strikingly, their engagements mostly root in *former job-activities* during the last years of study (according to the niche theory as explained in former reports).
- Evidently the novices benefit from qualifications based on learning and work-activities besides university. The *individual profile* seems to be more important to the labour market for them than good marks.
- Although pedagogy is often seen as a merely *practically* approached subject, surprisingly, one third of the novices look for *scientific and academic involvement*.
- Educational science functions as a pool for students with different ambitions, motives, and study-experiences. It seems to facilitate access to the labour market for *specialised lateral entries*. (openness, incompleteness of education)
- The clientele of pedagogic acting primarily consists of adult persons (area of *adult education*)

EDU	<i>Relevant job</i>	<i>Scientific involvement (PhD)</i>	<i>Add. studies</i>	<i>Still studying</i>	<i>Other job-activities</i>
1 m					x
2 m	x	x	x		
3 f	x			x	
4 m	x				
5 m	x				
6 m		x			x
7 f	x	x			
8 f	x	x			x
9 f	x	x			
10 f			x		
11 f	seeking				x
12 f					Parental leave
13 f				x	
14 f					x

A. Entering work life: Novices experiences of work

The current job-situation and the general standing of the respondents

The employment status of the interviewed pedagogues is complex. Regarding the occupational situation the group of educational scientists can be categorized into three different major types.

A) Scientific involvement: Four respondents (2,6,7,8) are differently involved in scientific activities whereas one of them (6) is close to the finalisation of his doctoral thesis but at the same time he is employed in a 'nonrelevant' job. The other three get paid by their institutes located at the university. Two of them (7, 8) envisage their PhD within the next couple of years and one respondent (2) is going to stop his scientific career in order to become a teacher. For this reason he does additional studies and already reduced his job to a half-time position. Recently, a female respondent (8) gave birth to her second son; while waiting for her scientific employment in the beginning of 2004 she is additionally involved in other educational side job-activities.

B) Adult education: The second group consists of novices who work in adult education. Two of them (5, 9) are employed permanently in this area whereas two other interviewees (6 and 8) mentioned before under scientific involvement offer workshops for adults occasionally. One of the respondents (5) works in the area of psychosocial professional rehabilitation. The other one develops multimedia-based learning profiles for the Chamber of Handicraft and offers training courses in e-learning to employees.

C) Self-initiated jobs: The employment-status of the third group of novices is characterised by self-initiated jobs as a result of their individual qualification based on their extraordinary performances in jobs during their study time. Respondent no.3 makes an exception to the novices cohort as she still has to finalise her exam, but from an employers' point of view she is engaged as a full time pedagogue. She works in an agency which organises social-creative and cultural events in the Rhein-Ruhr Area; for the management the finalisation of her university exam is nonrelevant. The situation of the male respondent (4) is a bit different as he created his own job at a terristic zoo some years ago, but for a further career development his certification is indispensable. In the context of his employment he plans to establish an ecological institute in connection with an advanced media-pedagogical approach to teaching young people.

D) Other appearances: One male novice (1) works as a software consultant in an international company whereby his tasks are outside his original pedagogical field. A male novice works (14) for a banc institute in the area of personell training, unfortunately, he was not available for an interview. From all interviewees there is only one unemployed pedagogue (11), none of over thirty applications lead to any employment, even though her examination marks were very good; and in addition she has finished two vocational trainings before study. Another female novice (12) dropped her plans for any employments as she likes to concentrate on her young motherhood.

Remarkably, there are altogether four pedagogues who were formerly enrolled in the psychology programme.

Novices with scientific involvement

Among the novices it is attractive to be engaged as a research associate. Altogether four graduates are involved in scientific activities, three of them are employed in different research institutions. As the pedagogues' field of activity is not clear defined; contrary to that of teachers, educators, or social pedagogues, there seems to be no "classical" occupation in which educational scientists are engaged. According to the ambiguous image in society the novices themselves have no established professionality at their disposal.

The idea of becoming a research assistant imparts several aspects and incentives, as the novices expect to have the chance

- to follow their own interests
- to continue their learning activities
- to continue a scientific project based on previous research activities

- to keep contact to the world of higher education and to combine practical work and theory
- to increase their qualification level (PhD)
- to get access to adult education
- to be paid by the provincial government through the university, to receive a secure income

On the other side the employment status imparts several negative aspects mentioned by the novices:

- The mostly limited duration of employment
- The limitation of available work contracts
- The tendency to create only half-time positions
- The dependency on projects' funds
- The limited time frame available for writing the doctoral thesis

The young pedagogues have all engaged in manifold job-activities during their studies. In this respect the transitional processes from higher education to working life are less drastically compared to students of other programmes. Due to the explicit job-orientation the novices have been relatively close to the working world already as students. The successful integration at their work place seems to result from the extent of the self-confidence acquired at university. The following example shows the process from the beginning of the occupation to its current state and the cultivation of autonomous working structures and –attitudes.

“I don't see myself as a newcomer, because I have done a lot of work before. Generally the colleagues were friendly, open and helpful like I knew them before. I put pressure on myself concerning the tasks. There was very short time for introduction, so I felt bad prepared. Now it changed a lot, I am integrated in all work processes and I work self-dependently, e.g. I can direct the processes of work because of routine and experiences.” (ES 7, female)

Further on, she puts emphasis on the striking effects (i.e. independence) which scientific work has on her personal development:

“Great independence is given at my work, but you also depend on others. There is a flexible time-setting. I get the opportunity to develop and to follow my individual interests.” (ES 7, female)

Her optimistic attitude decreased a bit after a longer engagement at a scientific institute. The personal disappointment resulting from a long-term consideration is mentioned by another research associate with intensive work experiences. As in the beginning the novice's motivation was very high and connected to personal ideas the respondent was getting more and more confronted with the reality of project work. While on the one hand the internal management tasks (e.g. leadership of the personell) increased the realization of the doctoral thesis became an unfulfilled target.

“There was no problem to start working. I felt very selfconfident, because it was my former working group from the study. In the beginning there was a phase of high motivation when we planned to found our institute. We wanted to realise our own ideas, but now there is missing the perspective. I cannot manage my PhD. Now, it is a mixture of earning money and pulling the duty. I do additional studies in order to become a teacher, so I asked for a reduction from full-time position to half-time” (ES 2, male)

Generally, the employment in a scientific position is regarded as an interstation of the transitional process between higher education and work. The perspective of gaining a professorship does not seem to be a primarily novice's target.

Novices in adult education

Before starting to work the two novices in this field had no idea about the immense diversity of adult education. Teamwork and flat hierarchies seem easily to enable the access to this profession and to guarantee more confidence and security concerning the work atmosphere.

“In my institution there are flat hierarchies, the colleagues address each other informally and when you need help there is no difference seen in the job-position. The one who is competent in a certain issue will be asked to solve the problem. Although I am a beginner, I already feel fully integrated. I feel well-treated and secured.” (ES 5, male)

In other respect, he complains about the increasing bureaucratic procedures, especially, within the cooperation with the local employment centre.

“At my job I am a bureaucrat by 50 percent and a pedagogue by the other 50 percent.” (ES 5, male)

The second novice who works in adult education experienced a rather strict hierarchical surrounding. Hence, the knowledge of conventional behaviour in the profession is perceived as an important feature resulting from learning activities at several practical trainings. He is convinced that for good teamwork one should know its rules.

“The access to my profession was easy because I did some practical trainings before and knew how a company works, how teamwork can be done, and how to behave within strict hierarchies.” (ES 9, male)

Besides, to technical issues the learning efforts are also referred to personal skills, such as, stress management at work and afterwards. The empathetic identification with the clientele (job-seekers) can be based on one's own experiences as an unemployed academic.

“The most important thing I have learnt so far is to distance myself emotionally from my mentally ill clientele. I have suffered as I was unemployed for six months and so I can understand my clients very well – having work means quality of life.” (ES 5, male)

As the learning processes mainly take place at work the respondents are aware of the incompleteness of their academic education. The role of the university is seen in the preparation for future learning processes. Once again *learning how to learn* is considered as an idea that university provides for pedagogues. Before starting his job the following novice had no concrete idea what e-learning is about.

“I was surprised by the technical progress in the general communication practice, e.g. the multipoint conferences, but it was not a big problem to get into the subject.” (ES 9, male)

Novices in self-initiated jobs

The professional activities of two respondents seem to be outstanding compared to others. Already during their studies they were creative and active in several jobs. In difference to rather common work life approaches they have individual ideas of their professional role which can hardly be compared to the common employment-status of pedagogues. The ambitious work-projects are a result of longer lasting interests. In one case the university degree is seen as a legitimation for a leading position, whereas for the other one the academic exam plays no further role for the mutual work contract with the agency for socio-cultural and pedagogical events. Both respondents have established their employment on individual arrangements with regard to their special motivation and qualification.

“Some years ago, I founded a registered association, called social creative projects e.V. and I realized some art projects with pedagogical approaches. Based on my contacts to different project partners I learnt how to manage all these events and how to acquire money for it. To do a job like that was my childhood dream.” (ES 3, female)

Focussing on the other novice in a self-created job there are some other dimensions to be noticed as well. Starting studies at the age of 33 after more than ten years of working in a coal mine and a second-chance education the male novice copes with several different jobs at one time.

“I have got three jobs, I give seminars at the university (psychology for IT students), I work at the terristic zoo (workshops for kids, seminars, tours,etc.) I produce internet-sites and create digital learning cd's. Soon I will found an institute for ecological pedagogy, the whole project is in the application-process. I am looking for a start-up financing.” (ES 4, male)

His specific work attitudes and experiences are distinguishable from all other interviewees as he expressed a powerful self image and an aversion against hierarchical conceptions. The central value is seen in the individual *performance* each professional worker has to supply. During the whole interview there was an air of omnipotence and moral around the respondent. From a long time perspective, he tries to connect many single abilities and interests to a common work complex. His current and envisaged pedagogical occupations contain issues of *multimedia, psychology, biology, learning theory, social and ecological ideas*. For the realization of a multimedia based institute for ecological pedagogy he can use these different competencies he acquired through the psychology and educational science programme and from other activities. His enormous self-discipline then is especially derived from his experiences as a worker in the mining industry and by achievements besides university.

“I don't accept any kind of chief because I always formulate the conditions of my own work. I prefer an unpersonal contact to colleagues, because I am highly performance oriented. You see, I think managerial, including attitudes, such as, discipline, strictness, and distance. I see myself in the role of a work-creator.” (ES 4, male)

The role of learning plays a crucial role for his career outlook. The novice already concentrated on psychological learning theories during his studies, i.e. at multimedia projects. Now, the idea to develop an ecological institute integrates previous areas of knowledge and new ways to the realisation of an educational undertaking. The respondent reflects on didactical approaches and compares the conduction of pedagogical workshops with a kind of entertainment business.

“I have learnt at work that it is important to entertain the customers. You need a lot of humour to distribute knowledge successfully. I always try to prevent the school-like atmosphere. Before I started to work in the *terra zoo* I observed ten different zoological schools and their didactical principles.” (ES 4, male)

B. Novices' appraisal of their studyprogramme after worklife experience in comparison with their opinions as seniors.

Providing personal nichés and individual ambitions

The lateral entries benefit from psychological knowledge acquired in former psychology studies. They see themselves rather as psychologists or as pedagogical psychologists than as pedagogues. The diploma certificate in educational science enables them to realise and explore their personal nichés. Due to the open directions of work application (the pedagogues can choose from) the novices can fulfill their self-determined functions. In other words: the liberal programme structure supports individual ambitions. Otherwise, doubts are casted on the effectiveness of the educational programme itself in terms of knowledge distribution and supervision.

“The studies didn't help me to become a good professional, but I would say the whole time was positive due to my experiences of project work and institutional knowledge.” (ES 1, male)

“You need a better practical training, such as, learning about therapeutical procedures, counselling conversation, the parental problems are not being mentioned at studies. I think you should know your clientele and get in contact with them earlier. The common practicals are useless at all.” (ES 11, female)

Forms of knowledge distribution and competence

The utilization of the studies for further professional affairs strongly depends on individual aims and activities. A female novice also thinks that the programme did not support her professional orientation, especially, during the last semesters, but she regards the main function of her academic education as the acquisition of *reflection skills* and as the chance to enhance *critical perspectives*.

“In terms of finding my own profession the university doesn't help me at all, but this is ok. Regarding the theoretical reflection skills and the critical approach it helped very much. I became able to think more analytically.” (ES 7, female)

The value of *person-related competencies* is once again mentioned in the following statement.

“The university influenced my personality, I know how to fight, to open my mouth, and how to motivate myself.” (ES 10, female)

To a far extent, the required fields of knowledge of adult education do not correspond to the contents of the study programme in great detail, although the students can specialise in this topic. Regarding the different statements *specialised knowledge* is less valued than *individual competencies*. A representative opinion about worthwhile features of the studies is given by a male respondent. He appreciates the acquisition of *scientific techniques* and stresses the value of his voluntary practical trainings.

“Pedagogues have got the ability to get into a new subject quickly, that is most necessary .. I would add up more practical trainings outside university and recommend the university to install long termed learning groups to increase teamwork skills. By that more intensive work and a better performance level could become possible.” (ES 9, male)

Another adult pedagogue also places emphasis on *teamwork* and *communicative abilities*, as he confirms:

“It was good to acquire certain techniques of moderation and presentation. That was very important. Free speech, because oral presentations are demanded by working with people. And if you lead a group by yourself, it is valuable to play the role of the moderator. This was helpful at all.” (ES 5, male)

In contrast to applicable skills, forms of theoretical knowledge are less appreciated by pedagogues if the relevance for operational fields is not visible for them.

“Some other things were less helpfully. The wide excursions - if you deal with some sociological issues that have no further relevance, although it is good to learn scientific work.” (ES 5, male)

The university programme offered only a few opportunities for gaining *additional qualifications*, these options were provided immediately only by some engaged lecturers.

“The Institute for *Gestalttherapie* invited me to do a side qualification on the initiative of a professor. This was a very reasonable offer, but an absolute rare exception to the regular programme.” (ES 9, male)

C. The relation between HE and work: analytical comparison

Knowledge and learning concepts

The summaries of the novices' review of higher education enables to give a relative clear image of knowledge and learning concepts. For the arrival in the world of work the novices have 'stepped' through a liberal educational system which seems to reward personal efforts and give space for individual activities. Pedagogy students seem to be well-prepared for their first steps in profession as they benefit both from their individual practice achievements and, partly, from the learning environment at university. In order to resist the difficult conditions of the labour market they often strive for qualifications outside university. The practical experiences feed back to the academic institution with regard to theoretical reflections, e.g. sometimes in form of diploma or project theses. Aspects of theoretical knowledge are not very distinctive among pedagogues as most of them mentioned other areas of knowledge as more valuable topics. At least, the pragmatic attitude dominates as from this point of view knowledge should be applicable to rather material problems. But this question has a profound background: in order to ensure a flexible behaviour one needs to be able to think analytically in different processes of problem-solving. Hence, the students appreciate technical and cognitive abilities rooting in academic learning activities.

“Pedagogues have got the ability to get into a new subject quickly, that is most necessary.” (ES 9, male)

Professional awareness as a pedagogue and behavioural changes due to work life

In contrast to the former student's life the work experiences lead to another way of living. The novices' priorities in spare time changed, as they need to rely on different *physical* and *mental resources* in order to cope with daily work requirements.

“You become a bit calmer. After a work day you cannot always make party or go out with friends. You need a certain quietness and you have to be able to withdraw from everything. That's very important to me.” (ES 5, male)

In some cases the novices mentioned they experienced an *alienation effect* regarding their subject as they perceived the impulse to interrupt their further pedagogical involvement. But during several processes of behavioural changes the identification level with the profession increased as the view on responsibility becomes a more and more distinctive feature. The extent of confidence depends on the individual attitude towards the requirements of work and the sense of responsibility. After five months of unemployment the pedagogue, quoted below, developed a steady professional awareness.

“Well, after studying everything was unsteady. First, I didn't want to work pedagogically, because I was a bit frustrated. I felt discouraged by the notion that my former fellow students will become my future work colleague. Somehow I had no motivation. I experienced a lot from side-jobs and practical trainings. Than when I did something else, I recognised that this is even worse. You try to work more professional and you take the work for serious. At studies everything is easier and more open. If youself become responsible at work, you see the need to accept all these responsibilities and duties.” (ES 5, male)

Consistently, most of the novices share the opinion that it is difficult to define the specific area of work as an educational scientist. Mainly, pedagogical issues are brought into connection with different work activities.

“For me pedagogy is not a real profession. I call my work pedagogical project-management.” (ES 3, female)

“No, I don't feel like a professional pedagogue because there is no concrete professional orientation, if you compare it, for instance, with a heart surgeon. So it is difficult at a counselling job, there is no objective measurability.” (ES 11, female)

External views on pedagogy

Regarding the external view on pedagogy, society often sees pedagogues either as teachers or as social workers. Particularly, only these common professions are well-known among people. The example for the wide range of pedagogical application is mentioned by one of the female novices, quoted below.

“The image of pedagogues is ambiguous as you get classified as either teacher or educator. There is no clearly defined occupational image – this is exciting. I feel as a professional pedagogue, especially, in the informal area. In discussions I feel superior and I often say at the end: Wait, I am a pedagogue, ha ha .. In the future I like to write children’s books and to put issues of racism in forms of theatre and literature on the school’s agenda.” (ES 7, female)

The discrepancy between common prejudices and work life reality is criticised by another male novice. He demands on more global acceptance of pedagogical work.

“The image of pedagogues is very differently. I think the opinions are various. Some people honour the work, others argue the converse. They see pedagogues as softies, sluggards, laid back talkers etc. Generally, the pedagogical work should be more accepted among society. If you see how difficult this can be .. I don’t have a problem with this, up to now nobody struck me.” (ES 5, male)

Invisible learning processes

In how far the experiences of higher education have an impact on the personality can be shown in the following statement. A female novice accentuates the lasting changes and positions based on “invisible” *learning processes*. Particularly, she mentioned her changing approach to conversation as a result of personal and communicative skills and knowledge acquired through higher education.

“There are many things you learn by the way, and you take these for granted later on. The studies are important for your own development. I changed my awareness of learning and knowledge and I have changed myself, I am much calmer and have more patience. It is the way you talk to others. All these changes result from gaining knowledge and lifelong learning.” (ES 11, female)

Higher education functions as a catalyst

Studies in higher education often help to catalyse and supplement a pool of different individual interests and abilities for the creation of a professional identity and work life reality.

“Now, I have free choice regarding the issues and methods, for acting on a professional level the university study was helpful. You can use academic knowledge very well. I will combine all my interests and abilities, such as, multimedia, psychology, learning, social and ecological ideas, biology.” (ES 4, male)

The significance of gaining *ethical awareness* with regard to academic education is explicitly considered by only one of all the interviewees. The function of studies is seen in initiating a cognitive awareness that has an after-effect on the professional inventory

“The university initiated my thoughts on ethics and morality. The studies build a broad basis for professional educational acting” (ES 4, male)

4.3. Political Science

Overview of the general outcome:

- Novices on political science *seek suitable employments* in consideration of their professional identity.
- They show interest in *political involvement* but at the same time they are confronted with small vocational offers in political subjects.
- There is no *explicit labour market* for political scientists and there are no explicit *work cultures*.
- The novices have to cope with the diffuse work life situation.
- The *connection* between university and work life is not organised well.
- Positions in *academic institutions* with a scientific involvement are attractive but rarely as it is difficult to get an employment.

Notation: The data material comprises statements of some new respondents due to the circumstance that not every interviewee from previous wp2_1 questioning was accessible anymore.

Political activity (6, 4, 10) Creativity, creating and preparing the own job (6) Migrant work activities, scientific involvement (1, 3) Working in film industry (7) Side-job in a financial company and add. studies (9) Still studying (11,12)

POL	<i>Relevant job</i>	<i>Scientific involvement (PhD)</i>	<i>Add. studies</i>	<i>Still studying</i>	<i>Other job-activities²</i>
1 f	x	x			
2 m	seeking				x
3 f	x ¹				
4 m	seeking				x
5 m				x	
6 m	preparing				x
7 m				x	x
8 f	x	x			
9 f			x		x
10 m	x				
11 m				x	

¹ At the time of the interview the female novice was without a 'relevant job' due to her young motherhood, but two weeks later she got employed at the university

² Other job-activities are given when the respondent plans the continuation of the current activity for a longer time.

A. Entering work life: Novices experiences of work

Scientific employments

The novices are confronted with new challenges at work. In order to solve different problems they think they should increase their learning activities. These endeavours almost target at administrative tasks and at project work, i.e., writing applications, or managing the correspondence with several partner institutions. As a consequence of this form of working the novices see their professional context with the need of lifelong learning. Academic knowledge seems to be secondarily for this purpose as from their point of view rather *organisational knowledge* and *work experiences* lead to successful output.

“Learning is a never ending process, you meet new people, new opinions. I am confronted with new topics, terms, and contents .. The main things I learnt happen during the project acquisition: writing emails, phone work, formulating the texts for the envisaged project alone and in close cooperation with my colleagues. I didn’t expect to deal so much with these tasks.” (PS 1, female)

“Everything has to be organised by myself, just like in my student’s life. While I still do my side-job in telephone survey at a research institute (60 hours a month) I plan to establish a centre of independent living for advisory activities. Therefore, I try to solve juristical problems, to get valuable contacts and I want to learn how to get along with project acquisition.” (PS 6, male)

Two female novices who are employed in scientific institutes try to connect working with a possible doctoral graduation. One of them stresses the positive work atmosphere among the colleagues but the way to become established in her institute was stony and this could only be mastered by periodically doing without a regular income. The other one is engaged in a university project for about three months, but she stands out due to her optimistical attitude to a possible career as a scientist.

“The work atmosphere with my colleagues is easy and positive, we are all equal partners, making jokes and so on. In the beginning of my employment I was co-writing a project application on fundamentalism. After some months as an assistant I became a research associate now.” (PS 1, female)

“I like to start a scientific career. Soon, I will coordinate a project and plan to make my doctoral promotion.” (PS 3, female)

Irrelevant jobs

Many political scientists are engaged in “irrelevant” job activities. Mostly, these employments are low paid and live on side-jobs during the studies. These jobs are seen as an interstation before being integrated in the labour market later on. Generally, the respondent is sceptical concerning his career chances which seem to be difficult to manage with respect to his advanced age of 38 years.

“I do my job because of the financial necessity. Sometimes it makes fun, doing nothing would be nerveing, I like to work `cause I need activity. The studies have nothing to do with my job. The insurance fund I am employed at doesn’t contain any kind of mental work. I have a fixed job-profile, I don’t need to think much, it is a simple pc job.” (PS 2, male)

The dimension of knowledge (mentioned above) also refers to the recognition of formal and informal company structures, even though these experiences are not perceived as directly interwoven with issues of political science.

“I acquired psychological knowledge, to know how the company functions and its structure. There were some stressy situation when they discarded some colleagues. I learnt how to recognise and assess dangers. But learning efforts at my job are irrelevant for the entrance to work life .. Finally, I am motivated through the plus and minus at my banc account” (PS 2, male)

Social commitment

A good example for the difficult situation of political scientists can be seen by the following. The respondent accepts to do smaller jobs as long he has not found a passable employment. His ambitions concern the improvement of migrants integration in socially disadvantaged city districts.

“I have three different jobs resulting from former activities before and during my studies. I work at a construction site to earn money and I am engaged in a district-project from a local social institution (*Familienbildungswerk*) on a honorarium. I applied for a social work job called district-manager that deals, among other things, with the situation of migrants. Migrants have to be better integrated because the basic rights must be respected. I am also interested in a promotion.” (PS 4, male)

The influence of cultural backgrounds

The cultural background has an impact on the individual behaviour and work approach. In some cases the novices try to distance from their cultural or religious backgrounds as they aim at an objective view concerning religious topics. As, for example, influenced by a project idea on fundamentalism resulted from former study activities a female respondent strives for the maintenance of neutrality.

“There are no moral conflicts, but I feel challenged to keep distance from my own parentage/ origin. Yes I feel prepared to this issue due to my own life, personality, and to neutral knowledge based on my diploma thesis. I am interested in religious questions as I deal with it at work and from a scientific-philosophical point of view.” (PS 1, female)

Experiences of conflicts and believe in change

Most of the novices believe that their generation has *potentialities for societal changes*. They said conflicts can be solved by better education with regard to the exertion of civil rights.

“I believe that young academics can influence the society but the youngsters have less oportunities than the older ones. You can change something by inventions and rediscoveries. Every generation has its own culture. It should be a general task of academic people to change the social conditions.” (PS 2, male)

“Sure, the fish almost smells at its head. An academic person can show the direction to step, but often the sense of responsibility is missing. People shouldn't equate *bildung* with professional education.” (PS 4, male)

Students with migrant backgrounds often differ in their experiences of *xenophobia* from others. A male student experienced racist motivated violence when he was at younger age. He thinks that social conflicts can be prevented generally by a better education of values and human rights.

“Personally, I used to had conflicts and experiences of violence due to xenophobic attitudes, fighting, running, quarrels as the case maybe. Theoretical, one can cope these conflicts by education, if someone internalises certain values concerning equality and individual rights from the constitutional law” (PS 2, male)

B. Novices' appraisal of their studyprogramme after worklife experience in comparison with their opinions as seniors.

Critical view on the programme

Regarding the view on the studyprogramme the respondents mentioned both positive and critical impressions. Partly, the critics contradict the formal structure as the political science programme is strictly divided in different areas of concentration. The general opinion of the programme's quality is negatively, but each interviewee experienced positive exceptions, especially, with some single professors who were engaged to a greater extent.

“It was good to do presentations and to work scientifically in order to achieve professionalism. My scientific term papers are still useful. I regret that I don't know much about the statistic courses anymore .. The programme is chaotically, lecturers are not interested in students, there is no support and the organisation is weak. Only a few professors were teaching in a good way with personal commitment .. I think they should add up rhetoric seminars, English courses for social scientists, and offer more practical trainings. Generally, the programme should concentrate on several emphases.” (PS 1, female)

The social atmosphere

The following novice particularly criticises the *social atmosphere* at university as she thinks that personal involvement and identification with others is rarely possible.

“The general offers from the programme are not attractive. Topics of communication and culture should be extended. The general atmosphere should be more familiar, courses should not be only an obligatory thing. The guys from the field of political philosophy think they are masterheads and they talk arrogantly.” (PS 3, female)

The problem of *self-dependency* and the lack of *practice* in higher education is mentioned in the following statement. Some students have difficulties to motivate themselves within the liberal structure of the political science programme.

“There are not enough practical projects, if you have problems nobody helps you. I would change the programme to a more school-like structure.” (PS 8, male)

Learning and knowledge

A male respondent said that he misses the *theoretical fundament*, *ethical awareness*, and *practical relevance*. Besides some positive exceptions he says the university practice loses its academic culture which was

indispensable for professional acting. Contrary to the liberal approach he calls for a stronger performance approach and at the same time an advanced ethical inclusion within the programme.

“The university study appears to me more and more absurd, shallow average. I am missing a fundament based on theory, propaedeutics, and ethos. It is also too far away from the praxis. The studies are not more than a supplementary product, an illusory world. Higher education provides this attitude and destroys academic ways of living. These few lecturers were good who stepped beyond the common paths, who dared to ask ethical questions, who were engaged actively. Some students are intelligent .. I would add up rhetoric courses, ethical and theoretical issues and change the old forms of learning, e.g. by introducing compact-seminars, I want to have a stronger performance approach. I think the academic education of a political scientist is indispensable.” (PS 4, male)

His individual learning activities made an important contribution to his general motivation of studying. Regarding his negative impression of university he found an opportunity to overcome bad conditions by choosing a tutorial work. This student work enabled him to acquire *didactical competence* and *social skills* and, furthermore, it was useful for him to gain more *theoretical knowledge*.

“I was a tutor for one semester, there I learnt how to interact pedagogically and didactically with human. I improved my empathy and builded up a theoretical fundament to get out of the pragmatic swamp.” (PS 4, male)

The positive outcome of the learning efforts at the studyprogramme are particularly seen in the acquisition of *organisational*, *methodological* and *personal competencies*. The discourse of *lifelong learning* is stressed cynically by a novice as he points to the rising costs (study fee) the students recently have to cope with. He complains about the double-tongued statements of politicians and economists as they demand on longlife learning on one hand and punish students who need additional time for studying on the other.

“I learnt to organize myself, this is the essential process and condition for further scientific work. And I would say that I know about different methods that can be used for writing project-applications. Thematical contents, rather not.” (PS 6, male)

“Learning is an obligation in the length of time. Lifelong learning also besides work is a claim of politicians, but at the same time they rise the university fee.” (PS 6, male)

C. The relation between HE and work: analytical comparison

Professional awareness

Regarding the professional awareness the novices` statements indicate insecurity concerning their self-image as a political scientist. On the one hand society does not seem to appreciate political science as a respectable subject, on the other many novices themselves do not see their subject as a real profession. The sceptical notions root on the distance the political science programme shares to concrete fields of work life reality. Furthermore the medial representation is criticised among the respondents. Political scientists are either well known in areas of opinion research and statistics or as politicians. Although, it seems to be difficult to give a self-assessment from a professional point of view as the studies are liberally, but not professionally, approached. The insecurity also relates to the abstract nature of knowledge distributed through mainly theory-based study courses. Due to the current challenges of positioning somewhere in work life the identity of “new” political scientists remains in vagueness.

“No, I don't feel as a professional political scientist. The studies are like an aquarium, a safed area. I haven't enough detailed knowledge and I didn't prove myself in the praxis. I can hardly assess myself. The programme provided the basics to become a political scientist.” (PS 6, male)

“Political science is not a profession to me, I didn't perceive any kind of this emotion yet because there was no situation I had to recall this professional identity. Ok, everyone can see the statisticians on tv but that is just a big farce, neutrality doesn't exist. People think politics is a dirty business, if I studied medicine the people would respect me more. I don't care about this.” (PS 2, male)

The insight that learning starts to take place after studying is expressed by a female novice. She thinks that her professional identity depends immediately on the acquisition of knowledge and on learning activities at work. As being supported by a sociodemocratic foundation she identifies with the working class and feels to be bounded to step forward at her individual development.

“I don't feel approved in fields of knowledge. Actually, I would now begin to learn and to feel like a professional political scientist. I am a member of the labour union and I got a studentship of the *Hans-Böckler-Stiftung*.” (PS 3, female)

The impact of higher education on the personality

There is evidence that university influences the development of *personal habit*. In this connection a female novice mentioned her *behavioural changes* resulting from the studies. Thereby, she stresses the acquisition of a distanced approach and general forms of objectivity in conversation acquired through the participation in higher education. Aside from the self-perception she recognises a changing external view on her person by family members and friends. As she benefits from social enhancement, she feels more respected and accepted in areas of family and privacy.

“Now, I see everything from a different angle, not only emotionally but rather objective and with a distance. Since I am ready with study they take me more seriously. I make higher demands on others and on myself. In my family and private surrounding I am being perceived differently. I get more respect and I have another appearance. But I am still as I used to be, I am me.” (PS 3, female)

Political inclusions due to personal and social conflicts

Some respondents connect their professional ambitions with political events and individual experiences due to societal images of ethnical and religious affiliation. The German student with her Turkish background was confronted with stereotypes towards members of the islamic religion. At the same time she was scientifically involved in problems of fundamentalism and specialised to topics on religious phenomena. The process of developing a professional identity roots consistently on experiences of global and local problems and the realisation of the diploma thesis. Her employment in a scientific project on migrant issues is suitable to her former activities and her preferences at the university programme. As the political background of her work is connected to global questions of politics and society she confirms feeling as a professional scientist. In contrast to other novices she dares to give a steady and optimistic outlook on her career as a scientist.

“I had contact to the research institute because I dealt a lot with the *Alevites* issue during my studies .. After the WTC explosions you got chat up by some silly people who equate you with

fundamentalists. There are many stereotypes on the islamic religion. I think it is possible to cope this problems by education and by providing the dialogue of cultures.” (PS 1, female)

“Now, I feel like a professional political scientist. This self-impression is based on my excellent diploma thesis and the resulting draft of project ideas. I feel more accepted due to my academic title. I can imagine to start a scientific career, writing my doctoral thesis and giving seminars later on.” (PS 1, female)

The image of political scientists – communication and conversation with others

Regarding the image of political science there are many evidences that this subject-area is not very popular within society. A male respondent complains about a certain mentality as he sometimes mentions his first non-academic education in conversation with other people. They seem to be afraid of intellectualism and of a person who is better educated than themselves. Otherwise, the novice is aware of having the power to influence people and to convince them on certain topics.

“The status of political scientists is bad but this corresponds to our society. Sometimes I tell people that I have done a mechanical education to show them I am down-to-earth .I think I have got power at commuciation, I like to influence others to let ideas become reality.” (PS 4, male)

A similar idea about the power a political scientist has in conversation with other people is described by another respondent. He thinks that he is able to influence human beings by his special kind of speech. Considering the utilisation of communicational skills the respondent is convinced that he could compensate the undervalued image of political scientists.

“I endue the power of the word and with language you can move a lot .. the image of political science is undervalued but not as much as the politicians are. I try to make objection, so to speak: I play the advocat of the devil” (PS 6, male)

Interest in exchanges on political topics

The intensity of conversation on general societal topics (morality and responsibility) did not change among the novices and, furthermore, the attitudes did not change concerning these topics. Topics of rebellious or conformist attitudes did not appear among the interviews. Although the political scientists show a general social mentality they do not seem to be ideologically influenced. At least they often refer to the importance of democratic values and basic laws.

Summary: Comparison between the different programmes

All three academic programmes have an inherent social background in common based on their interest in human behaviour. In each group there are statements demanding a better practical training at university. None of them has an outstanding reputation in the societal context.

- Only the psychologists have a concrete image of their professional identity, whereas political and educational scientists do not see their academic qualification as a direct professional education.
- Most of the psychologists “escaped” into the teacher profession to secure their existential situation, those who plan to work in other fields with psychological application almost changed to the pedagogy programme during the last study period.
- There is a strong awareness of social responsibility among the psychology teachers due to educational challenges. The single type of school and its structural conditions have a massive influence on professional confidence.
- The pedagogues are the most creative and flexible group concerning their job activities. They seem to be well prepared for practical challenges of work life.
- Compared to the political scientists the pedagogues master the problems of integration more successfully into the labour market by individual preparations. To access the job market it is easier for them than for political scientists.
- Most of the political scientists are socially motivated concerning their envisaged job, but they seek the right way to transfer their ideas into reality.
- The political science programme has the most obvious academic approach to knowledge but the absolvents have to cope with the missing of an explicit job market.

