The requirements for contemporary teacher training programmes after the findings of PISA

### The ridiculous aspect of being a teacher

Teachers are well regarded in our society. Politicians be they the Chancellor, minister Presidents or Ministerial secretaries get away with saying they are lazy, incapable of learning and overpaid, that is unless their own children are still in school. Teachers have a lot of holidays, they have afternoons off and they do not really need to work. Memories of school are based on poking fun at teachers and criticising them for supposed or real unfair behaviour or their inability to recognise talent. Even the view held by the university lecturers of their trainees at third level training institutions is ambivalent. A view widely held at the highest level is that the best trainees will not necessarily become the best teachers.

## Are our teachers really so bad?

The public image is not a good one and what forces us to reflect on the matter is the result of international studies, some of which have identified serious deficiencies in teaching. However, let us look first at the positive things that have been done for the teacher during the training process. The current teacher training process, compared with the 80s and 90s has a clear pedagogic content and has a more practical, school related element.

A student today knows what education entails from their training in generic pedagogy. They know the basic school structure, know a bit about lesson shapes and how to advise pupils. His specialist subject studies are accompanied by specialist subject methodology. When they start their teacher training they have learned about the school and the different learning pathways from their placement. Some have even had a placement abroad and have been able to gain experience of schools in England, Norway or France. Sometimes they have had the chance to work on research projects on aspects of school life and teaching.

The training plans, especially in the specialist areas of primary and special education, have a considerably higher pedagogic content and the subject knowledge is confined to more general aspects.

Yet it is becoming clear that this change in perspective in the previous years is not enough to solve current problems in lessons and in the schools which teachers are faced with in their daily encounters with pupils. PISA is not the starting point in this case but a helpful and necessary push forward.

Although the PISA studies have not explicitly dealt with the image of the teacher, there are a range of indications in the results which expose weaknesses in our current training process and offer explanations for the problems in our schools.

There is an unexpected phenomenon to state: there is no statistical connection between the subject specific expertise of a teacher and a positive

motivation for the pupil to learn. Up to now the accepted principle was that only a high level of subject knowledge guaranteed successful teaching. In grammar school teaching in particular this can be observed in the 6<sup>th</sup> form. An almost academic lesson is tried out and is highly rated by the other teaching staff. As a consequence in our teacher training the mastery of the subject is given priority. A pupil's attainment in a subject is dependent on their sociocultural environment. Belonging to a particular social group brings factors into play which influence his ability to notice and learn. The organisation of the curriculum is statistically closely related to the social, ethic or cultural group. Learning cannot be just a question of subject matter organisation.

We have also been alerted to a wider problem. Today's pupils do not form homogenous groups. Instead they represent a wide spectrum of abilities. In today's classes achievement differs dramatically between the talented and the not so talented. There is no longer the middle ability group around which the lesson is organised. If you assume there is such a group the result is that the weaker pupil is not supported and in the same way the talented have not enough opportunity to develop their abilities.

The fiction of this middle ability group may be a relic of the time when the organisation of learning was based on the assumption that learning was possible based on the subject content and maximising the learning structure independent of a pupil's ability. The belief that everybody could learn anything was appealing. The price of this behaviourist view of learning is the dominance of Level 2 in our schools.

Teachers are still trained in a way that the teacher dominates the lesson. That is also applicable for the more open forms of lessons, whose openness is a question of mode rather than content. In this way the main concern is the 45 minute lesson time and not the learning time of the student.

Differentiation is not an unknown concept, at least lesson plans give it some recognition. In everyday practice takes the form of a variety of themes and is seen as a problem of the variety of content. This is obvious in the culture of task setting which is found in most classrooms. They are still focussed on teaching subject matter.

The Literacy and Numeracy results for German pupils must be put in this context. These subjects should have the latest developments in the curriculum. Studies have shown up a lack of perspective that had not been expected. Detailed and comprehensive reading skills are only available to a small group of pupils and using mathematical tools in different contexts to solve problems is a special case and not the primary topic in daily lessons. What should be a normal event is a special case.

# What can our teachers do and what can they not do?

The teachers in our school, when they are good, have an expertise in their subject. They are the expert in ....

Often the pupil suffers from lack of motivation in such subjects because they cannot access this knowledge. The relevance for the world of the pupil who possesses such knowledge is not addressed and often the behaviour of the pupil is designated as uninterested and the pupil is accused of lacking interest.

Today's teachers have learned to evaluate the complexity of subject material and themes. They have learned to create a motivational context to introduce their subject. They sometimes allow more student centred lesson stages. They feel responsible for the entire process, focussing on the target and achieving that target. To do this they invest in creating materials and using new technologies becomes important.

They are not trained to view and understand lesson topics as the result of a problem. Topics are a commodity which come from the teaching tradition or are connected to the educational history as it appears in the scheme of work. They are not the product of the experience of living reality.

They are trained to relate the achievement of pupils to a given norm. They are not able to identify achievements on their own. They can identify deficiencies, but are not experienced at recognising and describing achievements. They have no prognostic abilities, which would enable them to predict how achievements could be developed under certain conditions. That would require knowledge of curriculum development and evaluation. This is something that is often spoken about, but no real theoretical underpinning knowledge is given.

The ability to achieve is closely related to social and psychological components. The teacher must be able to manage individuals and groups in such a way that these are able to self manage, i.e. self motivate. It is not enough to have group work and organise teams. A professional approach means recognising the importance of and dealing with the individual competence of a pupil and follow this up. For this a far more comprehensive, more communicative knowledge is required than has been discussed up to now.

#### The school day – German lessons

The current teacher training studies are quite unable to tackle these problems. There are 140 subject related guided learning hours for twice 40 practice related hours. The current teacher profile, which would have to be based on social, psychological and pedagogic principles, cannot be adequately provided for in this way.

It is interesting, however, to see the result when you consider just the subject specific training. PISA looked at a very narrow part of Literacy, if we take the subject "German", even though Literacy does not only apply to the subject German.

To become a teacher of German, teacher trainees follow a course of German studies. They attend courses to introduce them to Literature and Language Analysis. They are made familiar with the different epochs of literary history. They encounter the lexical and grammatical structure of the German language and in higher level seminars discuss issues of language theory. At the same time they encounter the theory of teaching German.

When they get to the school they face the task of familiarising pupils with spoken language in situations and the different forms of oral communication. They have to be at least familiar with tasks to analyse conversational language if they want to adhere to the scheme of work in M-V. The range of communication types, beginning with the social event and ending with the problems of mass communication, has become a feature of schemes of work.

The teacher has to prepare and develop competences which foster communal and team related problem solving. This assumes that the teacher knows about how groups work and has experience with dealing with different communicative abilities of the pupils involved.

Of course it is expected that the teacher will integrate new technologies in the lessons. Pupils should use the internet and have to be taught to use research to acquire valuable knowledge. Just as Literature is read in the lessons, in the same way Film and TV must be a part of the lesson.

Taking part in general discussion in our society depends on the ability to deal with others' opinions and present arguments for your case. Students do practice this skill during their studies in a particular subject area. However, they do not get experience in how to develop and sharpen an ability to engage in arguing a case in a discussion.

Teachers of course also deal with the written word and writing. They need a knowledge of standard writing and which problems arise when learning the writing system during language development. They must be able to deal with a variety of school specific text types that they would not otherwise use.

Writing assumes an ability to read. Something that can not be reduced to simply the ability to identify the main points of a text. In order to be able read it is not enough to be familiar with theories of literature but it is also necessary to have a basic psychological awareness to deal with texts in different contexts and at different levels. Problems like this are a marginal part of German studies and are only available at larger institutions.

Reading and writing should not be seen as separate from the acquisition of speech and communication. In the secondary school level 1 (Years 5-10, Key Stage 3+4 in the UK) particularly, these processes are seen as completed. The result of comparative studies shows the detrimental effect of this assumption. A development plateau is reached after year 7-8. (Year 8 + 9 in the UK)

All of these "givens" in the daily life of the school are never really experience by the trainee teacher even if they have completed a placement with great interest and have worked more than necessary in their subject specific methodology studies.

#### Standard of training sets new perspectives.

Let us look a little bit further than the set curriculum. With the discussion of training standards defining itself as something closer to the professional life in school rather than the subject specific area, the demands on teacher knowledge are for a prognostic ability of a pupil's learning. The structure of the current courses of study cannot accommodate such a view and simple modifications will not solve the problem. Without a willingness to grapple with the fundamentals of the standards there can only be some suggestions as to how to develop the range of demand which the future teachers have be prepared for.

Let us return to the subject of German. Languages do not exist in isolation. They encounter us as a variety dependent on the context of the communicative situation. They are dependent on social, ethnical and cultural forms and decide verbal and communicative behaviour that we can experience due to particular effects. Spoken competence is more than standard usage.

Speaking and writing are obvious components of a lesson. The technical aspects of correct speech and the written word, which is matched to the cultural situation is not a primary component of teaching at a university, although this is often spoken about. Communication skills and the means of sharing of information which are listener friendly are practical skills which cannon be only learned in a theoretical way. The ability to read presupposes the mastery of different reading strategies.

Recognising the ways information is understood in texts as well as seeing how connotation is used are skills just as much as the spontaneous recognition of main information and opinions and illogical aspects in daily interaction. The study of the semantic reconstruction on the basis of different semiotic systems and the processes underlying them, if offered, are only available to advanced students in German studies, although we are continually dealing with them in everyday life.

These findings show that the subject specific studies as they are presented today can only meet the demands as they appear in a school situation in a very limited way.

#### **Obstacles and barriers**

Something which has not been discussed in detail has been brought to mind in the discussion of the standards. To not learn something has many causes. A neutral expression used is the term "barrier". In this way we are forced to consider the ability to recognise barriers.

Barriers create obstacles to the cognitive, social and psychological processing and recognition of experiences. Such barriers are reticence and fear in different situations. Problems often go unrecognised because attention is distracted or there is poor awareness of facial perception. Little attention has been paid to difficulties in hearing reception. Barriers due to memory difficulties or problems in structuring complex units are better known. Language difficulties have been discussed. This shows that dealing with aspects of knowledge is not simply a language problem. Especially in our information society, this aspect is key.

# What has to change.

Based on the professional life in the school and the perspective of the pupils. this discussion teaches us to identify ways in which we can enable pupils to reconstruct the physical and social reality in a new way.

What is offered in current teacher training is not sufficient to do this. By the way, this statement means that today's teachers have to be included in this process of changing thinking. For them, much is unavailable. New training should include more than the content of teacher training courses.

Today's teachers should be in a position to carry out action research on pedagogic practice. They should be evaluating teaching in a theoretical manner. Teaching and learning must be considered and understood in the context of learning theories. They must be able to diagnose, judge and advise on level of ability and areas for development. Their perspective should not be confined to the individual pupil and class, instead they must view the school system as a process in which these take place. This can be limiting or supportive. Here are new forms of cooperation to be established such as levels of information which go further than the institution. The development of a subject specific pedagogic view of the specific topics of the training standards must focus on the vocational area. This view will produce a new perspective on subject specific studies and a special interest in knowledge because it will have to be a component part of the working life of the school.

A person cannot BE a teacher. They must become one through a continual process in the daily teaching situation.

#### Missing paragraph??

From this, an overview of the content and structure of the state teacher training is necessary when the profile which has been described is given relevance.

The question is not whether to have a bachelor degree or not, but how the demand on a prospective teacher in their training can be organised so that they have and entry point into their profession which allows them to work successfully with pupils. It is not a question of how much knowledge a teacher must have to be a teacher, but rather what should they know to be able to deal with the problems of learning and the related realities that have to be dealt with. To do this, they need primarily not a subject knowledge, but a functional knowledge which enables them to deal in a timely and problem oriented manner.

How can a traditional university like Rostock respond when this background is developing. The Rostock bachelor degree model has a variety of features which could be developed to provide a solution. Faced with the complexity of the problem, Rostock offers a concept whereby the different aspects of teacher training are studied in an integrated way rather than in a successive way.

In the first 6 semesters one subject is studied in depth and a second in a more general way. Accompanying this is the study of how to teach and how to deal with subjects outside the teacher's specialism.

In the course of study for a master degree, the second subject is completed. In this way a three or four strand basic structure exists to combine different competences. A modular format is vital for developing concepts. The existing bachelor subjects are the basis of the subject specific studies. It must be noted that they are not enough to meet the demand on a teacher. It would of course be possible to define the school subjects through other modules.

The development of the teacher's own practice in an academic and theoretical way is seen as a key element in the modern teacher's training. To this end the component on teaching competence in the bachelor degree studies could be used for practical work in the school. This would need the willingness of the schools and the interest of the workers in the regional teacher training institutes to advise and look after the student teachers. The components, which are designed to focus on topics outside the teaching subjects could be used in the orientation in teaching theory. A graduate of such a bachelors degree would be knowledgeable in teaching theory, would have knowledge in a second subject and have a pedagogic qualification that they could use in school and beyond.

Working in a school and teaching would allow the new teacher to make the decision to follow a master degree programme with subject in depth. This would prepare them in a systematic way for teaching in a school. Tests in teaching competence should allow them to make a judgement on whether they are suited for the profession. This would allow broader exams to prevent less suitable candidates choosing the profession.

A masters degree would be primarily focussed on the needs of the school. Besides the second subject that they would study in a general way, if they want to work in a grammar school, the masters degree would equip them with competences which have been spoken about at the beginning of this text. If the content of the course of study is modularised, there would be building blocks of modules which could be put together to meet specific demands.