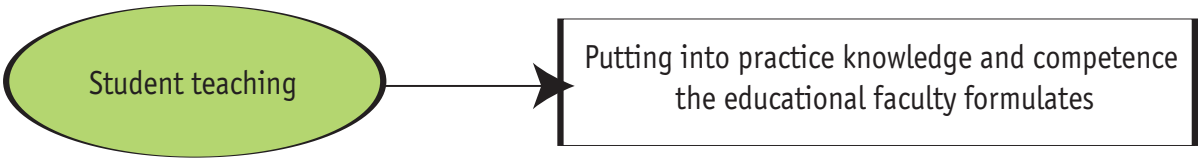
In-depth pilot project Academic Elementary School (PDS)

In September 2006, the Utrecht schools called Ariënsschool and Hof ter Weide, as well as the Amersfoort schools de Kubus and de Tafelronde began the in-depth pilot project called Academic Elementary School. This project makes it possible to connect the existing practice of "teacher training within the school" with school development and practical research.

Leaders at these schools are aware that, on the long term, this approach can produce more and better qualified teachers who focus on educational opportunity and employ innovative educational concepts. Reason enough for the directors in question, the Catholic School Board of Utrecht (KSU) and the Board for Catholic Elementary Education of Amersfoort (KPOA) to cooperate by investing their own efforts and working together intensively with partners the Domstad University of Professional Education (Hogeschool Domstad) and the Educational Consulting Organization KPC Groep. These schools are not starting at par but building upon six years of innovative training experience.

Changing visions of training within the school

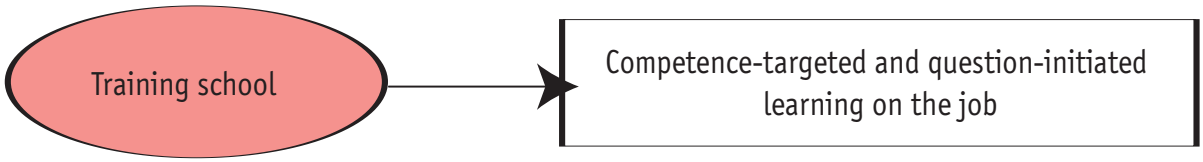
"All elementary schools are training schools," people tend to say. True. In elementary education, training has taken place on the work floor since time immemorial. In all that time, the actual situation in the school was an extension of the educational faculty: a place where student teachers put theory into practice. Theories were originally philosophical and pedagogical and later became psychological and methodological.



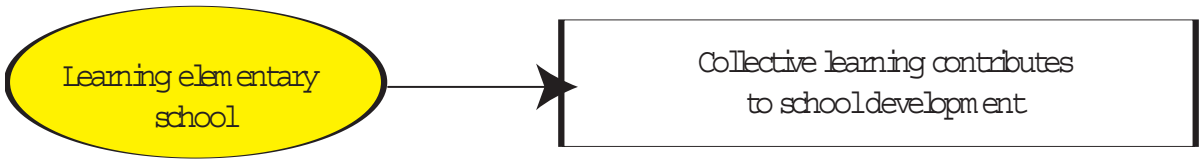
Often it seems the theory provides too few links to allow a beginning teacher to perform successfully in the classroom. Those concerned with schools and training admit this and research proves it. The practical situation shocks many teachers when they are first completely responsible for a group. This is why instructors

have introduced the Teacher-in-Training module into the fourth year of Teachers' Training College. If this shock is part of training, students in this phase – in addition to their responsibility for a group – also receive sufficient guidance as they go on learning. In these times of teacher shortages, the government is stimulating a parallel policy of admitting university and college graduates to the profession through a side door. They become teacher apprentices as they learn. Additionally, the government is stimulating differentiation of jobs in schools as an impulse for teaching assistants' apprenticeships.

The success of Teacher-in-Training, the side-door policy, and teaching assistants means that schools and Teachers' Training Colleges are experimenting with intensifying the learning experience on the work floor. A number of schools are experimenting with in-school, competence-targeted training for third and fourth-year student teachers.

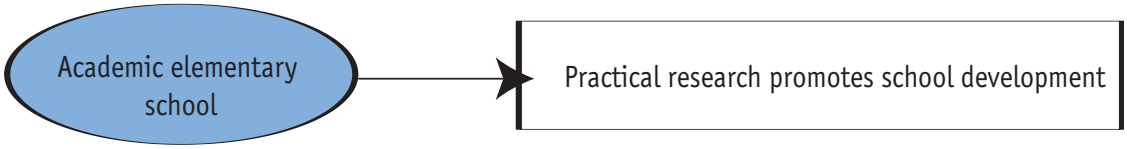


Not only students and internal and external coaches but also other involved persons realize that students work with others at school as full colleagues much more quickly than in the past when their in-school experience includes competence-targeted and question-initiated learning. For instance, students become involved in school-development processes, contribute their thoughts to their course, and carry out related tasks. Through their Master's theses or professional activities surrounding graduation, students focus on the content of their school-development tasks too. The student teacher learns as the elementary-school team learns.



Student teachers' increased involvement in school-development processes means they ask guidance personnel and subject teachers more and more direct questions about levels of content. Concurrently, teachers at the teachers' college are able to watch practical aspects of elementary-school development over their students' shoulders. The college teachers' expertise in content means they identify practical

problems and help their students ask themselves questions and more systematically investigate existing practices at school. Research of this sort becomes more interesting for the school when it contributes to realizing an inherent ambition or solving a problem. Schools that have a clear course, that target quality issues, that want school development and innovation profit most. School directors who know the required knowledge for different types of schools can draw up strategic plans. One way of doing this is to assign elementary schools a role as centers of innovation and personal development. Teachers' colleges introducing practical research into their training program to improve the final level of teacher education are keen to contact these schools.



If a lector[1] from a teachers' college guides such practical research methodologically, these schools can take a further step, developing into academic elementary schools.

What is an academic elementary school?

An academic elementary school is a school that links its actual pedagogical development with practical research by teachers in the framework of a Bachelor's or Master's degree for elementary-school teachers. Practical research is thus part of learning on the job. This means that student teachers have concrete and well-defined tasks within the framework of actual school development and that they can complete these satisfactorily by doing practical research. This teaches them to carry out relevant research in practice. Concurrently, they contribute actively as team members to the whole team's knowledge of the school development in question.

The term "academic" may sound a bit pompous, but it indicates that the practical research incorporates a systematic and

[1] The Dutch higher education system distinguishes between Research Universities and Universities for Professional Education. A lector is a professor at a University for Professional Education. A lector has a leading role in applied science in relation to education (hence a role comparable to that of professors at Research Universities).

methodological approach. After all, not all research takes place equally systematically or methodologically. A parent questionnaire, an analysis of faults, or an analysis of strong and weak aspects of the school done on a late afternoon does require an investigative attitude on the teachers' part, but that does not make it systematic research. Practical research plays an important role in the academic elementary school. Firstly, one must learn to do research. After that, student teachers under the guidance of an expert actually do the research. This is research furthering actual school development. It is also research that can evoke new questions and produce spin-off, encouraging school teams to learn and innovate. In fact it is the Dutch version of Professional Development Schools.

Academic elementary school: a significant change of culture

The practical situation in the academic elementary school turns out, however, to be more complex than originally imagined. Those involved must bridge the gap between the schools team's "common sense" and more abstract scientific knowledge from outside.

The transience of our society, dominated by economic and functional thinking, tends to make us label intensive reflection and contemplation at work as unproductive. You see, in order to arrive at the efficient production of knowledge, we have separated thinking from doing... Research, vision, and method development are not thought appropriate for active teachers; that's a job for experts. The next step is that experts dream up for active teachers a number of theoretical concepts, which they try to fob off on schools via "knowledge circulation" or "implementation strategies".

This inheritance from the past, separating thinking from doing, places teachers in consumer role. Concurrently, lots of attention in education goes into educative processes, promoting a culture of doers.

That is where we think things go wrong.

How can a 100% doer register a child's thought development and learning process? How can you expect children to start reflecting when so many routines have slipped into the teacher's life that he or she can hardly reflect at all? How can we prevent our children from copying their teachers to conclude that learning is doing mechanical and meaningless tasks others have devised? What counts for the teacher in relationship to the children counts for the academics in relation to

the student teachers. The visible separation of thinking and doing can easily put decelerate innovation. Separating thinking and doing means those involved cannot fully own the process of their own development and of the knowledge they need to develop. Where ownership of process is lacking, development stagnates.
To promote development and innovation in schools, we think it is necessary to reinstate the relationship between doing and thinking. To come to grips with the world meaningfully, it is necessary to act and reflect on one's actions, to do tasks and research the process of doing them, and to discover one's own talents. Development and learning in both children and adults is not a one-off product, but a reciprocal process. A process taking a lifetime. A process you can plan, but that always heads somewhere else. The academic elementary school offers chances to introduce more depth into this process.

Where are we now?

We recognize "old images" of training within schools in schools and in teachers' training colleges. At the same time, different teachers, directors, and teachers'-training managers project new images of training within schools and about the academic elementary school. Old task and responsibility chasms between schools and teacher training go with old images, while new images need new structures.
We distinguish three domains of importance:
- Competence-directed and question-initiated learning on the work floor
- School development
- Practical research on behalf of school development

Competence-directed and question-initiated learning on the work floor

Learning on the work floor is central to student teachers' developing competences. They can practice different teacher roles and tasks, acquire competence and authority, hone these, and use them independently.
The Dutch Education Professions Act lays down the competence to develop. The Act distinguishes seven areas of competence:
1. interpersonal relationships
2. pedagogy
3. subject content and didactic ability
4. classroom management
5. cooperative work with colleagues
6. cooperative work within the school environment
7. reflection and development

Actions of a competent teacher rely on relevant and connected knowledge, skills, and attitudes.

Competence-directed learning on the work floor does not assume a standard way of learning for everyone. Student teachers choose their own way of learning based on an individual strength-weakness analysis. Personal desires regarding distinct profiles and school-specific learning possibilities play roles here. Schools differ. The school profile determines the learning situations on the work floor from which student teachers learn and fail to learn. Not every school is able to offer all professional situations characteristic for the profession or every needed technique. Elementary-school mentors play important roles in competence-directed and question-initiated learning at work. They introduce student teachers to roles, tasks and situations typifying the teaching profession in their school. Together with a study-career guidance counselor from the teacher-training college and internal school coaches, mentors guide student teachers in developing competence.

School development

School development happens when a team, acting systematically, continually guides change through the design and organization of educational processes. It aims to create optimum conditions for each targeted development in children. Quite a mouthful! School development is:

- team-based, collective learning to improve children's learning processes at individual, group, and supra-group levels;
- planned at all times, not drifting from hype to hype;
- guided both in content and process of the changes; it is not "laissez faire";
- thorough in its approach to designing and organizing educational processes'; it is not cosmetic intervention or "professional" asides from stage left;
- focused on creating conditions for children to achieve development goals; it does not fill didactic toolkits based on chance offers from training or guidance institutes.

Yes, quite a mouthful! This means you know what you want as a school team and mutually plan how to get it. Not all school teams can pinpoint this clearly. The first step is to reflect on the school's course:

- Are we doing the right things?
- Are we doing them well?
- How do we know?
- Do others agree?
- What are we doing concretely with our wisdom?

The team answers these questions using information from children, parents, school inspection officers, and others. These questions produce such a mountain of information that you must shuffle and establish priorities rapidly. After all, you can't work on everything at once. The first step is to take on crucial conditions needing urgent attention.

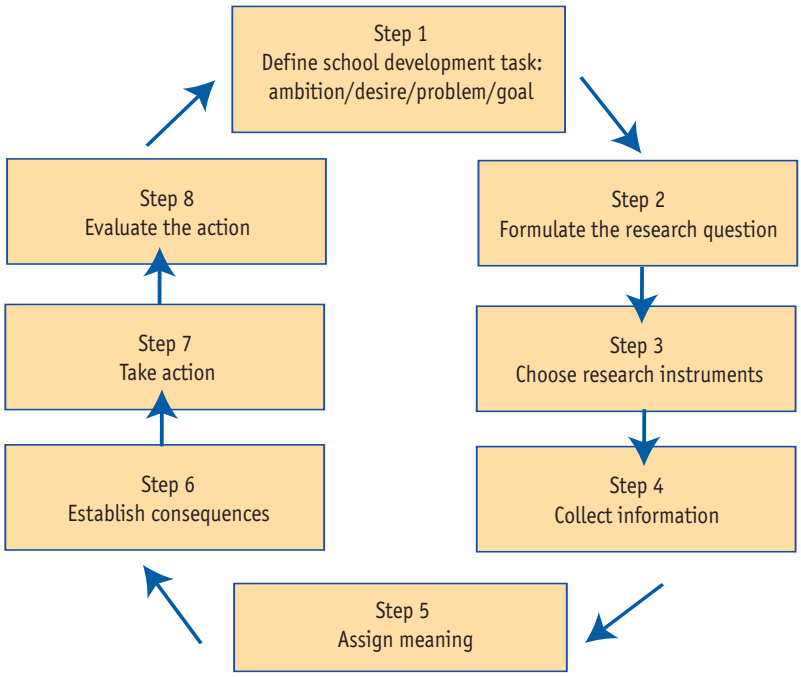
Practical research promoting school development

At academic elementary schools, teachers do practical research to promote school development. They implement new practices and use their action research to produce results they can use directly in innovation. Management goes through learning experiences at the level of differentiating tasks and jobs. Communal knowledge develops at the level of systems because participating schools are linked at the national level.

Concretely, this means that teachers and supporters of education in the school systematically research their daily work in the practical situation. They formulate research questions based on practical problems or on ambition. Subsequently, they collect systematic information, analyze the collected data, and make provisional conclusions communally (= assigning meaning). They then attach consequences to their conclusions ("What will we do how/otherwise/better?"), try these consequences out in practice, and evaluate whether they have solved the problem or realized the ambition. This means the elementary school is the middle point of knowledge development in elementary education; the learning child is the core element of the elementary school. The hub where different knowledge partners find one another is the actual working situation in the elementary school. The more complex the school's questions, the more knowledge and knowledge partners it needs. The more people involved, the more complex the cooperative effort.

Practical research in academic elementary schools

We use the following learning and research cycle for practical research within Hogeschool Domstad:



Step 1 Define school development task: the team's ambition, desire, problem or goal

The point of departure for practical research in academic elementary schools is the student teacher's delineated, defined school-development task. At school, you run into something either as an individual or as a team, you call attention to something working differently from what you want. Or, you have mutually set out a course to concretize it. Or you are mutually seeking a course to pursue and need inspiring input. The first step in practical research is clarifying this school-development task.

Step 2 Formulate the research question

Once he/she has clearly delimited and positioned the school-development, the student teacher formulates his/her research question. This is the most difficult

step in the whole process and, concurrently, the most crucial. The student teacher describes how personal considerations frame his/her research: what must I be able to do to carry out the task properly? What must I know, in any event? What do I think I know in general; do I want to check whether that is true? What do I already know based on existing educational psychology, didactic subject matter, and pedagogic theories? What do I ultimately want to learn from my research?

Step 3 Choose research instruments

The research question determines not only what the student teacher wants to know, but also often how to learn it best. If you want to learn something about student behavior or about your own actions as a teacher, use either open or closed observation methods, possibly supported by video recordings. When you are looking for opinions, desires, or needs, you use either open or structured interview techniques. Fault analysis of student work can put you on the track of wrongly registered thinking patterns. Research into sources and archives can help you find approaches proved successful. Logbooks of both students and teachers often reveal openings for further reflection and research.

Step 4 Collect information

When the student teacher has chosen his/her research instruments, information collection begins. The quality of the research instruments, but also the competence of the teacher working with these influences amounts and quality of the information gleaned. A well-structured interview, for instance, done using a poor interview technique may possibly produce less valuable information than when both are excellent.

Step 5 Assign meaning

An important step in practical research is communally assigning meaning to found information. Often with team members, the teacher confronts the question: "what does the information found mean for my school-development task? The research question is the searchlight. One analyses collected information and makes cautious conclusions, always keeping the research question at the back of one's mind.

Step 6 Establish consequences

The new insights and tentative conclusions subsequently bind the teacher, in discussions with colleagues, to the consequences for his/her own acts. What will I/we do differently to realize the agreed upon school-development task?

Step 7 Take action

In this step, the teacher puts into practice consequences for his/her own actions.

Step 8 Evaluate the action

In the last step, the teacher evaluates whether his/her actions have led to realizing the school-development task, based on new knowledge and insights. Usually this step produces new ambitions, desires, goals, or problems to research. Thus, a new starting point arises for further learning and research processes.

Realizing aims in three connected areas ...

The students are active in all three areas: competence-targeted and question-initiated learning on the work floor, school development, and practical research. In everyday practice, this means that guidance roles that are formally separated overlap. Often there is question of unified personnel. In all academic elementary schools, the people responsible for school-development process are knowledge-circle members too. Hogeschool Domstad external coaches and study-career guidance counselors are members of the knowledge circle. At all four schools, internal coaches work with guidance counselors from the educational faculty. The fact that personnel is unified improves chances of realizing progress cohesively in all three policy areas (school development, educating/learning on the work floor, and research). Nevertheless, to reach the goals of the minor subject area for graduation, it is important to remain alert to the three-part goals of the academic elementary schools. This makes critical reflection on process crucial during the in-depth pilot project.

Practical research by Tim and Welmoed at the Ariënsschool in Utrecht, a nascent academic elementary school

Tim van der Voort,

Welmoed Rietstra

Tim and Welmoed are in their third year of teacher training, taking a minor subject called Academic Elementary School within the Educational Faculty of Hogeschool Domstad. They are doing practical research within the framework of learning on the work floor. Both students have never done research before and have never had any training in this. In parallel with "doing research", they learn which steps they have to take in the educational cycle. In addition, they get limited training in a number of research skills, for instance, interview techniques. Two days a week, they teach a student group; one day a week, they do research activities at the school; the other two days they prepare their research and lessons and take part in supportive meetings at the University. This makes actual school development at the Ariënsschool the point of departure for a delineated school-development task, which they fulfill.

Actual school development at the Ariënsschool

The Ariënsschool had to work from the summer of 2006 to April of 2007 without a principal. This had the foreseen effect on the school-development process. The cluster director and the internal coach kept the school going during this period. One notices that this school-development process may have slowed, but this does not seem to have adversely affected the internal coach's social and pedagogical drive. Cluster director, Ariënsschool principal in the past, and the coach formulate the school mission as improving social chances of children from language-impoverished backgrounds. This makes good language policy essential.

Introducing preschool into the Ariënsschool has increased the percentage of language-impoverished students entering the school, bringing to the foreground problems with the students' inadequate vocabulary. Concurrently, numbers of teachers are decreasing due to changes in the ruling assigning numbers to schools. Whereas in the past practical education was possible with more teachers per group, the school must now design creative ways to promote team-teaching. Within this context, the team uses a collective pedagogical vision and a culture focused on learning to implement language policy systematically. An important bottleneck in doing this is that staff needs to combine and fine-tune the different methods mutually. The team uses the thematic-language approach of a program called I & Co. to accentuate vocabulary development more fully ("Working With Words"). The team also looks for ways to connect the differentiated, technical, learning method with vocabulary development. Additionally, team members use clusters of words in social studies to stimulate vocabulary.

School-development choices the school faces

The internal coach of the Ariënsschool is aware of the importance of socializing its teachers around the school's pedagogical vision. A systematic schooling approach for personnel and student teachers fits within this socializing aim. Important elements are to achieve insight into learning systems and study methods, to develop a mutual, planned pedagogical, didactic, and organizational way of thinking through the lessons, to interact effectively and cooperatively with parents and institutes in the school environment. This requires of team members not only skill but also a willingness to invest more time than average in preparing lesson activities. On top of that, the new approaches make supportive materials necessary for made-to-measure learning; instances are PCs with software and graphic materials.

Interventions in the school-development process

Interventions the internal coach considers aim at facilitating team members' learning. Some examples are study days with experts, linking up with citywide initiatives to improve education in technical reading, promoting team-teaching so that teachers learn from one another on the work floor, and encouraging self-study through performance interviews and personal-development plans for student teachers. The new principal subsequently chose to revive the school-development course in the area of vocabulary development and to give Tim and Welmoed a directed school-research task in this area.

School-development task and practical research

Tim and Welmoed's school-development task (step 1) was to ask teachers about their learning experiences with the modernized vocabulary training in the elementary school and to present the results to the team. The team hopes to improve and accelerate implementation in junior and senior high by mapping and discussing these experiences.

The research questions break down into 4 parts (step 2):

1 Which needs, desires, and expectations do teachers have in elementary, junior and high school with regard to implementing "vocabulary training"?
2 Which needs, desires, and expectations are in place already due to implementation in the elementary school?
3 Which factors encourage and which inhibit this process?
4 Which lessons can we learn from this for implementing "vocabulary training" in junior and senior high school?

As an educational instrument (step 3) they choose to do partially structured interviews. In order to get a good picture of actual vocabulary training at the elementary level, they observe lessons as well. Tim and Welmoed made summaries of the conversations after they did the interviews, thus imposing a first selection on their collected information. They then analyzed the interview summaries based on their four-part question (step 5). This led Tim and Welmoed to the following conclusions and recommendations:

Continuing the course of creating vocabulary development

There is a need to know what the children were taught in previous years. There is no record of this yet. Talks must take place about which themes play a role in the whole school. Each teacher can use these themes to work further in a directed way, based on what is offered that year.

Offering schooling and support

There is a need for practical guidance, repetition of study days, and ideas focused on junior and senior high. Teachers need feedback. They need to know whether what they are doing is good and they need to discuss their ideas with others.

Purchasing materials

Sustainable materials like written-out lessons, vocabulary lists, and graphic materials are effective on the long term. At the beginning, preparing and presenting these lessons takes a long time and is a lot of work. It is important to purchase materials.

We are thinking of a camera and printer. In addition to that, it is important to create sustainable and clearly organized files per grade or theme. There must be space to store materials.

Creating lesson and development time

It takes a lot of time to get "vocabulary training" down pat, particularly when it means finding graphic materials. At the beginning, the teaching timetable and the teacher's own planning must include free time to do this. Teachers find it difficult to plan the vocabulary lessons because they have to leave something else out to do it. The teacher's diary and the class's teaching timetable must free up time for this. Choices must be made. Teachers can win time by integrating more subject areas into the theme. Certainly, at first, "vocabulary training" will replace other activities.

Promoting team-focused cooperation

Cooperation is efficient and safeguards quality. Teachers can ask for feedback from one another and use each other's experiences. Cooperation is possible within each school type. Working together makes it easier to create a through-going line in collective themes.

Offering structural internal support

Supplementary support is necessary, added to guidance by external experts, to guarantee continuity of innovation. A language coordinator could keep an eye on "vocabulary training", even if only to ensure it is always on the agenda for teachers' meetings.

Tim and Welmoed went on to consider how they could give feedback about their research results to the team (step 6). They chose a short presentation followed by a game with two dice. One die contained conclusions -- Vocabulary training takes a lot of time; Cooperation is efficient; We should repeat the two-day study period; Sustainable materials are efficient; A language coordinator is a good idea; A through-going line would be a great thing in the future. The other die contained questions: What does it mean to me? What does it mean to us? What can I do/ do I want to do/am I going to do about it? What can the team do/does the team want to do/is the team going to do about it? What do I need to change about myself to do this? What do I think of all this? Playing the game (step 7) led the team to the collective process of reflecting on the research results and on the question "What do we do next?" When we look back at the presentation and the game (step 8), we can say that Tim and Welmoed properly carried out their school-development task. Their approach led to discussing learning experiences and bottlenecks in introducing vocabulary development. The team acquired more feeling for factors supporting introduction, which expectations exist as to roles and tasks, and how ready the team is for action.

What have we learned from this?

Tim and Welmoed's example shows that student teachers can carry out a delineated school-development task with the aid of practical research. There are, of course, a number of notes in the margin. While those involved at the Ariënsschool could recognize the research results, the quality of the different research steps could be higher. Going through and experiencing the entire research cycle was new for the student teachers. At this point, I dare to answer the question "Are we doing the right things?" with a yes. In answer to the question, "Are we doing well?" I would say that this is not yet the case. Every step in the cycle of practical research demands focused schooling, training, practice on the work floor and study of sources relevant to the chosen subject and the method. This means that Faculties of Education can access a wonderful tool by incorporating practical research systematically into their Bachelor's or Master's programs. In addition to serious reflection on the curriculum, this demands further professionalizing teachers and professors, and elementary-schools guidance counselors and coaches. This is necessary to do practical research on the one hand, and to stay abreast of "state-of-the-art" educational psychology, didactic subject matter, and pedagogical school-development themes on the other.

It's worth a whole new cycle of research to figure out how to achieve this ambition!

Quotes

"I think school development at our school is important because we are a new school and we have chosen our educational concept very consciously." *(Judith van der Lee, project manager of school development at the elementary school Hof ter Weide , Utrecht)*

"I talk to student teachers about the school's vision and research in relation to school development. I involve the team in the in-depth pilot project to keep that 'we-feeling' alive." *(Alice de Jong, principal Ariënsschool, Utrecht)*

"I am a knowledge-circle member and therefore active in my role as researcher. We establish the link with the practical situation by joining the elementary schools in researching relevant and desirable outcomes." *(Simone de Koning, researcher and knowledge-circle member Hogeschool Domstad, Utrecht)*

"My mission to discharge my coordinator responsibilities and contribute to school development by finding good matches between student teachers and practice-teaching situations." *(Henk Jacobs, Coordinator of the Centre for Professional Development in Schools of Hogeschool Domstad, Utrecht)*

"I am involved in the student teachers' research. I give them guidance, in consultation with the internal coaches from both schools." *(Simone van Dijk, study-career guidance counselor Hogeschool Domstad, Utrecht)*

"The student teachers are getting better training and being exposed to more facets of their future work. I think this could make them better teachers." *(Arjenne Velterop, teacher at the elementary school de Kubus, Amersfoort)*

"I support ideas surrounding the Academic Elementary School and, at the same time, see this as a chance to be a vital link between the elementary schools and the teacher-training faculty of the Hogeschool Domstad. *(Willy van Dijk, project manager Academic Elementary School Utrecht-Amersfoort)*

"The exciting thing about coaching student teachers is being involved in both subject-matter questions and personal development. I really like forming a team with my colleagues in guiding a student." *(Yvette ten Barge, coach elementary school de Tafelronde, Amersfoort)*

"As lector, I manage the research of the knowledge circle. In addition to the teachers at the Hogeschool Domstad, the movers and shakers in school development take part in the knowledge circle. That is how we guarantee the link between practical research student teachers do in the schools and real school development." *(Winfried Roelofs, lector Hogeschool Domstad, Utrecht)*

Proposal on the PDS Conference Orlando Florida 11th of April 2008 time; 2.30 – 3.15 pm

Dutch PDS, a commitment among teacher-training schools, school boards and schools

Professional Development Schools (PDS) are hot in the Netherlands. Our government has subsidized thirty-five large projects. Ultimately, it hopes these will reveal the advantages and qualities of cooperative professional development so that school boards and teacher-training schools work together to accent these in schools. PDS ensure unity of student teachers' education, school innovation and, often, practical research. It is difficult to set up collaborative projects among school boards, schools, and teacher-training schools. Each has its own culture, its own way of working, and its own idea of educational commitment. Schools welcome student teachers if their activities benefit the school, if huge amounts of time do not go into supporting them, and if the educational faculty keeps pace with the schools. Partners involved spend much time on agreements to make in-service training a positive experience for everyone. However, if the training includes research and innovation within schools, problems multiply if agreements are not robust. PDS need special agreements, trust, and communication on all sides.
In the Netherlands, several on-going projects throughout the country aim at outlining possibilities for commitment among universities, school boards and schools. What can we agree, what can we expect from one another, what defines success? This proposal gives you a glimpse of the Dutch situation. This is how we have dealt with PDS to the present day.

Rosa Hessing *r.hessing@kpcgroep.nl*
Ria Logtenberg *f.w.logtenberg@pl.hanze.nl*

Rosa and Ria are connected to the in-depth pilot 'Academic Elementary Schools' an initiative of Schoolboards of public Elemantary schools of Groningen, Scheemda, Veendam and Tynaarlo in cooperation with Hanze Hogeschool PA Groningen and the University UOCG Groningen.

Winfried Roelofs *w.roelofs@domstad.nl*
Willy van Dijk *w.vandijk@kpoa.nl*

Winfried and Willy are connected to the in-depth pilot 'The Academic Elementary School Utrecht-Amersfoort, an initiative of the Katholieke Scholenstichting Utrecht (KSU – Catholic School Board Utrecht) and the Stichting voor Katholiek Primair Onderwijs Amersfoort e.o. (KPOA – Board for Catholic Elementary Education Amersfoort), in cooperation with Hogeschool Domstad. (Domstad University of Professional Education) and KPC Groep. (Educational Consultancy Organisation)