ED 407 402 SP 037 318

AUTHOR Veugelers, Wiel; Zijlstra, Henk

TITLE Learning Together in Networks of Schools and University.

PUB DATE Mar 97

NOTE 16p.; Paper presented at the Annual Meeting of the American

Educational Research Association (Chicago, IL, March 24-28,

1997).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *College School Cooperation; Educational Change;

*Educational Cooperation; Foreign Countries; Higher Education; *Partnerships in Education; Professional

Development; Secondary Education; *Teacher Collaboration

IDENTIFIERS *Netherlands

ABSTRACT

The collaborative schools networks are an important means for modernizing education in the Netherlands. The freedom of organization allowed by the Dutch educational system results in schools having more responsibility for their own financial affairs, task differentiation for staff, and curriculum organization and structure. Nearly 70 percent of the 450 Dutch schools for Upper Secondary Education participate in collaborative networks. This paper outlines the development of the Upper Secondary Education School Network, a collaboration of the Center for Professional Development in Education at the University of Amsterdam (Netherlands) and 20 schools. University faculty stimulate and structure this interchange, working with teachers on action research and bringing expertise to the participating schools. The structure and operation of the network is described, along with such functions as interpreting and influencing government policies, learning from others' experiences, developing new educational approaches and materials, and creating new initiatives. Finally, elements in creating a successful network are outlined. These include: creating an atmosphere of mutual confidence and give and take; the combination of schools in the network; professional development education and school development; trendsetters in schools; collaboration and competition; and financial support. (Contains 17 references.) (ND)



LEARNING TOGETHER IN NETWORKS

of

SCHOOLS AND UNIVERSITY

WIEL VEUGELERS & HENK ZIJLSTRA UNIVERSITY of AMSTERDAM

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Paper presented at the AERA-conference CHICAGO, MARCH 1997

On Thursday afternoons, teachers from different schools meet to exchange experiences, reflect on their practice, and produce educational materials. Because they have been doing this for years, they know one another, they know one another's schools, and they know how they can help one another. Together, they form a community of learners.

Since 1988, the Center for Professional Development in Education at the University of Amsterdam has collaborated with 20 schools to create the Upper Secondary Education School Network. Schools learn from one another, analyze one another's practice, and develop various initiatives. Teacher educators from the University stimulate and structure this interchange, working together with teachers on action research and bringing expertise to the participating schools.

The collaboration of schools in networks is increasingly regarded as an important means for modernizing education in the Netherlands. Nearly 70 percent of the 450 Dutch schools for Upper Secondary Education participate in similar networks, of which ours is the oldest and largest. We have published two bestselling books called Networking on Upper Secondary Education (Veugelers and Zijlstra 1995a) and Practices from the Study House (Veugelers and Zijlstra, 1996b), and the Dutch government recently awarded us the Athena Prize for the best network in secondary education. Here we outline the methods and development of our network and show why schools and universities in the Netherlands choose this approach to modernizing their upper secondary schools.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)



[☐] This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

RESTRUCTURING UPPER SECONDARY EDUCATION IN THE NETHERLANDS

Upper secondary education in the Netherlands consists of pre-university education and senior general education. Pre-university education, for ages 15-18, is a prerequisite for university study; senior general education, for ages 15-17, usually leads to higher vocational education. The final examination determines entrance possibilities into all higher education.

The Dutch government has recently subjected upper secondary education to a restructuring initiative. This restructuring must provide an answer to changes we see in students, who are at the same time more independent and shrewder about educational options. Schools must demonstrate effectiveness in transferring cultural capital to their students and in caring for students. In addition, higher education requires that secondary education better prepares students for university study.

Upper secondary education in the Netherlands has to change therefore its methodology, so students are becoming more active learners. Schools are getting a greater autonomy in organizing their own education and in choosing their own teaching methods. The government wants education to encourage students in upper secondary education to take a more active attitude toward learning. For that purpose schools as organizations must be reorganized into so-called 'Study Houses'. Two educational concepts often mentioned in the discussion about the Study House are instruction and independent learning. Teachers should reduce the time spent on instruction and it would be advisable to give instruction in the form of lectures for large groups of students. In Study Houses students should learn more independently than they do now.

What are exactly the changes in Dutch Education? It is often said that in modern education teaching is replaced by curriculum material and modern media, which take over a great part of the teachers' tasks (Apple 1986; Veugelers, 1989). Active learning means in this kind of education that students just follow predescribed paths. These changes in education result in a dequalification of teachers' work.

The changes in education can develop either in the direction of the strong framed curriculum or in the direction of the weak framed curriculum (Bernstein, 1971): in just following determined paths or in meaningful learning on real problems. We are working with schools that want to develop the weak framed curriculum: a student-oriented learning in a curriculum with weak framing. Here the dialogue between teachers and students is central.



This education may be regarded in different perspectives: from a constructivist view, students construct their own knowledge but teachers guide these constructions; from a subject matter perspective, teachers analyze and support the construction of meanings and the learning of subject specific skills; from a didactic point of view, teachers help students to regulate their own learning process by handing over learning functions from teacher to student: from a social psychological point of view, teachers have to teach students to function as part of a community, cooperative learning is an element of this; and finally, from a pedagogical point of view, it means that teachers try to influence the identity construction of students (Giroux, 1989; Veugelers, 1995).

In our opinion the just mentioned emphasis on instruction and independent learning causes a deterioration of educational thinking concerning the Study House. In this way a student-oriented learning in a curriculum with strong framing would be created, whereas we plead for creating more room for a dialogue between teachers and students in the Study House: between instruction and independent learning we find this dialogue between teachers and students.

In our Network we place strong emphasis on the border area, on the interaction, the dialogue between teacher and student. In this respect we pay attention to the above-mentioned perspectives: subject-matter tutoring, learning how to work independently, functioning in a group and the development of an identity. The meaning we give to the Study House is that of an educational institution characterized by an intense interaction between teachers and students; an interaction which is on the one side flanked by instruction and on the other by independent learning.

We work with schools that want to develop the weak-framed curriculum, by stimulating self-regulated learning, constructive classrooms, and critical thinking, sometimes in the context of a critical pedagogy (Veugelers 1997).

SCHOOLS DIFFER

The Dutch educational system allows what is called freedom of organization in education. Within the boundaries of the government regulations each school may organize its education in the way it prefers. Nowadays the policy of the government is aimed precisely at giving schools possibilities to increase this freedom of organization. Schools are getting more responsibility for their financial affairs, for differentiation in the tasks of their staff and for the organization or structuring of education. The formal curriculum has been



formulated by the government, in the Netherlands we have a National Curriculum.

In theory, schools within the same school type are the same, but actually schools do differ. Schools differ from each other, for example, in topics like the duration of teaching time, tutoring and counseling, cooperation between subjects and special programs, as well as philosophy and educational views. Because of these differences, in choosing a school for their children parents need to make a informed decision. Especially in big cities each school creates its own educational profile in order to attract a certain part of the population of pupils.

Schools organize their own education and in that they express their own identity, react to their specific population of students and take a specific position with respect to other schools. This structuring of education is a continuing process that obtains a special impulse when schools have to introduce reforms or when they are faced with real difficulties.

Due to the fact that schools have their own population of students, their own identity and their own educational context, there cannot be just one answer for all the schools. Each school has to find its own solution to various challenges. Centers for Professional Development try to help schools to meet these challenges. These institutes cannot, however, provide uniform models for school organization, the structuring of the educational process and didactic methods that fit for all schools. Also, schools cannot take over such models. So, what then can schools and Centers for Professional Development in Education do together?

We want to emphasize learning from each other, not with the idea that solutions can be copied but because certain strategies, models and didactic methods can, in an adapted way, be used in the educational practice of individual schools and serve the school development. Schools differ and therefore they can learn from each other.

SCHOOLS LEARN FROM OTHER SCHOOLS

Three years ago, one of the schools in our network developed a planning format to give students a clearer idea about teachers' expectations, ways to achieve their goals, and in what time frame. Impressed with this format, other schools modified the document to fit their needs. Two years later, the first school examined the changes and the experiences of the other schools and, as a result, adapted some of the changes for their students. We have seen similar processes for collaboration on teaching methodology and on tutoring and monitoring of students. By working together, teachers from different schools are creating new educational methods (See also Veugelers and Zijlstra, 1995b en 1996b).

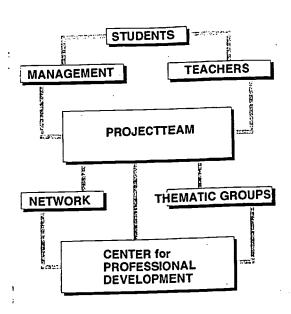


Within the limits of government regulations and a national curriculum, each school may organize its education as it sees fit. Schools are receiving more responsibility for their financial affairs, for differentiation in the tasks of their staff, and for the organization and structuring of education. Schools differ in the amount of time spent on teaching, tutoring, and counseling; the connections between content areas; special programs offered; and educational philosophy. In developing their own approach to education, schools express their unique identity. Especially in large cities, each school develops its own educational profile in order to attract a certain population of pupils.

As schools consider new challenges, the Center for Professional Development in Education tries to help them find solutions. But we cannot provide uniform models that will fit all schools. We emphasize learning from one another, not with the idea that schools can copy solutions, but because they can adapt what they learn to their school's particular needs.

HOW THE NETWORK OPERATES

The School Network is organized as follows: The upper section of the model contains the school configuration: pupils, senior management team, teaching staff and the project team, which plays a particularly important role in the school network. The lower section of the model shows a scheme of cross-school activities within the network.





Each school in the network has a project team whose task is to bring about reforms in the upper grades of secondary education. The team consists of a school project leader, who is a member of the school's senior management team, and at least three school staff members. The team functions as a consultative and development group and often organizes workshops for the other staff at the school.

Project leaders meet together across schools, as do members of the school project teams. The teams participate in thematic groups, which meet every five weeks on six themes: profiles (subject combinations available to students as 'science and health' or 'culture and society' and students' orientation to higher education); study load and school organization; independent learning; thinking skills; interface between lower and upper secondary education; and identity development of the student and school. In the school year 95/96 subject lines have been linked to the School Network. In clusters of subjects like science, languages, social studies, we want to make the interpretation of the new program proposal and establish the route along which the school can implement these proposals which, of course, must be embedded in its own school development.

The Center coordinates and supervises the network and provides leaders for the thematic groups. Some of our staff work only at the university; others work primarily at one of the schools.

In the network, professional development and school development go hand-in-hand. Professional development helps schools work for their own development and shape their own profile. Teacher educators do not tell schools what to do, however; rather, they carry out analyses and offer alternatives, while schools determine their own goals and course of action. The persons participating in network meetings are upper secondary education coordinators, management staff, career counselors, but also members of educational task forces and teachers who function as experts in schools. In our paper we use the word teacher for all these people. These teachers want to invest in their own professional development and work on school development. More than 80 teachers and school administrators invest in their own professional development as they work on school development through the network. Participants view the network as a project that belongs to everyone -- schools and university together.

Each school has developed its own educational structure, interpretation of the formal curriculum, methodology, and tutoring system, which we explore in network meetings. By discussing the different approaches, we hope to discover the educational views that transcend each school's choices, especially as they relate to the methods that teachers use.



FUNCTIONS OF THE NETWORK

Networks are becoming popular instruments for both professional development and school development. In Canada, Fullan (1991) describes networks as a school development instrument, using the term 'learning consortium'. In presenting an overall picture of experiences in the United States, Lieberman and McLaughlin (1992) suggest the following functions of a network: a new form of collegiality; a vehicle for broadening educational perspectives; an opportunity for teachers to be both learners and partners in the construction of knowledge; and a legitimate professional voice for teachers.

Several functions distinguish our network:

1. Interpretation of government policies

Government policies have consequences for schools as organizations, as well as for teaching materials, didactic methods, and teacher and student behavior. Discussions among teachers from different schools provide greater insight into these consequences and the various possibilities for restructuring education and implementing policy.

2. Influencing government policies

A network of schools can also try to influence government policies by giving feedback as a group, indicating developments that need adjustment and showing the implications of policies for practice. Teacher educators produce working papers, in mutual agreement with the schools. Network participants and government representatives then discuss these papers at network meetings. For example, the junior Minister of Education for Education invited the network to discuss with her our ideas about student assessment.

3. Learning from others' experiences

In our view, learning from one another is the most important difference between professional development in networks and other forms of professional development. Schools can benefit from others' experiences as they restructure the school organization, the curriculum, and the teaching methodology. In presenting their educational practices and reflecting on other participants' comments, teachers become more aware of the rationale behind their choices. They also learn a great deal by coherently presenting their own experiences to their colleagues: they must explain how and why they approach certain issues and how they shape teaching activities.

4. Tapping into expertise

One of the advantages of a network is the opportunity to know staff from other schools. Participants identify those they can call on for their questions and problems or those with whom they can collaborate on new ideas. A participating school may invite expertise from



another school, from the Center for Professional Development, or from experts outside the network. These resource persons may become involved as seminar contributors, special guests, or temporary participants in an educational committee or school project team.

5. Developing new educational approaches and materials

In the thematic groups, participants create products other schools can use. These products include teaching materials, organizational models, detailed analyses of educational approaches, training courses for teacher teams, and descriptions of innovation processes. Participants may produce guidebooks, construct curriculum timetables, bring coherence to the teaching of skills, or work to change the moral climate in the school. For example, one group uses Dimensions of Learning (Marzano 1992) to teach thinking skills.

6. Creating new initiatives

Universities and secondary schools become partners in initial teacher education, professional development and research, as well as in helping students make the transition from upper secondary education to university. In a true partnership, both schools and university can benefit from the collaboration and can develop new initiatives together. Schools collaborate intensively with the University of Amsterdam, but they also often 'go shopping' at other Centers for Professional Development, as they do not have an exclusive contract with our center.

PROFESSIONAL DEVELOPMENT AND SCHOOL DEVELOPMENT

What kind of activities are carried out within the School Network? Fields are explored, practices are analyzed, new programs and organizations are developed and tested. Schools choose their own development route within the scope of educational content. To achieve this we use different methods. *Lectures* delivered by scientists and practice experts from outside the network must supply theoretical and practical insights. Subjects and speakers are chosen and assigned in consultation.

During network meetings and consultations of school project leaders, various lines of development are brought together and the route of school development is discussed. Project leaders are often members of the senior management team or are upper secondary school coordinators. In a cyclic process each school makes a project plan which contains the innovation targets of the school, with a description of the school's activities and initiatives within each thematic group, the connection between these activities, the way in which the communication with the other school staff, the pupils and sometimes also with the parents is stimulated, and the list of activities that will be initiated in the short term.



These are policy plans concerning content and strategies.

Teacher educators also visit the schools in order to supervise the project groups, and they participate several times to the consultations of the school project team. During these consultations they discuss development routes, implementation strategies and the basis for innovation created in the school.

Apart from this, the chairmen of the thematic groups make regular appointments with the schools where, by means of extra activities, they pay attention to a specific development as, for instance, the preparation of a seminar, the further development of the orientation program concerning future study and profession or a team-oriented approach of study skills. Sometimes the teacher educator gives a lecture at a seminar or a workshop, at other times the teacher educator coaches the teachers of the schools to organize and lead the seminar themselves.

It is remarkable that, due to the developmental character of the innovation, the participating teachers acquire a great deal of expertise which they later can use in their own school. For instance, during seminars in different schools, one or more participants in a particular theme organize a workshop and the established routes are discussed by teacher teams and sections and then included in the regular policy and proceedings. We find it very useful that teachers take responsibility for in-service tasks in their own school.

PARTNERSHIP PROGRAM BETWEEN UNIVERSITY AND SCHOOLS

The network is not the only way in which schools and the University of Amsterdam work together. In the U.S. also, there are partnership programs between the university and upper secondary education. In such a program the following activities can be distinguished (Wilbur and Lambert, 1991): initial teacher education, in-service education, research and monitoring students' transition from upper secondary education to university. The University of Amsterdam carries out these activities with most of the schools in the network. The term 'partnership' expresses clearly that both schools and university can benefit from this collaboration. In this paper we will confine ourselves to intensive forms of collaboration in which the University of Amsterdam has reached a further stage in the new developments than other universities.

The Graduate Institute for Teaching and Learning of the University of Amsterdam provides post-graduate training for intending teachers from all schools. There is an intensive collaboration with ten schools, the so-called 'training schools', which aims at



achieving a good interaction, based on equality, between university and school training. School teachers participate in university programs and university lecturers participate in training programs carried out in schools for secondary education. Most 'training schools' also participate in the network. Teacher education is also relevant for this paper because student-teachers contribute to the whole process of modernization by doing their research in the context of the restructuring process taking place in the school. Their action research often supports the activities of the school in the network.

In 1993 the network generated a program concerning students' transition from upper secondary education to university (Hofmeister, 1997). Under this program, students pay several visits to the university, attend lectures and workshops and talk with staff and students. University staff members also teach at the school in order to give students an orientation towards study and work. Both schools and university teachers are responsible for tutoring the students' transition to university. University staff members learn a lot about students in upper secondary education and about their learning activities. The project concerning the transition from upper secondary education to university is a tutoring program for students both in secondary and in higher education. From their second last grade in upper secondary to and including their first year at university, students from 30 schools follow a program aimed at achieving a better tutoring and a better preparation for university study. Recently, we added a new activity to this program: teachers from upper secondary education and the University of Amsterdam visit their workplace, analyze their curriculum and give collegial support.

In the school year 95/96, a sub-project has been introduced, in collaboration with the College for Higher Education of Amsterdam, concerning the transition from upper general secondary education to colleges for higher education. Some 6000 students are now participating in both projects.

Both the School Network and the Transition Project benefit from this long-standing, intensive collaboration based on equality between the University of Amsterdam and a large number of schools, which also enables a better tuning between the schools and the university in the field of research.

CREATING A SUCCESSFUL NETWORK

What have we learned in these years?

Atmosphere of mutual confidence



A network has to be constructed gradually. It is not sufficient to put schools together and call them a network. Educators need the opportunity to get to know one another in an atmosphere of mutual confidence. As schools bring in their own experiences, examples, and expertise, participants need to feel assured that others will handle their contributions with care. This means that all must work together in a spirit of 'give-and-take' to create the network and make changes as they see fit.

Give and take

Within a network, schools should be able to 'give and take'. Schools that only want to obtain information from the network will soon get stuck and will function less efficiently. Schools must bring their own experiences, examples and expertise into the network. This is always a matter of giving and taking. Teacher educators call schools to account on this matter, and the schools themselves also expect such an interchange, for example of time tables and ways of mentoring students.

Combination of schools in the network

A network should not contain only innovative schools, but it should also involve more 'traditional' schools, and our network has been constructed in this way. Trendsetters sometimes feel that they have not learned enough from a meeting, but it can be interesting even for trendsetters to learn the motives of more traditional schools, or of schools that find themselves at the beginning of a certain development. Just like it is in their own schools and classrooms, the teachers in a network have to be able to deal with differences among learners. In the network, differentiation and the feeling of belonging to the same 'community of learners' is very important.

Professional development education and school development

A tension may exist between the interests of the schools and those of the teacher educators, between doing justice to the school's own choice and the educator's contribution of supplying knowledge and insights. Although the network is a partnership, in our opinion teacher educators should be allowed some 'steering' role in determining the content of activities. This means, for instance, that schools should be 'challenged' to pay more attention to certain educational subjects. To this purpose, the task of teacher educators should be to present alternatives, whereas the school can make its own choices. Of course, for the continuation of the partnership teacher educators must enjoy the trust of the



schools.

Trendsetters in schools and the rest of the team

The network concentrates mainly on 'pioneers' in the school. These persons, who may or may not belong to the senior management staff, participate in network meetings and thematic groups. These persons put lots of energy in the dialogue with the other school staff. The network always judges the innovation strategies used by each school according to the extent in which a basis can be achieved in the school by using these strategies. Contrary to in-service education which is directly focused on school development, our network chooses an indirect strategy. The teachers participating in the network bear the responsibility for school development.

Collaboration and competition

It is remarkable that at a moment when schools in the Netherlands are expected to give proof of more autonomy, they are also expected to collaborate more intensively within networks. Schools can learn much from each other but there is, of course, competition amongst schools as well. This deserves care and attention, especially if schools are situated in the same recruitment area.

Centers for Professional Development must compete with each other too. Schools from our network also 'go shopping' in other institutions.

Consolidation, collaboration and growth

Schools with which we have a good collaboration are, of course, not keen on seeing a large number of new schools joining the network. After all, working together with people and schools that you have known for years seems to be more effective. For the professional development and the success perception of the teacher educators involved in the network, it also seems more challenging to very intensively support a smaller numbers of schools for a long time.

Centers for Professional Development have other reasons. They want to keep their share of the market and, if possible, enlarge it.

Strain on timetables

On Thursday afternoons most participants have no lessons scheduled in the school. That



puts a great strain on the lesson- and assembly-timetable of the school. On the other hand, there is no cancellation of lessons due to the fact that teachers sometimes go to seminars. A concentration of activities on the Thursday afternoon means that schools can schedule network participation, but that one afternoon is blocked for school activities of these teachers.

Financial support

At the moment, the effort made by schools in the network is paid for 30% by the Ministry of Education within the scope of the restructuring of Upper Secondary Education. Schools pay the remaining 70% from their own budgets. The Center for Professional Development is also paid for 30% by the Ministry of Education. The other 70% is again paid by the schools, who have a budget for in-service training. The extra financial means are partly used for school development, partly for the transferability of the activities. Two books we recently published on the our experiences in the network are examples of this (Veugelers en Zijlstra, 1995a; 1996a).

Continuation

Participants from the schools speak positively about their experiences in the network. One indication is the level of participation: of the original 20 schools, 15 still participate, and there is much continuity among the participants. From these schools more then 80 teachers participate monthly in the network.

Two years ago we have initiated two new sub-networks of twenty schools that wanted to join the original network. The route which has been established for this sub-network includes both learning from the experiences gained in the 'old' network and undergoing it's own development.

ADVANTAGES FOR TEACHERS AND SCHOOLS

Our nine-year collaboration with schools has offered participants a chance to become acquainted with other organizational forms and other ways of teaching. Teachers have learned that schools have many choices. By coming to understand the educational views behind these choices, they can consider alternative ways of educating students. In the network, teachers describe and clarify their own approach, and through the reactions of others, obtain feedback to help modernize further. As teachers work on their professional



development, schools become learning organizations. By participating in a network, teacher educators and secondary staff get a broader view of education and the feeling of belonging to an educational community (See for recent experiences on networks Lieberman, 1996 and Lieberman and Grolnick, 1996).

REFERENCES

- Apple, M.W. (1986). Teachers and texts. (New York, Routledge and Kegan).
- Bernstein, B. (1971). On the classification and framing of Educational Knowledge, in: M.F.D. Young. *Knowledge and Control*. New directions for the sociology of education. Collier-MacMillan, London.
- Fullan, M. (1991) The New meaning of Educational Change. New York, Teachers College Press.
- Giroux, H.A. (1989). Schooling for democracy (Londen, Routledge).
- Hofmeister, J. and Veugelers, W. (1994). Recent developments in Career education in the Netherlands, paper presented on the AERA-conference, New Orleans.
- Lieberman, A. (1996). Creating Intentional Learning Communities. In: Educational Leadership, Volume 54, no. 3, pp. 51-55.
- Lieberman, A. and Grolnick, M. (1996). Networks and Reform in American Education. In: *The Teachers College Record*, Vol. 98, no. 1, pp. 7-45.
- Lieberman, A. and McLaughlin, M.W. (1992). Networks for Educational Change: Powe rful and problematic. In: *Phi Delta Kappan*, May 1992, pp. 673-677.
- Marzano, R.J. (1992). A Different Kind of Classroom. Teaching with dimensions of learning (ASCD, Alexandria).
- Veugelers, W. (1989). The Modular Approach in the Netherlands, Rationalities in the Relationship between Education and Labor, in: Voorbach, J.T. and Prick, L.G.M., Teacher Education 5. Research and Developments on Teacher Education in the Netherlands ('s Gravenhage, SVO).
- Veugelers, W. (1995). Teachers and Value regarding Labour, in: Curriculum Studies, 2, no. 3, pp. 169-182.
- Veugelers, W. (1997). Teachers, Values and Critical Thinking. In: Steinberg, S.R. and Kincheloe, J.L. On their Own Recognizance: Students and Teachers Creating Knowledge. New York, Routledge, in press.
- Veugelers, W. and Zijlstra, H. (1995a). Netwerken aan de Bovenbouw van HAVO en VWO. Leuven/Apeldoorn, Garant.
- Veugelers, W. and Zijlstra, H. (1995b). Learning together: In-service education in netwo



rks of schools. In: British Journal of In-Service Education, Volume 21, no. 1, pp. 37-48.

Veugelers, W. and Zijlstra, H. (1995a). Praktijken uit het Studiehuis. Leuven/Apeldoorn, Garant.

Veugelers, W. and Zijlstra, H. (1996b). Networks for Modernizing Secondary Schools. In: Educational Leadership, Volume 54, no. 3, pp. 76-79.

Wilbur, F. en Lambert, L. (1991). Linking America's schools and colleges. Washington: American Association for Higher Education.

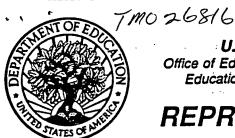
Wiel Veugelers is assistant professor at the Faculty of Educational Studies and the Graduate school of Teaching and Learning of the University of Amsterdam, he is also the director of the School Network for Upper Secondary Education of the University of Amsterdam.

Henk Zijlstra is vice-principal of Nieuwer Amstel, one of the schools of the network, and assistant professor at the University of Amsterdam. He is the co-director of the network. The School Network for Upper Secondary Education of the University of Amsterdam is part of the Center for Professional Development Amsterdam.

Address:

Dr. WIEL VEUGELERS
UNIVERSITY of AMSTERDAM
GRADUATE SCHOOL of TEACHING AND LEARNING
FACULTY of EDUCATIONAL STUDIES
Wibautstraat 4
1091 GM AMSTERDAM
the NETHERLANDS
Tel. 31 20 525 1370
Fax 31 20 525 1290
E-mail WIEL@ NAS.EDUC.UVA.NL





U.S. Department of Education

Office of Educational Research and Improvement (OERI)

Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDE	NTIFICATION:		
Title: LEARMIN	S TOSETHER IN	NET WORKS	
Author(s): VEu (ELERS Q ZGLSTRA	1	
Corporate Source:		Publication Date:	
LINIVERSITY OF AMSTERDAM.			5/28/97
II. REPRODUCTIO	N RELEASE:		
in the monthly abstract journ paper copy, and electronic/o given to the source of each	as widely as possible timely and significant nall of the ERIC system, Resources in Educator optical media, and sold through the ERIC Dodocument, and, if reproduction release is grad to reproduce and disseminate the identified	tion (RIE), are usually made available cument Reproduction Service (EDR) nited, one of the following notices is a	e to users in microticine, reproduced S) or other ERIC vendors. Credit is affixed to the document.
the bottom of the page.			
	The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below affixed to all Level 2 docume	
Check here For Level 1 Release: Permitting reproduction in	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE DISSEMINATE THIS MATERIAL IN OTHER THAN P. COPY HAS BEEN GRANTED	APER BY Check here For Level 2 Release Permitting reproduction in
microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical)	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOL INFORMATION CENTER (EF	
	Level 1	Level 2	
"I hereby gr this docum	cuments will be processed as indicated provide produce is granted, but neither box is check ant to the Educational Resources Information Count as indicated above. Reproduction from the byses and its system contractors requires per n by libraries and other service agencies to satisfic	ced, documents will be processed at conter (ERIC) nonexclusive permission ERIC microfiche or electronic/optica mission from the copyright holder.	n to reproduce and disseminate all media by persons other than exception is made for non-profit response to discrete inquines.*
ic V		E-Mail Address:	Date: