

6. Collaborative curriculum renewal as propelling force for school and teacher development

Nienke Nieveen, Adam Handelzalts, Jan van den Akker, Hans Hooghoff, Jenneke Krüger, Sijbe Homminga, Hans Berkien

6.1 Aims of the Pivot-study within the context of school autonomy

In the Netherlands, there is a tendency towards increasing autonomy of schools (cf. Kuiper, Hooghoff, van den Akker & Letschert, in this volume). The ambition for large-scale and 'top-down' curriculum reform is diminishing. In its place, there is more awareness of the complexities and accompanying timeframes of introducing, realizing and sustaining change. Among others, this is influenced by a better understanding of the need to realize context-specific solutions that involve ownership and commitment of all relevant stakeholders. Thus, the development process of schools and teachers come more to the forefront of curriculum improvement.

This shift in Dutch education policy has been distinctly affected by wide dissatisfaction about recent curriculum change efforts, especially in secondary education, which have resulted in overloaded and fragmented programs rather than in broad pedagogical renewal (such as skill-oriented education with greater attention to the self-activation of learners). To tackle these problems, schools and teachers got more policy freedom to make site-specific choices. This was accomplished by strongly reducing the number and detail of prescribed attainment targets for lower secondary education (ages 13-14). The new set of attainment targets is intended to be a source of inspiration for schools and teachers as well as to give a frame of reference for public accountability.

Influenced by this expanded autonomy, an increasing group of entirely new schools with innovative visions open their doors. Moreover, about 80% of all existing schools for secondary education strive to renew their curriculum and school organization based upon their own curriculum preferences and possibilities (Onderbouw-VO, 2006). Within this context, schools increasingly ask for external assistance in accomplishing their ideals. For agencies like the Netherlands Institute for Curriculum Development (SLO), these requests of (groups of) schools and teachers imply a broadening of their approaches. Next to generic curriculum development they face a need towards approaches for school-based curriculum development. In short, for both the schools and the support agencies in the Netherlands, there is a growing need for suitable scenarios that focus on school-based curriculum innovation.

The *Pivot* project (2002-2006) with its three partners (Bonhoeffer College, SLO and University of Twente) was situated in this context and worked towards the following (partly overlapping) aims:

- Bonhoeffer College: This school in fact initiated a curriculum renewal and worked on a set of school-based intentions and while doing so they contacted SLO in order to get

assistance in accomplishing their challenges. The central aim of the school was to develop an innovative school curriculum (with accompanying lesson materials) in combination with the professional development of the teachers and school organization.

- SLO: SLO coaches assisted the Bonhoeffer College in its curriculum renewal attempts. By doing so, their aim was to gain a better understanding of the shift of the tasks of SLO towards school-based curriculum development and the implications of this shift for the competencies of their employees.
- University of Twente: By studying the processes at this school site systematically and validating the findings, they aimed at grasping main principles for school-based curriculum development through teacher teams. Knowledge on this theme is of strategic importance for several parties: it assists teacher teams in taking their self-steering role, it helps school management in stimulating changes and deciding on the need to seek for (external) support, it advances the support of agencies (such as SLO) in their joint work with teacher teams in the context of school-based renewal.

During the project, it soon became obvious that the three partners had much to offer to each other. The project stimulated the cross-fertilization between practical and scientific knowledge and can be seen as an example of a professional learning community that bridged the gap between educational practice (of the teachers and school management), educational support (by the SLO coaches) and educational research (of the UT researchers). For more information on the *Pivot* project and its results, please refer to Leverink and Hooghoff (2005).

6.2 Introducing the school-based renewal of the Bonhoeffer College

The activities of the three *Pivot* partners are strongly related to the project aims. The next section provides a brief overview of the main activities and results. However, in order to understand the project activities, first the actual school-based initiative for curriculum renewal needs some introduction.

The Bonhoeffer College (location Geessinkweg) is a school for secondary education with about 500 learners. Their initiative focused on the first two years of junior sec (about 250 learners). An assessment of baseline practice showed that in its starting position (October 2002), the school had a pleasant and orderly atmosphere and the relationships between teachers and learners were good. Nevertheless, the classroom practices at this school were rather traditional with conventional textbook-driven lesson patterns. To the learners, the overall curriculum showed little coherence and the day-to-day practices were fragmented

and hardly challenging. The experienced teachers were working in small but rather passive departments. Between the teachers only limited collaboration was going on and professional debate and deliberations were rare. The school professional culture resembled what can be described as 'permissive individualism' (Hargreaves, 2003). Although each individual teacher had some aspirations, there appeared to be a great gap between those articulated aspirations and their daily practices.

In the years preceding 2002, several small-scale innovation initiatives had been carried out within the school. However, they did not prove to be sustainable and did not reach all teachers. Meanwhile the school leaders were working on a - rather open - innovative vision for the first and second year of junior sec. The main aspirations in this vision can be summarized as follows:

- more activity-based learning, more responsibility and options for learners
- from teacher-oriented program towards student-centered approach
- more coherence between subject domains
- less fragmented schedule, longer time periods of learning
- task differentiation for teachers and support staff
- more integration of ICT-use.

Overall, the renewal was based on the vision that uninterested students do not exist. According to the visionaries of the school, tailor-made education responds to, and makes optimal use of, their natural curiosity. Students exposed to tailor-made programs devise their own questions, and seek answers individually or in groups. Of course, they need to get the support they require.

6.3 Activities and results of the three project partners

This section will present a brief overview of actual activities that the three partners undertook in order to reach the three main aims of the *Pivot*-project.

Aim 1: An innovative school curriculum for Bonhoeffer College

Development activities at Bonhoeffer College

From 2002 on, the Bonhoeffer College has been working towards the aspirations, mentioned in the former section. An important characteristic of the innovation process is its school-wide approach and evolving (phased) nature. The approach does not aim at isolated projects of a few (groups of teachers), but from the start it stimulates an active involvement of all junior sec staff members. In order to bridge the gap between the general

school level and the individual teachers, the school realized a structure in which seven design teams (of about 3 teachers of related subjects) were composed. These teams reexamined their joint curriculum domain and worked together on the design, test and implementation of a renewed common curriculum of their domains. In addition, each team was assigned a coach (an external expert in pedagogical content knowledge and curriculum) as facilitator and resource person. Two school leaders (the principal and an 'innovation manager') are responsible for the overall facilitation and coordination. Moreover, as part of the new school structure, a core team (with the leaders of each design team) meets regularly, in order to exchange ideas, discuss problems and needs, and to serve as a platform to come to some convergence in the innovation. It took the school one school year (2002-2003) to redesign and develop the entire first year's curriculum. In the school year 2003-2004, this curriculum was implemented and refined and the second year's curriculum was developed. In the year 2004-2005, the first and second grade worked according to the renewal and the third year's curriculum was developed. In the school year 2005-2006 the first three years are implemented and refined.

Results at Bonhoeffer College

The school has made a significant step towards achieving the school-wide renewal of the junior secondary curriculum (ages 12-14), illustrated by the following facts:

- Students work more actively and independently and at their own speed; 40% of the available learning time is left to the students to decide where, with whom and on what tasks (supplied by the teachers) they will spend their time. Tearing down some walls and putting in new workstations created a study house in which students can work independently.
- Teachers have fewer teaching periods and more time for coaching, preparation, design and follow-up activities. Teaching assistants take over a number of activities from teachers (such as assisting the students while they are working independently), so that teachers gain development time to keep adapting their teaching methods.
- Curriculum coherence is growing. Formal and informal consultations within and beyond their subject departments have become much more common than they used to be. Some groups of subjects are (for the time of a project) fully integrated whereas other groups of subjects stimulated coherence in their didactical approach.
- The timetable shows less fragmentation. Subjects and groups of subjects are scheduled more intensively during a shorter period. Each 9-week period holds no more than 8 subjects, not exceeding three a day.
- Most teams have integrated ICT in their subject programs, for some programs it is now impossible to imagine education without the use of information and communications technologies (ICT).

And whereas the Bonhoeffer College was once a quiet school, during the past year it has received visits from groups every week, as colleagues from all over the country, and even from abroad, come to witness the innovative success of a once very ordinary school. Teachers and assistants are dedicated and involved, parents are involved and satisfied and students are pleased about their being in control. The strongest proof is the statement of one of the most critical teachers, who said that he wouldn't have missed it for the world. It is an innovation that cannot be reversed, because teachers, students and the restructured building vouch for its success.

Aim 2: Understanding implications for competences of SLO coaches

Coaching activities of SLO

Commencing in the school year 2002-2003, SLO coaches supported the teacher design teams of the Bonhoeffer College. After making an inventory of the needs and wishes, they jointly formulated the ideas for renewal and started the design process by writing a work plan (covering for instance the type of subject integration and preferred pedagogical approaches). In some teams, the direction of the renewal was made more concrete by conscious reflection on various inspiring sources (such as joint school visits, workshops, websites, video fragments, literature). The coaches worked together with the team on the design of lesson materials and they assisted the teams with planning and performing pilots and reflecting on the outcomes. Workshops were organized to explore specific educational aspects, such as cooperative learning and working with study planners, in greater depth. Moreover, the coaches stimulated the design of the overall curriculum of the team.

Results concerning implications for SLO

As far as the move towards curriculum development in a context of school autonomy is concerned, the coaching activities within the school and their results shed light on several implications for SLO. The overall result shows a mixed picture influenced by many factors, of which two are elaborated, here. First of all, the school renewal did not start from a complete idealistic overall vision of the school renewal. The school arrived at the renewal by working at it during a long-term process while the implications of the activities and choices became increasingly apparent to those involved. Secondly, not one single team appeared to act the same in the change process. Some teams already existed, whereas in other teams the participants worked together for the first time and/or needed to learn to work together. Teachers within the same team took different positions towards the renewal, towards each other and towards the coach (more/less supporting and active). Coaches brought in their own knowledge, experiences and coaching style (more/less steering and pro-active). Overall, the process revealed specific competences that coaches

need in order to be able to work in such complex settings. Looking back on the process and results, it was expressed that school-based curriculum development calls for a pro-active and responsive coaching style at classroom and school level with mutual (teachers and coaches) trust and respect for each other's knowledge domain and working style. When it comes to competences of SLO coaches, this means that they need to work from a relational approach on top of the rational (or more systematic) approach that most coaches are used to work from in their projects.

Aim 3: Design principles for school-based innovation

Research activities of UT

The researchers of the University of Twente were responsible for studying the school-based innovation process and results. Their study comprised three main components. First of all, it covered systematic data collection at the Bonhoeffer College by assessing its baseline practice, following the design and support processes in the teams and performing implementation studies at the end of each school year (2002-2005). This intensive case study led to several preliminary principles for school-based curriculum development, which were validated by a series of four case studies on active secondary schools elsewhere. Moreover, they performed a comprehensive literature review to situate and embed the project work in the growing body of knowledge of school-based curriculum innovation.

Results with regard to principles for school-based innovation

The empirical data and literature study led to a series of heuristic principles for school-based curriculum development that are tied together with the following foundational tenet:

Successful and sustainable school-based renewal needs synergy and productive relations between:

- curriculum development at various levels (system, school and classroom)
- professional development of teachers, and
- school development.

As a means of integrating the three developments, this study centers on the potentials of teacher teams who are involved in joint curriculum design efforts. For understanding the synergy that these teacher design teams potentially put forward, one may start from either of the three development perspectives:

From a curriculum development perspective:

the curriculum renewal is taken as a lever for school and professional development. In contrast to organizational issues, the focus on improving the curriculum for their

students is intrinsically motivating to teachers. It is appealing to them to put effort in planning the actual learning processes of their students in their own subject matter domain (cf. Grossman & Stodolsky, 1995; Black & Atkin, 1996). Teacher collaboration in curriculum development is seen as essential to bridge the gap between the work of individual teachers (within their own subjects and classrooms) and school-wide aspirations. In order to further the consistency of the curriculum design and to encourage teachers' discourse and learning, teachers need to be encouraged to work jointly in small teams.

From a professional development perspective:

the long-range, collaborative activities of teachers, focusing on curriculum design and discourse located within and supported by their own school context are seen as crucial for the kind of teacher learning that can have profound impact on student learning (cf. Ball & Cohen, 1996; McLaughlin & Talbert, 2001; Shulman & Sherin, 2004). Skilbeck (1998) argues that teacher participation in curriculum development will help improving the quality and relevance of what is taught and will strengthen teacher professionalism. From this perspective, collaborative teacher learning by cyclical curriculum development (including piloting, reflection and sense-making) is at the centre of this approach.

From a school development perspective:

the work of teacher design teams needs to be embraced by a powerful learning and development environment and (external) coaching. Schools that foster these kinds of professional learning communities need to stimulate teachers' working together, but they also need to insist that this joint work consistently focuses on improving teaching and learning and use evidence and data as basis for informing classroom improvement efforts and for solving whole-school problems (Hargreaves, 2003).

In summary, the following four clusters of heuristic principles were formulated for teacher design teams who are taking their self-steering role in the context of school-based renewal, for school management who need to stimulate changes and decide on the need for seeking (external) support, and for support of agencies (such as SLO) in their joint work with teacher teams.

Take curriculum renewal as a lever for school and professional development (cf. Hargreaves, Earl, Moore & Manning, 2000; Hopkins 2001; Skilbeck, 1998; van den Akker, 2003):

- think big, but start (not too) small: Define school-wide innovation goals, but work progressively (for example, start with one year group) and involve all teachers in the innovation
- one size does not fit all: create a collective framework with high standards, but allow and accept variations and give room to evolution of personal interpretations, creativity,

needs and wishes

- think comprehensively and place students at the centre in the innovation: start the renewal process from the vision on future learning, work towards coherence in plans in which all curriculum components are handled (avoid blind spots) and coordinate team developments to insure coherence from the student point of view.

Give teachers responsibility for renewal process and results (cf. Cochran-Smith & Lytle, 1999; Hargreaves, Earl, Moore & Manning, 2000; Little, 1990; McLaughlin & Talbert, 2001; Putnam & Borko, 2000):

- work cooperatively in autonomous teams of teachers who are responsible for a specific part of the curriculum, allow the development strategies of teams to differentiate and consider necessary cooperation and planning skills in cases where teachers are not used to joint work
- use a cyclical approach to the process: Start with analyzing the baseline and exploring the zone of proximal development, make a 'short list' of design choices, articulate considerations and experiment with ideas and plans during pilots, reflect on the pilots and revise the plans accordingly.

Turn the school into a stimulating learning and development environment (cf. Fullan, 1999; Hargreaves, 2003; Hord, 2004; Lieberman & Miller, 2004; McLaughlin & Talbert, 2001):

- give teams clear responsibilities, tasks, leverage and facilities by stimulating joint responsibility and distributed leadership. This can be accomplished by defining a minimum performance for each team, discussing roles and responsibilities in every team, encouraging initiative, staying close to the processes/being responsive for needs, balancing the rational and relational approach, creating tolerance for mistakes
- support the development process with a suitable infrastructure. Recommended interventions are: creating facilities (shared (design) time, workplace with internet access, budget for hiring external support), stimulating a varied communication infrastructure with various cross-over structures and integration of the design process as being part of the job.

Organize external support (cf. Black & Atkin, 1996; Fullan, 2001; Huberman, 1995):

- organize responsive external support that explores wishes and skills and creates a context of discussion and sense making
- organize pro-active support that shows initiative, aligns the work process in the teams and brings in stimulating and relevant activities.

Finally, no matter how well conceived the innovation approach; change processes are

bound to be turbulent and creating insecurities, tensions and emotions. Thus, for all participants it is suggested to be tolerant for frustrations, keen on identifying and celebrating successes, and flexible based upon experiential learning.

6.4 Concluding remarks

It is a justifiably claim that, in 2005, all partners in the project made a significant step towards achieving the aims. SLO assisted the teacher design teams in reaching their aims and reflected on the implications of the relational coaching style when it comes to school-based innovations, UT put forward a set of tentative principles for school-based innovation, and the innovation at Bonhoeffer College cannot be reversed, because teachers, students and the restructured building vouch for its success.

For legibility reasons, the aims, roles and results of the three project partners were separated in this manuscript. However, in practice, the project partners have been flexible enough to blur their roles, without losing their primary responsibilities. This highly stimulated the cross-fertilization between educational practice (of the teachers and school management), educational support (by the SLO coaches) and educational research (of the UT researchers).