Curriculum development re-invented

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Authors: Jan van den Akker
        Hans Berkien
        António Cachapuz
        Mats Ekholm
        Adam Handelzalts
        Maria van der Hoeven
        Hans Hooghoff
        Sijbe Homminga
        David Hopkins
        Jenneke Krüger
        Wilmad Kuiper
        Jos Letschert
        Joanna Le Metais
        Nienke Nieveen
        Eike Thürmann

Editor: Jos Letschert

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              P.O. Box 2041
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              the Netherlands
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Foreword
This book is the outcome of an invitational conference on the occasion of the 30th anniversary of the Netherlands Institute for Curriculum Development (SLO). The fact that we have been advising on curriculum policy and that we have been supporting school development for already three decades is in itself reason for a party. An even more important reason for this conference refers to our changing beliefs on curriculum development and to our intention to place an unmistakable identification mark on our own line of development.

There have been major changes in the context in which curriculum development has evolved since SLO was founded thirty years ago. Views on the influence and role of stakeholders have changed over the years. The bandwidth of the concept curriculum has been enlarged. The pivotal role of teachers and schools and the importance of ownership in school innovation processes have become more evident. So, with this conference we intended to state our willingness to push borders for another thirty years. The Dutch minister of Education, Culture and Science, Maria van der Hoeven, who was guest of honour during the conference dinner, underlined the importance of curriculum development and the new role of SLO. She said: ‘I am supporting the idea to give curriculum development a new content, put it higher on the agenda, suitable to the Dutch educational context. And who better to take the lead in this than the Netherlands Institute for Curriculum Development?’.

We experience that invitation as a major source of inspiration and encouragement.

The distinguished contributions of our conference presenters, as well as the overview of discussion results, show where we are in the process of reinventing the curriculum. SLO is working in a challenging and intertwined field, defined by the triangle of curriculum policy, scientific and subject development and the dynamic world of school practice. It is our aspiration to offer added value to all these interactions.

Albertjan Peters

general director of SLO
A. Introduction and Keynotes
1. Introduction

Jos Letschert
From 7 till 9 December 2005 the Netherlands Institute for Curriculum Development SLO organized an invitational conference within the framework of its 30th anniversary. The conference was focused on the topic reinventing curriculum development. The conference location was the National Museum of Natural History ‘Naturalis’ in Leiden. Invited were head teachers, politicians, researchers, curriculum developers, inspectors, and guidance and evaluation officers in the Netherlands and other European countries.

SLO was founded thirty years ago by the Dutch government to give independent, professional advice on, and support for, curriculum innovation, development, and implementation. In performing its tasks, SLO tries to take account of developments in society in general, as well as internationally, and in education in particular. SLO virtually works in all education sectors including primary education, secondary education, special education, vocational education and teacher education, and covers all subject areas. Its central task is to advise the Government on important education reforms and new curricula. SLO supports and coordinates curriculum development in cooperation with schools and universities, carries out curriculum evaluations and provides information about learning materials.

In the thirty years of existence forms, functions and expectations of curriculum, curriculum development and curriculum policy have changed. The concept curriculum changed from a more or less prescriptive book or syllabus, defined on a central level, to a more process oriented challenge for schools to define their own curriculum policy within the context of a rather open framework.

The fact that SLO has celebrated its birthday party in a museum could suggest that curriculum development is something of the past, something to cherish, to place behind glass, or to stuff like the animals in this museum of natural history. There is no truth in it. SLO strongly believes that curriculum development is ‘alive and kicking’. At the same time, and with respect for the past, SLO also believes that the concept curriculum and the process of curriculum development have got some connotations, which are ready for redefinition.

This apparently curious disunity of thoughts - curriculum is alive and kicking, but at the same time ready for reinvention - has to do with the remarkable speed of development of the concept curriculum during a rather short period. Although ‘curriculum’ is of all ages, curriculum studies defined as an independent and substantial scientific approach, exist only since relatively short time. The American curriculum expert William Schubert mentions a period of one hundred years. One of the first books in the educational history with the term ‘curriculum’ in its title is John Dewey’s book ‘The child and curriculum’ (1902).
It is interesting to see, especially in the Netherlands, where the current curriculum debate seems to be predominated by what we call ‘old learning’ and ‘new learning’, that this distinction between ‘old’ and ‘new’ has already been a main topic for Dewey and that he also used the same labels and nearly the same arguments as we do nowadays. So, ‘reinventing curriculum development’ obviously has to do with ‘rediscovering your own roots’.

Curriculum and curriculum development are not only issues for schools and teachers; both have broad impact, importance and relevance for the sustained development of communities. More than ever curriculum is, or should be, in the centre of daily life and in the responsibility of the society in general. Let me explain that by giving two examples that attracted my attention.

In September 2005, the Dutch government presented as usual, the plans for the next period. In the Netherlands, this is called ‘Prinsjesdag’, and it is quite a happening. A journalist of one of the Dutch newspapers interviewed students from secondary education and asked them, if they had seen the presentation of the plans on television. ‘Of course not’ was the answer, ‘we were at school’. The emphatic character of that reaction tells a lot about how far the curriculum apparently has been insulated from today’s life. In the same month I saw an advertisement in ‘Educational Leadership’, the magazine of the Association for Supervision and Curriculum Development (ASCD), that said: Make the New York Times your interdisciplinary curriculum.

The product-oriented interpretation of the curriculum concept gradually changed to a more process-based interpretation, in some cases even in a rather philosophical kind of view. For the American educationalist Pinar for instance, the concept curriculum has developed in a direction far beyond the regular interpretation of curriculum as a syllabus or a table of contents. He considers curriculum as ‘the site on which the generations struggle to define themselves and the world’. For Pinar, the curriculum particularly represents a way of being, a way of giving meaning, a process of defining principles, standards and values. You may even say (Letschert, 2004) that the main interest is looking for an answer for the basic question: what kind of people do we want to be, and what can we do to achieve this through education?

In nearly all cases, curricula result from a mixture of the retrospective, the reflective, and the progressive point of view. For example, all curricula give ample attention to our cultural heritage, to present-day-society, as well as to the preparation of pupils for the future. By dealing with these components, big variety of emphasises are found. The core question in curriculum development therefore is to achieve a workable balance. This balance will never be permanent, but will have to be found again and again. The balance is continuously
shifting. The present day will gradually become history. The future is gradually turning into reality. Each newly found balance will be disturbed at a later stage, when once again a new balance will have to be achieved. Within this process different degrees of freedom and various interested parties exist. This is what makes curriculum development such an exciting, challenging and difficult – but above all - continuous process.

During this delicate balancing-process, important and interesting questions have to be considered:

• How can we connect suitable pedagogical and educational concepts with the shifting public views, values and standards that develop in the evolving society?
• How can we offer intellectual challenges to each pupil in order to make education attractive, motivating, and effective for pupils as well for society?
• How can we materialize pedagogical, educational and subject-related views in advanced teaching materials and in challenging learning environments?
• How can we adapt new views and valuable insights from other disciplines?
• How can we make the curriculum tangible for teachers and at the same time applicable in the available time of teaching?
• How can we create consistency with the various curriculum components, such as vision, goals, contents, learning activities, teachers’ roles, educational tools, grouping ways, locations, applicable age groups, and evaluation methods?
• What are important criteria to assess the relevance of the curriculum for pupils, as well as for the economical, social, cultural, spiritual society in which they grow up?

These questions are key issues for policy makers and curriculum developers, and they constantly need reconsideration and reflection. This process is loaded with values and multiple interpretations. As a result, it will often lead to highly differentiated and sometimes opposing views.

This book consists of two parts. Part A contains an introduction, the two keynote speeches and the dinner speech of the Dutch minister of Education, Culture and Science. Part B contains case studies and information about the output of group discussion based on country presentations.

The main challenge for the participants of the invitational conference of SLO is: how to implement ideals into practice, and what role does curriculum development play in that process? Wide differences occur between intended curricula and the actual implementation of these, even if an intended curriculum is fixed and compulsory, for example in the form of core goals, standards, or a national programme.
Two eminent keynote speakers illuminate this subject. Professor Jan van den Akker, Director Curriculum of SLO and Head of the Department Curriculum Design and Educational Innovation of the University of Twente, by sketching the playground, the stakeholders, the challenges and the pitfalls. Professor David Hopkins, from the University of London, does the same from another perspective, i.e. emphasizing the role of leadership in curriculum development and other processes of educational innovation.

In her table speech at the conference dinner, the Dutch minister of Education, Maria van der Hoeven, compared curriculum development with a search or quest, using a story of the Brazilian author Paulo Coelho as a metaphor to redefine the specific task of SLO. Coelho’s story is about an Andalusian shepherd who ventures from his homeland in Spain to North Africa looking for a treasure buried in the Pyramids. Along the way he meets a beautiful, young gypsy woman, a man who calls himself a king, and an alchemist. They all show him the way in the direction of his quest, but no one knows what the treasure is or if he can surmount the obstacles on his way through the desert. However, what began as a boyish adventure to discover exotic places and worldly wealth turns into a quest for treasures only found in himself.

The SLO conference has been placed in an international perspective. In cooperation with the University of Twente, SLO is carrying out a European research project titled: Curriculum development in (de)centralized policy contexts. Not only in the Netherlands, but also elsewhere in and outside Europe, roles of national governments, curriculum development agencies and schools are shifting. In a number of cases the trend is towards more decentralization of curriculum policy. However, in other countries the pendulum seems to move in the opposite direction, emphasizing centrally formulated, prescriptive standards combined with considerable demands on assessment at different levels. During the conference case studies have been presented and some of those are included in this collection. A general overview of the tentative results of the study, presented during the conference by Wilmad Kuiper, associate professor of the University of Twente, is also part of the proceedings.

Finally, a report of the discussion in sub groups, following the presentation of the case studies - made by Joanna Le Metais, educational researcher and consultant - is added to this collection.

We hope this volume is going to be a valuable contribution to the ongoing debate concerning the contemporary interpretation of curriculum concept and curriculum development in the process of school development, of ownership in innovation and teacher responsibility.
2. Curriculum development re-invented: evolving challenges for SLO

Jan van den Akker
2.1 From memories of the past to nowadays perceptions

SLO was founded as a national institute for curriculum development in the middle of the 1970s, a decade that may be characterized by a preference for ‘grand designs’ for education (and many other domains of society). Expectations about the contribution of curriculum development to address the need of learners as well as society at large were high. SLO was supposed to fulfil a coordinating role in the various curriculum development activities (that had previously been carried out by over twenty different subject-oriented committees) and to initiate the design of curricular frameworks at national level, including the development of examples at various levels of learning and instruction. Altogether, it was hoped that SLO could contribute to more integral and professional curriculum development practices. Thus, the intentions were rather optimistic. However, it is fair to say that these intentions were not undisputed by various other stakeholders, both in the political arena (would SLO not be instrumental to too strong government influence on education?) as well from the educational publishing sector (fear for false competition on instructional materials).

Three decades later, we have witnessed a variety of demographic, social, political, cultural, economic, and technological changes that have seriously affected education practices. However, the fate of many educational reform attempts has turned out to be far from successful. On the contrary, disillusion and chagrin dominate many educational debates. There is a lot of frustration and polarization. Often the discussion tends to resemble a battlefield, leading towards an overdose of blaming games. At least, we may conclude that nowadays there is little coherence and much fragmentation in educational development. Gaps between innovative rhetoric and actual outcomes are usually big. By the way, these phenomena are, of course, not only typical for the Netherlands, but quite common in many countries.

It is remarkable in these often confused educational debates and sobering practices that curriculum thinking seems to play a very modest, almost invisible role. Although many trends and problems could be fruitfully interpreted from a curriculum perspective, curriculum concepts and approaches are very seldom explicitly used. Perhaps even more remarkable is the fact that the work of SLO itself gradually seemed to have lost a clear curricular focus. Its mission has become rather fuzzy and the actual activities of SLO also often seemed to lack a well articulated curricular approach. In line with Schwab’s (1969) famous words, one may wonder whether the (Netherlands) field of curriculum is ‘moribund’.
As I am convinced that a curricular perspective has lots to offer, both in conceptual grasp of educational problems as well as in how to address concrete development activities, I would like to underscore that it is still very much needed, thus should be brought back to life again. To stimulate that, I will make an effort to ‘re-invent’ that curriculum perspective in this presentation. For starters, redefining, reframing and re-interpreting of curriculum concepts, perspectives, and approaches are needed. Afterwards, I will try to elucidate the emerging curriculum development challenges for SLO.

2.2 Defining curriculum and curriculum development

When there is a myriad of definitions of a concept in the literature (as with curriculum), it is often difficult to keep a clear focus on its essence. In those cases it often helps to search for the etymological origin of the concept. The Latin word ‘curriculum’ refers to a ‘course’ or ‘track’ to be followed. In the context of education, where learning is the central activity, the most obvious interpretation of the word curriculum is then to view it as a course or ‘plan for learning’ (cf. Taba, 1962). This very short definition (reflected in related terms in many languages) limits itself to the core of all other definitions, permitting all sorts of elaborations for specific educational levels, contexts, and representations.

Given this simple definition, a differentiation between various levels of the curriculum has proven to be very useful when talking about curricular activities:
- supra: international, comparative
- macro: system, society, nation, state
- meso: school, institution, program
- micro: classroom, group, lesson
- nano: individual, personal.

The macro and micro are more or less classical in educational literature. The supra level becomes increasingly visible through international policy discussions, where common aspirations and frameworks are formulated (for example, within the European Union), or countries are comparing their educational productivity (e.g. via large scale studies as PISA and TIMSS). The meso level is especially prominent in countries (such as the Netherlands) where schools are supposed to be active in developing their own profile. The nano level relates to the growing emphasis on individual responsibility for (life long) learning and development, resonating both societal trends as well as socio-constructivist visions.
The process of curriculum development can be seen as narrow (developing a curricular product) or broad (comprehensive and ongoing improvement). In order to successfully address tasks of curriculum decision-making and enactment, a broader description of curriculum development is often most appropriate: usually a long and cyclic process with many stakeholders and participants, in which motives and needs for changing the curriculum are formulated, ideas are specified in programs and materials, and efforts are made to realize the intended changes in practice.

### 2.3 Different curriculum representations and analytical perspectives

Curricula can be represented in various forms (cf. van den Akker, 1998, 2003). Clarification of those forms is especially useful when trying to understand the problematic efforts to change the curriculum, as often manifested in major gaps between ideals and outcomes. A common broad distinction is between the three levels of the ‘intended’, ‘implemented’, and ‘attained’ curriculum. A more refined typology is outlined in box I.

<table>
<thead>
<tr>
<th>INTENDED</th>
<th>Ideal</th>
<th>Vision (rationale or basic philosophy underlying a curriculum)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Formal/Written Intentions as specified in curriculum documents and/or materials</td>
</tr>
<tr>
<td>IMPLEMENTED</td>
<td>Perceived</td>
<td>Curriculum as interpreted by its users (especially teachers)</td>
</tr>
<tr>
<td></td>
<td>Operational</td>
<td>Actual process of teaching and learning (also: curriculum-in-action)</td>
</tr>
<tr>
<td>ATTAINED</td>
<td>Experiential</td>
<td>Learning experiences as perceived by learners</td>
</tr>
<tr>
<td></td>
<td>Learned</td>
<td>Resulting learning outcomes of learners</td>
</tr>
</tbody>
</table>

*Box 1. Typology of curriculum representations*

Besides this differentiation in representations, curriculum problems can be approached from various analytical angles. For example, Goodlad (1994) distinguishes the following three different perspectives:

- **substantive**, focusing on the classical curriculum question about what knowledge is of most worth for inclusion in teaching and learning
- **technical-professional**, referring to how to address tasks of curriculum development, especially the challenge how to bridge the gaps between intentions, realities and outcomes
• socio-political, referring to curriculum decision-making processes, where values and interests of different stakeholders and agencies are at stake.

Some might argue that this list is too limited as it does not include the more ‘critical’ perspectives that are amply present in curriculum theory literature (e.g. Pinar, Reynolds, Slattery & Taubman, 1995). However, as critical curriculum theory often focuses on analysis of what is wrong in education (running through each of the previous angles), the threefold distinction seems adequate for a developmental and improvement perspective.

2.4 The vulnerable curriculum spider web

One of the major challenges for curriculum improvement is creating balance and consistency between the various components of a curriculum (i.e. plan for learning). What are those components? The relatively simple curriculum definition by Walker (1990) includes three major planning elements: content, purpose and organization of learning. However, curriculum design and implementation experiences have taught us that it is wise to pay explicit attention to a more elaborated list of components. We have come to adhere to a cadre (see box 2) of ten components that address ten specific questions about the planning of student learning (cf. van den Akker, 2003).

<table>
<thead>
<tr>
<th>Rationale</th>
<th>Why are they learning?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aims &amp; objectives</td>
<td>Toward which goals are they learning?</td>
</tr>
<tr>
<td>Content</td>
<td>What are they learning?</td>
</tr>
<tr>
<td>Learning activities</td>
<td>How are they learning?</td>
</tr>
<tr>
<td>Teacher role</td>
<td>How is the teacher facilitating their learning?</td>
</tr>
<tr>
<td>Materials &amp; resources</td>
<td>With what are they learning?</td>
</tr>
<tr>
<td>Grouping</td>
<td>With whom are they learning?</td>
</tr>
<tr>
<td>Location</td>
<td>Where are they learning?</td>
</tr>
<tr>
<td>Time</td>
<td>When are they learning?</td>
</tr>
<tr>
<td>Assessment</td>
<td>How to assess their learning progress?</td>
</tr>
</tbody>
</table>

*Box 2. Curriculum components*

The ‘rationale’ (referring to overall principles or central mission of the plan) serves as major orientation point, and the nine other components are ideally linked to that rationale and preferably also consistent with each other. For each of the components many sub-questions are possible. Not only on substantive issues (see the next section), but, for example, also on ‘organizational’ aspects as:
• Grouping:
  - How are students allocated to various learning trajectories?
  - Are students learning individually, in small groups, or whole-class?
• Location:
  - Are students learning in class, in the library, at home, or elsewhere?
  - What are the social/physical characteristics of the learning environment?
• Time:
  - How much time is available for various learning domains?
  - How much time can be spent on specific learning tasks?

The relevance of these components varies across the previously mentioned curriculum levels and representations. A few examples may illustrate this. Curriculum documents at the macro level will usually focus on the first three components (rationale, aims & objectives, content; often in rather broad terms), sometimes accompanied by an outline of time allocations for various subject matter domains. When one takes the operational curriculum in schools and especially classrooms in mind, all ten components have to be coherently addressed to expect successful implementation and continuation. The components of learning activities, teacher role, and materials & resources are at the core of the micro-curriculum. The component of assessment deserves separate attention at all levels and representations since careful alignment between assessment and the rest of the curriculum appears to be critical for successful curriculum change.

Our preferential visualization of the ten components is to arrange them as a spider web (figure 1), not only illustrating its many interconnections, but also underlining its vulnerability. Thus, although the emphasis of curriculum design on specific components may vary over time, eventually some kind of alignment has to occur to maintain coherence. A striking example is the trend towards integration of ICT in the curriculum, with usually initial attention to changes in materials and resources. Many implementation studies have exemplified the need for a more comprehensive approach and systematic attention to the other components (in particular the role of teachers) before one can expect robust changes.
The spider web also illustrates a familiar expression: every chain is as strong as its weakest link. That seems another very appropriate metaphor for a curriculum, pointing to the complexity of efforts to improve the curriculum in a balanced, consistent and sustainable manner.

### 2.5 Perspectives on substantive choices

A classic approach to the eternal curriculum question of what to include in the curriculum (or even more difficult as well as urgent: what to exclude from it?) is to search for a balance between three major sources or orientations for selection and priority setting:

- **Knowledge**: what is the academic and cultural heritage that seems essential for learning and future development?
- **Society**: which problems and issues seem relevant for inclusion from the perspective of societal trends and needs?
- **Learner**: which elements seem of vital importance for learning and development from the personal and educational needs and interests of learners themselves?
Answers to these questions usually constitute the rationale of a curriculum. Inevitably, choices have to be made, usually involving compromises between the various orientations (and their respective proponents and pressure groups). Oftentimes, efforts fail to arrive at generally acceptable, clear and practical solutions. The result of adding up all kinds of wishes is that curricula tend to get overloaded and fragmented. Miscommunication between different stakeholders often arises from neglecting one or more of the orientations. And implementation of such incoherent curricula eventually tends to lead to student frustrations, failure, and dropout.

How to create a better curriculum balance? Easy answers are not available, but a few alternatives seem to have some promise. First, in view of the multitude of (academic) knowledge claims, it sometimes helps to reduce the big number of separate subject domains to a more limited number of broader learning areas, combined with sharper priorities in aims for learning (focusing on basic concepts and skills). Second, referring to the avalanche of societal claims, more interaction between learning inside and outside the school may reduce the burden. However, the most effective response is probably to be more selective in reacting to all sorts of societal problems. As Cuban (1992) phrased it clearly: schools should not feel obliged to scratch the back of society every time society has an itch. And third, about the learners’ perspective: worldwide, many interesting efforts are ongoing to make learning more challenging and intrinsically motivating, by moving from traditional, teacher- and textbook-dominated instruction towards more personally meaningful and activity-based learning approaches and environments, emphasizing preparation for future roles in education, jobs and society.

2.6 Development strategies

To sketch curriculum development as a problematic domain is actually an understatement. From a socio-political stance, it seems often more appropriate to describe it as a war zone, full of conflicts and battlefields between stakeholders with different values and interests. Problems manifest themselves in the (sometimes spectacular and persistent) gaps between the intended curriculum (as expressed in policy rhetoric), the implemented curriculum (real life in school and classroom practices), and the attained curriculum (as manifested in learner experiences and outcomes). See, for example, van den Akker (1998) about such gaps in the science curriculum. A typical consequence of those tensions is that various frustrated groups of participants blame each other for the failure of reform or improvement activities.

Although such blaming games often seem rather unproductive, there are some serious, critical remarks to be made on many curriculum development approaches worldwide.
First of all, many curriculum reform efforts are characterized by overly big innovation ambitions (especially of politicians) within unrealistically short timelines and with very limited investment in people, especially teachers. Second, oftentimes there is a lack of coherence between the intended curriculum changes with other system components (especially teacher education and assessment/examination approaches). And last but not least, timely and active involvement of all relevant stakeholders is often neglected.

From a strategic point of view, literature has offered us many (technical-professional) models and strategies for curriculum development. Three prominent approaches are Tyler’s rational-linear approach, Walker’s deliberative approach, and Eisner’s artistic approach. As it does not fit with the purpose of this text to explain those models in specifics, the reader is referred to educative texts as from Marsh and Willis (2003). Obviously, the context and nature of the curriculum development task at hand will determine to a large extent what kind of strategy is indicated. It is noteworthy that we are beginning to see more blended approaches that integrate various trends and characteristics of recent design and development approaches in the field of education and training (for an overview and a series of examples: see van den Akker, Branch, Gustafson, Nieveen & Plomp, 1999).

Some key characteristics:
• Pragmatism: recognition that there is not a single perspective, overarching rationale or higher authority that can resolve all dilemmas for curriculum choices to be made. The practical context and its users are in the forefront of curriculum design and enactment.
• Prototyping: evolutionary prototyping of curricular products and their subsequent representations in practice is viewed as more productive than quasi-rational and linear development approaches. Gradual, iterative approximation of curricular dreams into realities may prevent paralysis and frustrations. Formative evaluation of tentative, subsequent curriculum versions is essential to inform and support such curriculum improvement approaches.
• Communication: a communicative-relational style is desirable in order to arrive at the inevitable compromises between stakeholders with various roles and interests and to create external consistency between all parties involved.
• Professional development: in order to improve chances on successful implementation, there is a trend towards more integration of curriculum change and professional learning and development of all individuals and organizations involved.

A promising approach that incorporates some of these characteristics, and adds the element of knowledge growth to it, is development(al) or design research (van den Akker, 1999, 2002; van den Akker, Gravemeijer, McKenzie & Nieveen, 2006). Such research can strengthen the knowledge base in the form of design principles that offer heuristic advice to curriculum
development teams. More than in common development practices, deliberate attention is paid to theoretical embedding of design issues and empirical evidence is offered about the practicality and effectiveness of the curricular interventions in real user settings.

2.7 Strategic dilemmas and puzzles

However, there are several persistent dilemmas in curriculum development that cannot easily be resolved, let alone through generic strategies. For example: how to combine aspirations for large-scale curriculum change and system accountability with the need for local variations and ownership? The tension between these conflicting wishes can be somewhat reduced when one avoids the all too common ‘one size fits all’ approach. More adaptive and flexible strategies will avoid detailed elaboration and prescription through over-specified central curriculum frameworks. Instead, they offer substantial options and flexibility to schools, teachers, and learners. Although struggles about priorities in aims and content will remain inevitable, the principle of ‘less is more’ should be pursued. However, what is incorporated in a limited core curriculum should be clearly reflected in examination and assessment approaches.

The ‘enactment’ perspective (teachers and learners together create their own curriculum realities) is increasingly replacing the ‘fidelity’ perspective on implementation (teachers faithfully following curricular prescriptions from external sources). That trend puts even more emphasis on teachers as key people in curriculum change. Both individual and team learning is essential (Fullan, 2001). Teachers need to get out of their all too often still customary isolation. Collaborative design and piloting of curricular alternatives can be very productive, especially when experiences are exchanged and reflected upon in a structured curriculum discourse. Interaction with external facilitators can contribute to careful explorations of the ‘zone of proximal development’ of teachers and their schools. Cross-fertilization between curriculum, teacher, and school development is a conditio sine qua non for effective and sustainable curriculum improvement. The increasingly popular mission statements of schools to become attractive and inspiring environments for students and teachers can only be realized when such integral scenarios are practiced.

Obviously, there are no magical solutions for the tensions between common core and local autonomy. It will always remain a balancing act, also depending on the scale of operations and the broader educational policy. In those policies, we see quite an interesting variation between countries in their respective pendulum movements. In recent years, the Netherlands has seen a trend towards decentralization. In basic education (ages 4-14), only two-third of the instructional is very broadly defined by (rather abstract) attainment...
targets in a national framework, leaving many choices to schools, teachers, and students. Some other countries are in a different position, characterized by highly detailed and prescriptive curriculum frameworks, oftentimes combined with heavy assessment regimes patterns. This theme is more fully elaborated in the chapter of Kuiper et al. (this book).

Whatever the position on the continuum of central-decentralized curriculum policy making, a number of debatable issues are relevant in any context:

- How much commonality in curriculum offering is required to promote equity for students and to stimulate socio-economic development?
- How can curriculum and assessment policies adequately be aligned?
- Which accountability mechanisms are helpful for both policy and practice?
- How to stimulate and support professional development of teachers?
- How can schools' capacity for educational improvement be strengthened?
- How can external support to schools and teachers have actual added value?

A series of country workshops during this conference deals with these challenges (see several chapters in this book). In the remaining part of this chapter, I will explore such questions for SLO.

### 2.8 Major challenges for SLO

The major challenge for SLO is to re-position and articulate its role in curriculum development. SLO should feed the continuous dialogue about the aims, content and organization of learning, and further the quality of curriculum development as part of integral educational development. A first requirement is that SLO, as a national expertise centre for curriculum development, operates in close interaction with many other stakeholders and professionals in: policy, school and classroom practice, research, teacher education and development, assessment/examinations, textbooks and materials development, and school guidance.

Moreover, SLO has special responsibilities for curricula and curriculum development to have added value to the following quality criteria of education:

- relevance: it should be transparent how the different sources/perspectives for learning (knowledge, society, learner) are balanced in the curriculum
- internal consistency: attention should be paid to the linkages between the ten interwoven curriculum components.
- external coherence: curriculum development should occur in interaction and alignment with other systemic change factors (in particular teacher development and examinations)
• usability/practicality: new curriculum proposals should be tested and improved to arrive at acceptable practicality
• effectiveness: curriculum development strategies should include data gathering that permits plausible statements about the effectiveness of (new) curricula in terms of student learning
• sustainability: curriculum changes should be assessed for their chances on lasting improvement under more or less realistic conditions.

These criteria need also to be reflected in the basic tasks of SLO:
• Knowledge development (in interaction with other professional partners) about curriculum and curriculum development issues.
• Designing and validating:
  - national curricular frameworks
  - exemplary school programs
  - exemplary instructional materials.

These tasks have both product and process characteristics (to be elaborated in the next sections) and require combined approaches of design, research and consultancy activities.

2.9 Curricular frameworks

As mentioned before, the trend in Dutch educational policy is towards decentralization. What does that imply for the nature of curriculum frameworks? Obviously, imposing (top-down) curricular straitjackets is out of the question, but which balance to strike in frames of reference to be experienced as stimulating, meaningful, and helpful? Schools and teachers continuously express their desire for autonomy, but, at the same time, they also like more or less stable curriculum structures. Moreover, they like to see examples of how practitioners in other, more or less comparable circumstances are dealing with their curricular challenges, what lessons can be learned from their experiences, and to what extent their findings hold promise for other contexts.

As a national agency, SLO has also a special responsibility for those questions that require central initiative and coordination. That applies in particular to generic curriculum questions that go beyond the scope of individual schools.
Three examples:
• How to optimize the longitudinal transition and alignment of curricular trajectories of subsequent education stages?
• How to optimize the horizontal balance and alignment of curricular frameworks for subject matter learning domains within the same stage?
• How should national curriculum frameworks be made (more) responsive to social, cultural and economic needs?

Addressing these and related questions offers considerable professional challenges for SLO in terms of analysis, design, validation and coordination. These challenges can only adequately be addressed in interaction with many partners, but SLO can facilitate through:
• stimulating commitment of all relevant stakeholders
• creating balance between multitude of interests and views of different stakeholders
• maintaining transparency in the process of development and decision making
• underpinning decisions, where possible, by research
• offering promising practical examples that illustrate and support the concrete implications of generic curriculum decisions.

2.10 Examples at school and classroom level

What is the function of exemplary programs and materials for schools and classroom? Top-down, detailed prescriptions are out of the question nowadays. Hardly anyone is eager to receive nation-wide recipes. Schools and teachers prefer local, school-based, and classroom-adapted customization. However, very few people like to completely re-invent the wheel. Schools and teachers do like concrete, promising examples from other, more or less comparable contexts, if firmly rooted in practice. SLO, as national agency, with a full range of curriculum experts across learning domains and education sectors, and a permanent overview of relevant development activities, is in the right position to identify, co-develop, and validate such examples. Close interaction with local/regional practitioners and other professional partners in educational development is very important. The resulting examples are then not meant to copy, but to stimulate and support orientation on promising, concrete alternatives to current practices. They can help practitioners to redesign their own curriculum.

This approach brings teachers (and their school leaders) deliberately to the forefront of curriculum improvement. Starting from their own ‘zone of proximal development’, teachers can act as curriculum makers through collaborative design and piloting of alternative curriculum approaches. Discourse and reflection about alternatives and experiences can lead to development that is perceived as real improvement. It is evident that such curriculum improvement can only succeed when occurring in close interaction with teacher professional development and school capacity building for educational renewal. Thus, productive relations between curriculum, teacher and school development are essential for local progress.
In line of the aforementioned approach, SLO likes to pay special attention to strengthening the interrelation between teachers and curriculum development. One might argue that the quality of teachers and the quality of the curriculum they use together contribute most to the learning experiences and outcomes of students. For that reason, investing in relations and partnerships with teachers (including teacher educators and teacher associations), both locally, regionally, and nation-wide, is a top priority for SLO. The recent, ongoing initiatives to create regional educational development centres around cooperating teacher education institutes offer fine opportunities to build partnerships with the world of teachers, focusing on their role in curriculum improvement.

2.11 Knowledge development

As expertise centre, SLO invests considerably in knowledge development about relevant curriculum themes. The research & development activities of SLO are initiated and coordinated by five, recently established ‘knowledge circles’ or ‘professional learning communities’. An overview of those groups, including some tentative key themes:

• The core of the content
  - how to arrive at balanced national frameworks?
  - from subjects to broader learning areas?
  - longitudinal curriculum priorities?

• Dealing with diversity
  - in talents, interests, problems
  - in social and cultural backgrounds

• Learning resources and environments
  - e-learning, web, ICT (blended approaches)
  - linking with out-of-school learning opportunities
  - design of learning environments within school

• Schools & curriculum development
  - promising scenarios for integrated curriculum, teacher, and school development
  - including aspects of leadership, collaboration, organization and culture, networking, external support

• Teachers & curriculum development
  - teachers as curriculum makers
  - collaborative curriculum development
- local/regional networking
- continuous professional development

The R&D approaches within the five groups will include a variety of activities: literature reviews, trend analysis, scenario studies, pilots of innovative designs, formative and summative evaluations, sharing and coordinating expertise with partners from within and outside SLO, publications, conferences, workshops, et cetera. Moreover, it is important to notice that the R&D activities will not occur in isolation, but as much as possible in close relation to the mainstream of curriculum development projects of SLO, and to related efforts of other agencies, both in the Netherlands and abroad. The R&D efforts should support those projects, leading not only to optimized products (including indicators of their practicality and effectiveness), but also to knowledge growth (in terms of design principles), and, last but not least, to capacity building of SLO and all its partners in curriculum development. Such interactive approaches, aimed at joint professional learning seem most beneficial for the ‘resurrection’ of curriculum development as a vital approach to educational improvement.
3. Leadership for curriculum improvement: going deeper

David Hopkins
3.1 Introduction

By background and temperament I am a school improvement activist. Over the past thirty years or so, I have self-consciously located myself at the intersection of practice, research and policy. It is here that I felt I could best contribute to the process of educational reform. Reflecting back over this time, one of the initiatives I am most proud of is the work I did with the Improving the Quality of Education for All school improvement project where we collaborated with hundreds of schools in England and elsewhere in developing a model of school improvement and a programme of support. The IQEA approach aims to enhance student outcomes through focusing on the teaching-learning process as well as strengthening the school’s capacity for managing change. More recently however I have found myself as a national policymaker concerned not just with regional networks of schools but with a part responsibility for transforming a whole system. These two sets of experiences have convinced me that not only should every school be a great school, but that this is now a reasonable, realisable and socially just goal for any mature educational system. In pursuing the argument in this paper, I will emphasise the importance of leadership and curriculum development in realising this goal.

Ask any parent about the goal of educational reform and the answer is simple – why can’t every school be a great school? With these key implications in mind, the purpose of this paper is by using the English experience as a case example, to outline an approach to large scale, long term reform that has the potential of realising high standards for all students in all schools within a curriculum context. In elaborating the argument, I will set out the:

• crucial policy conundrum in achieving sustained improvement
• four key drivers that can build system capacity to deliver on standards
• implications for the curriculum
• system leadership necessary to sustain such an approach.

3.2 Prescription or professionalism: the crucial policy conundrum

Most agreed that educational standards in England were too low and too varied in the 1970s and 80s and that some form of direct state intervention was necessary. The resultant ‘national prescription’ proved very successful particularly in raising standards in primary schools – progress confirmed by international comparisons. But progress plateaued in the second term of the Labour Government, and whilst a bit more improvement might be squeezed out of prescription nationally, and perhaps a lot more in underperforming
schools, one has to question whether it still offers the recipe for sustained large scale reform in the medium term. There is a growing recognition that schools need to lead the next phase of reform.

This implies a transition from an era of Prescription to an era of Professionalism – in which the balance between national prescription and schools leading reform will change. However achieving this shift is not straight forward. As Michael Fullan (2003, p.7) has said, it takes capacity to build capacity, and if there is insufficient capacity to begin with it is folly to announce that a move to ‘professionalism’ provides the basis of a new approach. The key question is ‘how do we get there?’, because we cannot simply move from one era to the other without self consciously building professional capacity throughout the system. It is this progression that is illustrated in the diagram below.

![Towards Large Scale Sustainable Reform](image)

In making the transition from ‘prescription’ to ‘professionalism’ strategies are required that not only continue to raise standards but also build capacity within the system. Hence the four drivers for system reform which I believe have a more general applicability as an approach to large scale reform.
3.3 Four drivers for system reform

Building capacity demands that we replace numerous national initiatives with a national consensus on a limited number of educational trends. There seems to me to be four key drivers that if pursued relentlessly and deeply have the potential to deliver every school a great school. These are personalised learning, professionalised teaching, networks and collaboration and intelligent accountability. As seen in the ‘diamond of reform’ diagram below they coalesce and mould to context through the exercise of responsible system leadership.

![Diamond Diagram](image)

Fig. 3: System leadership

Together these key trends provide a core strategy for improvement.

**Driver one. Personalised learning**

Personalised learning is an idea that is capturing the imagination of teachers, children and young people across the country. It is an idea that has its roots in the best practices of the teaching profession, and it has the potential to make every young person’s learning experience stretching, creative, fun and successful.

The current focus on personalisation is about putting citizens at the heart of public services and enabling them to have a say in the design and improvement of the organisations that
serve them. In education as can be seen in the diagram below this can be understood as personalised learning, the drive to tailor education to individual need, interest and aptitude so as to fulfil every young person’s potential.

Fig. 4: The moral purpose of schooling

It is important to realise that personalised learning is not a new. Many schools and teachers have tailored curriculum and teaching methods to meet the needs of children and young people with great success for many years. What is new is the drive to make the best practices universal.
To build a successful system of personalised learning, we must begin by acknowledging that giving every single child the chance to be the best they can be, whatever their talent or background, is not the betrayal of excellence, it is the fulfilment of it.

Obviously personalised learning demands a curriculum entitlement and choice that delivers a breadth of study, personal relevance and flexible learning pathways through the education system. In addition to the importance of curriculum entitlement and choice to both provide the basics and to engage and inspire, there are two key components:

Metacognition / Learning how to learn
Metacognitive skills enable students to develop the capacity to monitor, evaluate, control and change the way they think and learn. There is clear evidence that the acquisition of these skills can significantly increase achievement. To ensure more students gain these skills we need:
- teaching strategies that consistently and strategically develop students’ learning skills. For example, instead of simply presenting information for knowledge acquisition, teachers can ensure that in tandem with learning new knowledge students also extract ideas, memorise information, build hypotheses and theories, use metaphors to think creatively, and work effectively with others
- a framework of common learning skills, as there is currently a lack of clarity for students on the skills they should acquire and how they can develop these as they progress. These skills would need to be identified and taught coherently across the curriculum.

Assessment for learning
Personalised learning also depends on teachers (and students) knowing in a deep way the strengths and weaknesses of individual students. A key means of doing so is formative assessment for learning and the use of data, evidence and dialogue to identify every pupil’s learning needs. This may be organised differently in different schools, but the rationale must always be the same:
- clear evidence about how to drive up individual attainment
- clear feedback for and from pupils so there is clarity on what they need to improve and how best they can do so
- clarity for students on what grades / levels they are working at, with transparent criteria to enable peer coaching, and
- a clear link between student learning and lesson planning.
**Driver two. Professionalised teaching**

As we strive for a high equity, high excellence education system it is the continuing professional development of teachers (CPD) that is at the heart of the response. Put simply, unless teachers see their continuing development as an essential part of their professionalism the system will be unable to make the next big step forward in standards of learning and achievement. This is not just an ‘academic’ issue about making teaching more comparable to other great modern professions - it is a highly practical, standards-based, issue about how we deliver personalised learning and fulfil the potential of every student. To address this, teachers need continually to be learning from each other, developing knowledge in their subject area and in pedagogy, and using rich data on pupil progress to individualise teaching styles and strategies. Moreover, schools and teachers need to be seizing this agenda and seeing CPD as a responsibility that extends beyond the strict confines of the school day.

To personalise learning, teachers must increasingly focus on how they use data and evidence to apply a rich repertoire of teaching strategies to meet their students’ needs. This in turn implies radically different forms of professional development with a strong focus on coaching and establishing schools as professional learning communities. The key elements are:

**Enhanced repertoire of learning & teaching strategies to actively engage and stretch students.**

This includes:
- an ability to use a range of whole class, group and individual teaching, learning and ICT strategies to transmit knowledge, to instil key learning skills and to accommodate different paces of learning
- curriculum planning and pedagogy tailored to particular student groups: in particular, to tackle underperformance (e.g. amongst boys); to provide catch-up (e.g. for those entering secondary school without the expected at performance at age 11); to provide stretch (e.g. for gifted and talented students)
- a realisation that teaching behaviours have a big impact on student achievement. Students learn more when teachers: allocate available class time to academic activities; spend most of their time actively teaching; ensure students are on task a high proportion of class time; ask frequent and answerable questions.

**Continuous professional development (CPD)**

In order to maximise the teacher effect on learning we need to ensure that professional development directly impacts on teacher behaviour. This demands:
opportunities for teachers to engage newly learnt skills in the workplace through: immediate and sustained practice; collaboration and peer coaching; studying development and implementation

performance management systems that focus explicitly on learning and teaching in the classroom. These are currently far less developed than those focussing upon the school itself (with for example, Performance Management Observation Systems that does not report on how well pupils are learning, their time on task, etc).

Achieving these goals would go along way to ensuring consistency of practice in all classrooms – creating a truly whole school effect (i.e. with no place to hide). This would involve our leading heads and schools creating models and specifications of best practice developed by and disciplined by international research.

**Driver three. Networks and collaboration**

Over the course of the past two decades or so, we have seen a plethora of funded and unfunded networks develop. These have taken a range of forms. From ‘clusters’ to ‘partner- ships’, ‘collaboratives’ to ‘networks’, schools across the country have been, and currently are, part of them. Frequently, schools are finding themselves belonging to three or more, with some schools listing as many as ten in their portfolio.

The prevalence of networking practice supports the contention that there is no contradiction between strong, independent schools and strong networks, rather the reverse. Effective networks require strong leadership by participating heads and clear objectives that add significant value to individual schools’ own efforts. Without this networks wither and die, since the transaction costs outweigh the benefits they deliver. Nor is there a contradiction between collaboration and competition – many sectors of the economy are demonstrating that the combination of competition and collaboration delivers the most rapid improvements.

So it is clear that networks support improvement and innovation by enabling schools to collaborate on building curriculum diversity, extended services and professional support and to develop a vision of education that is shared and owned well beyond individual school gates. There are however two key components that are crucial for success in networking:

**Best practice captured, highly specified and transferred.**

Our leading schools and teachers already employ best practices. In the 1970s and 80s such practices remained isolated innovations with other schools reinventing the wheel every time they set out to improve. Some were successful, many were not. In the 1990s, attempts
were made to universalise best practices through prescriptive guidance to all schools. The result was fairly rigid pathways to improvement that many schools either chose not to implement or implemented in ways that did not significantly improve student learning.

The alternative is firstly the development of highly precise models of best practice that distil and specify processes of improvement into meaningful toolkits. These would help all schools and teachers to:
• establish their own approaches in relation to the needs of their students
• learn and improve themselves in the process of doing so, and
• most importantly, start from an advanced position, knowing the basic principles of best practice and how they can increase achievement.

Secondly, facilitated networks are needed to spread best practice and ensure it generates improvement across the system. Networks of schools provide the capacity (i) to discipline and transfer innovation and (ii) to create a cultural willingness with the profession to re-examine existing practice so as to ensure consistency and tackle within-school variations.

**Partnerships beyond the school.**
This is key to:
• developing high expectations, especially in not allowing social-economic disadvantage to determine aspirations, interests or success
• enabling parental voice to co-construct improvement, through for instance: regular information of pupil progress; an open-door policy for new parents; and consultation on new developments
• building parental responsibility, to support their child’s educational and behavioural development.

**Driver four. Intelligent accountability**

A fairly sophisticated national framework for accountability has evolved in England since the early 1990’s. That framework, which links together standardised achievement tests and examinations, target setting, publication of performance tables and independent inspection, has no doubt made a major contribution to the raising of standards during the period. Michael Barber (2004, pp4-5) part architect and staunch advocate of our system of external accountability claims that:
*For pupils and the performance of the system the benefits have been huge. Standards of achievement have been put in the spotlight, expectations have been raised, teachers’ efforts have been directed to making a difference and performance has undoubtedly improved.*
Many others however have been highly critical of the accountability framework. Although many of these critiques have been the predictable opposition of the unreconstructed and those with vested interests, it is true that such an externally imposed approach to accountability has had some perverse effects. Oft quoted examples are of teachers ‘teaching to the test’ and schools increasing their ‘competitiveness’ through adjusting their admissions policy to boost their position in the published performance tables. Many would also agree that an over emphasis on external accountability increases the degree of dependence and lack of innovation within the system.

But the solution is not to abandon the accountability framework that would be to throw the baby out with the bathwater, but to make it more intelligent. In the move from ‘prescription’ to ‘professionalism’ any accountability framework needs to be able not only to fulfil its original purpose but also to build capacity and confidence for professional accountability. This is not just in terms of its own remit but also in supporting the capacity building function of the other three drivers. To better support progress towards ‘every school a great school’ a more intelligent accountability framework would have at least two key elements.

**A better balance between internal and external assessment**

There needs to be a clear distinction between internal and external assessment: the former relates to assessment undertaken by a student’s school, college or other provider, commonly referred to as teacher assessment; and the latter to a national standardised exam, externally marked. Although the balance of assessment will inevitably gradually shift from internal to external as students move through school stages there are strong arguments for moderated teacher assessment being the default approach to assessment. It can be very reliable and links well to personalised learning, supports teacher professionalism, and through external moderation encourages the transfer of curriculum innovation between schools. As the effectiveness and reliability of teacher assessment and school self evaluation increases, capacity is built in the system, and the need for ‘high stakes’ testing can be confined to key points of transition in a narrower range of subjects.

**A better balance between formative and summative assessment**

In clarifying the purposes of assessment, it is important also to distinguish between formative and summative assessment. Formative assessment is commonly understood as *Assessment for Learning* and this has a clear focus on the improvement of learning. This is an essential feature of learning how to learn, is an embedded component of effective teaching and lays the basis for school self evaluation. Summative assessment on the other hand is commonly understood as *Assessment of Learning* whose uses are certification, selection, standard-setting, and accountability.
The operational clarity between formative and summative assessment enables each to more effectively support their core purpose. In terms of formative assessment there is a need to develop increasingly precise methods for assessment for learning, pupil progress data, contextual value added and school profiles. These can become tools not just for personalising learning and enhanced teacher professionalism, but also, for assisting school self evaluation and holding schools open to public scrutiny. In terms of summative assessment there is a case for considering random national sampling which can be a more effective means of monitoring the level national standards than full cohort testing which is onerous, expensive and has too wide a margin of error.

3.4 Implications for the curriculum

Although the four drivers all have clear implications for the curriculum and many have been mentioned in the proceeding discussion, it is important now to consider the implications for the curriculum more explicitly. It is the curriculum that provides the vehicle for every school becoming a great school and every student achieving their potential. Yet in many educational systems the curriculum is often a barrier to achieving the forms of personalised learning so necessary for modern educational systems. One way of both pinpointing the curriculum issue and of drawing the argument together is to pose the question ‘What does it mean to be educated?’ at any particular phase of education. The answer to this question can provide the school with both the means of transformation (for itself) and the personalisation of learning for its students.

Being educated at any particular age has four central elements:
• a breadth of knowledge gained from a curricula entitlement
• a range of skills in which a 7, 11, 14 or 16 year old is competent
• a range of learning experiences
• a set of key products, projects or artefacts.

It also means that students are sufficiently articulate to:
• sustain employability through basic skills
• apply their knowledge and skills in different contexts
• choose from and learn in a range of post-14 study
• draw on wider experiences to inform further learning and choice.

I would suggest that most National Curricula do not meet these aspirations. Most central authorities set out mandatory programmes of study in all subjects, with schools generally free to determine their own timetables and design their own programmes of teaching.
In England for example, the KS3 curriculum, for 11 – 14 year olds currently delivers:

- **Knowledge**: the KS3 core provides a focus on English, maths and science that occupy 35-40% of curriculum time. However, most other subjects have either a heavily specified content load or more open-ended content with heavily prescribed processes.

- **Skills**: core skills of literacy, numeracy and ICT have significant curriculum time, and are promoted across the curriculum. However, a combination of curriculum congestion and a lack of pedagogical expertise results in skills not being always effectively taught.

- **Expected levels**: clear levels of attainment exist in English, maths and science. However, it is not certain that levels, or the way teachers interpret them, clearly test the functional application of literacy, numeracy and communication.

- **Increased Stretch**: pupils can be challenged by faster pace, more breadth and greater depth. However, few schools achieve personalised stretch across all subjects at the top end of the ability range due to curricular congestion, a lack of pedagogical expertise, and limited subject knowledge.

- **Participation**: programmes of study provide opportunities to support underachievers. However, because these are not always taken up or reflected in schemes of work by schools the current quality of support varies significantly within and between schools.

- **Attainment**: over recent years there have been year on year improvements in standards achieved in KS3. However, more than a quarter of pupils still fail to achieve the target levels of attainment in the core subjects of English, maths and science or in ICT. Some pupils’ performance actually worsens across KS3.

Although this analysis is based on the English KS3 (11-14) curriculum the issues it raises and problems it identifies are intended to have a more general relevance. In particular the following issues seem to be shared across many jurisdictions.

- **Curriculum congestion**: the curriculum suffers from content and process overload, the consequence is congestion, with a breadth of study militating against students gaining a good grasp of knowledge and consolidated skills.

- **Poor catch-up provision or progression for low attaining pupils**: too many schools do not build on what pupils have already learned. Schools frequentlycite insufficient time in an overloaded curriculum for tailored catch up provision as a key factor preventing them addressing low attainment, although teacher capacity is also certainly in play.

- **Inadequate embedding of core skills**: schools have yet to fully embed teaching of literacy and numeracy across the curriculum.

- **Lack of clarity for students on the common learning skills**: students often do not know what learning skills they should have acquired, in particular because skills are overly subject specific.

- **Insufficient stretch for the most able**: the pedagogy for identifying and developing giftedness is insufficiently embedded in classroom practice and assessment opportunities not taken up.
• **Staffing problems**: lower secondary education in particular often suffers from a higher incidence of weak teachers, or frequent changes of staff, reflecting the priority given to teaching 16 year old students.

There is of course, a spectrum of possible solutions for these problems. A general dilemma though is how to balance the need for change without the inevitable disruption caused by legislation to modify the statutory curriculum. The aim is always to achieve the maximum amount of reform whilst ensuring stability in the system. Once again the current review to the Key Stage 3 (11–14) curriculum in England offers some possibilities.

The first is to focus on core study. Functional literacy, numeracy and communication could be clarified as expected attainment at the end of the KS3 curriculum. ICT would also need to be explicitly added to the current core of English, maths and science. Functional skills would similarly need to be embedded across the curriculum.

The second would be a condensed statutory curriculum in non core subjects combined with an optional entitlement. This means that the statutory curriculum content and processes in non core subjects would be reduced. The content that is removed would be approximately 20-25% of current specifications. The reduction would be redesignated as an optional entitlement. The entitlement would make up a number of components in the breadth of study currently set out for each subject. Schools would be required to teach a minimum number of components.

Third, the flexibility of an optional entitlement would allow schools to guarantee time to:
• secure essential knowledge and teach common learning skills through the curriculum;
  and,
• organise the curriculum to meet the needs of a range of abilities, tailoring support for underachieving and underperforming students, and to stretch gifted and talented students.

Fourth, there needs to be clarity on common learning skills. This requires that a common framework of skills is identified across the whole curriculum. This would include: enquiry, problem solving, creative thinking, information processing, reasoning, evaluation, communication. Students would develop each skill to a deeper level as they progressed through each Key Stage. It is also necessary to look systematically across non core subjects to consider how the spread and transmission of skills could best be improved to develop learning and raise attainment.

Finally, is the need to champion effective pedagogy. There needs to be external support to help schools organise the curriculum to meet the needs of a range of abilities. It must also
help teachers bring curriculum knowledge and common learning skills together in the classroom.

The clear prize from pursuing these actions would be a curriculum tailored to the needs, talents and aptitudes of all students. This would ensure that every student had the core and common skills required to learn at each stage of education, and that best were properly stretched.

In this section I have built on the description and advocacy of the four key drivers by discussing the reform of the curriculum as the vehicle for achieving personalised learning. But still there is a missing ingredient – the necessity for leadership as the system as a whole grapples with the challenge of adaptive change. As we shall see in the next section it is system leadership that has the power to maximise the impact of both the four drivers and the curriculum context and make them work in different situations.

3.5 System leadership as the catalyst for systemic change

I have argued that it is leadership that shapes the drivers to context, but this is obviously not a form of leadership that is commonplace. Traditional leadership and management approaches are well able to accommodate technical problems. The future however is about solving problems for which there is no immediate solution, and then to build the capacity for doing this into the medium and long term. This requires leadership of a different order.

The literature on leadership has mushroomed in recent years as have leadership courses and qualifications. All seem to have a slightly different take on leadership and claims on truth which I for one find a little confusing. In this section I will set out an approach to leadership, which I am calling ‘system leadership’ that accommodates the arguments for educational transformation made in the preceding pages.

‘System leaders’ are those head teachers who are willing to shoulder system leadership roles: who care about and work for the success of other schools as well as their own. System leaders measure their success in terms of improving student learning and increasing achievement, and strive to both raise the bar and narrow the gap(s). They look both into classrooms and across the broader system, they realise in a deep way that the classroom, school and system levels all impact on each other. Crucially they understand that in order to change the larger system you have to engage with it in a meaningful way. In terms of the argument here, this leads me to a simple proposition:
If our goal is ‘every school a great school’ then policy and practice have to focus on system improvement. This means that a school head has to be almost as concerned about the success of other schools as he or she is about his or her own school. Sustained improvement of schools is not possible unless the whole system is moving forward.

Space precludes a full explication of system leadership concept but the following aspects of the role require some brief further clarification:
• the moral purpose of system leadership
• system leadership roles
• the domains of system leadership.

The first thing to say is that system leadership as Michael Fullan (2003) has argued is imbued with moral purpose. Without that there would not be the passion to proceed or the encouragement for others to follow. In England where the regularities of improvement in teaching and learning are still not well understood, where deprivation is still too good a predictor of educational success and where the goal is for every school to be a great school, then the leadership challenge is surely a systemic one. This perspective gives a broader appreciation of what is meant by the moral purpose of system leadership.

I would argue therefore that system leaders express their moral purpose through:
• understanding personalised learning, as the drive to tailor education to individual need, interest and aptitude so as to fulfil every young person’s potential
• measuring their success in terms of improving student learning and increasing achievement, and strive to both raise the bar and narrow the gap(s)
• developing their schools as personal and professional learning communities, with relationships built across and beyond each school to provide a range of learning experiences and professional development opportunities
• striving for equity and inclusion through working on context and culture
• realising in a deep way that the classroom, school and system levels all impact on each other. Crucially they understand that in order to change the larger system you have to engage with it in a meaningful way.

Although this degree of clarity is not necessarily obvious in the behaviour and practice of every head teacher these aspirations are increasingly becoming part of the conventional wisdom of the best of our educational leaders. It is also pleasing to see a variety of system leader roles emerging, within our system that are consistent with such a moral purpose. At present these are:
• Partnering another school which is facing particular difficulties i.e. to run two schools. This role is now commonly referred to as being an Executive Head or when more schools
are involved in a Federation as the *Chief Executive*,

• Choosing to lead a school that is in *extremely challenging circumstances* or becoming an *Academy Principal*,

• Acting as a *civic leader* to broker and shape the networks of wider relationships across their local communities that can support children in developing their potential. In England currently this role currently relates to leading an Education Improvement Partnership or a cluster of Extended Schools,

• Working as a *change agent* within the system such as a *consultant leader* with a school leadership team to improve levels of attainment, or operating as one of the new *School Improvement Partners*.

No doubt these roles will expand and mature over time, as indeed these roles have evolved in response to the adaptive challenge of system change.

The third issue is what are the ‘domains of system leadership’, what does the task involve? One of the clearest definitions is the three core functions proposed by Ken Leithwood and his colleagues (2004). These are:

• **Setting Direction**: to enable every learner to reach their potential, and to translate this vision into whole school curriculum, consistency and high expectations

• **Developing People**: to enable students to become active learners and to create schools of professional learning communities

• **Developing the Organisation**: to create evidence based schools and effective organisation, and to be involved in networks collaborating to build curriculum diversity, professional support, extended services.

This outline stands up well when it is tested against existing approaches to school leadership that have had a demonstrable impact on student learning. Take for instance, Richard Elmore’s contention (2004, pp. 66-68) that ‘the purpose of leadership is the improvement of instructional practice and performance’ and its four dimensions:

• instructional improvement requires continuous learning

• learning requires modelling

• the roles and activities of leadership flow from the expertise required for learning and improvement, not from the formal dictates of the institution

• the exercise of authority requires reciprocity of accountability and capacity.

Finally, while it is true that ‘system leadership’ is a relatively new concept, it is one that is not only fit for purpose but also finds a resonance with the outstanding school leaders of the day. It is also not an academic or theoretical idea but has developed out of the challenges that system reform is presenting us with and the thoughtful, pragmatic and morally purposeful responses being given by our leading heads. Ultimately the test of
system leadership is – is it having an impact where it matters? Can our school leaders answer the hard questions?

Michael Barber (2005) phrases then like this:
• Who are your key stakeholders in the local community? Do they understand your vision? Are they committed to it? How do you know?
• Have you established a core belief that every pupil (yes, every pupil) can achieve high standards? And then have you reorganised all the other variables (time, curriculum, teaching staff, and other resources) around the achievement of that goal? If not, why not?
• Is each pupil in your school working towards explicit, short and medium term targets in each subject?
• Does each teacher know how his/her impact in terms of results compares to every other teacher? Have you thought about whether governors or parents should have access to this data? And what do you do to make sure that teachers who perform below the top quartile are improving?
• How do you ensure that every young person has a good, trusting relationship with at least one significant adult in your school?
• What does your school do to contribute to the improvement of the system as a whole?

These are the types of questions that the best system leaders test themselves against and are now comfortable with. When all our school leaders can do so then surely we are well on our way to every school being a great school.

3.6 Coda. Realising the vision of every school a great school

There is no doubt that an increase in national standards is possible with a boldness of vision and resoluteness of approach. The challenge of ensuring that every school is a great school requires perhaps even more boldness, but of a different type. Crucially, a balance needs to be achieved between national prescription and schools leading reform, with the presumption towards the latter, except when schools find themselves in very challenging conditions. In turn, through self-evaluation, schools will become increasingly aware of how to improve and how to contribute to improvement in other schools.

Large scale reform is neither only nationally led nor only schools led, but necessarily both supporting each other within a system committed to raising the bar and to narrowing the gap. For instance, in increasingly dynamic policy contexts, schools must use external standards to clarify, integrate and raise their own expectations. Equally schools, by themselves and in networks, must be enabled to lead improvements and innovations in
teaching and learning with the support of highly specified, but not prescribed, best practices.

In concluding it is important to remember that the challenge of ‘every school a great school’ has great moral depth to it because it addresses directly the learning needs of our students, the professional growth of our teachers and enhances the role of the school as an agent of social change. The emphasis on transformation is key - reform strategies can no longer take only an incremental approach to change. The raising of standards of learning and attainment for all of our students now needs to be seen within a whole school or systems context and to impact both on classroom practice and the work culture of the school. It is this that will characterise the next phase of educational reform in England and elsewhere. Without such an approach to school improvement, the evidence of practice and research clearly suggests that society will continue to set educational goals that are, on current performance, beyond the capacity of the system to deliver. Every school a great school – you bet!
4. Curriculum treasures for education (dinner speech)

Maria van der Hoeven, Dutch Minister of Education, Culture and Science
Ladies and gentlemen,

Parties are synonymous with presents. And today I haven’t just brought along any old present – I have a veritable treasure chest with me – and no, it’s not the one that belongs to my colleague, Finance Minister Zalm! Any treasure is extremely difficult to find but well worth the effort. Just like explorers of the past who went in search of new continents and adventures or privateers seeking sunken ships full of gold and jewels, I would like to take you on a treasure hunt. Together, let us decipher the riddle...

I am presenting you with this treasure chest on the occasion of your 30th anniversary because you have earned it. At the same time, however, I would like to call on you to actually go out in search of this treasure. Rushing off blindly won’t achieve much, so I’ll make it easier for you. This treasure map gives a clue as to the whereabouts of the treasure.

In his book 'The Alchemist', Paulo Coelho writes about Santiago, an Andalusian shepherd boy who dreams of a treasure buried in the Egyptian pyramids and sets off to find it. He travels on foot across vast distances, driven by his heart’s desire. His journey is difficult and many times Santiago is forced to deviate from his chosen route but he never loses sight of his ultimate goal. After many detours, unexpected meetings and adventures, the shepherd boy arrives – his heart racing – at the pyramids. Although he fails to find the treasure, Santiago meets a man who knows more. This man tells Santiago about a dream he himself had about a hidden treasure: a treasure buried in the hills of Andalusia. Finally, after a long search that has taken him many miles from home, the shepherd boy realises that all along the treasure was to be found on his doorstep, at home.

Ladies and gentlemen,

This is a traditional fable that has been handed down for centuries from generation to generation; in Saharan countries, in Persia, in India. Paulo Coelho has beautifully retold the story for a larger audience. But this is not just a story for public consumption – it is your story. The story of the SLO and of each of the people in this room.

Our treasure that seems to have been safely hidden in a distant land was actually never far away, just like it was for the shepherd boy. It is so close that you can touch it. As you’ve probably already guessed, the treasure I’m talking about is curriculum development. In recent years curriculum development was lost from sight for a time but it is still safely locked away in the treasure chest. Within hand’s reach.
The time has come to open the chest and rediscover curriculum development. Today we can make a start. And we are in the right company for learning from one another!

In neighbouring countries, Finland, for example, they did not lose sight of their treasure. In Finland, sound curriculum development shares top priority with good teachers. Both these elements – not separately but in interaction – are prerequisites for high-quality education.

While I’m not saying that we in the Netherlands should adopt Finland’s approach, I do set great store by international comparative studies like the annual ‘Education at a glance’ study. Because an international perspective is very important in evaluating the Dutch education system and in finding out what we can learn from other countries.

Not to blindly copy them - every country has its own education system, after all - but to assess critically how we can benefit from the experiences of others. I therefore believe it would be well worthwhile to look across our national borders when examining curriculum development.

A good example of how countries can cooperate is citizenship as part of curriculum development. In the Netherlands an amendment to an Education Act is currently in its final stages. The amendment will mean that every primary and secondary school will be given the task of actively promoting citizenship within their education programmes. A study that I had carried out when the Netherlands held the EU presidency showed that all European countries are actually busy with promoting citizenship in their education systems – at the national level of citizen of a country and a school, and also at the European citizen level. Each country acts in keeping with its own education policy, in its own way and at its own pace. There are differences but more than enough similarities.

The Council of Europe proclaimed 2005 as European Year of Citizenship Education. And the best thing about this is that the various countries concerned are discussing the subject with one another and learning from one another. At the curriculum development level too! Exchanges of experiences, ideas, tools and course materials are taking place. It is the start of something beautiful!

I therefore believe that it is truly worthwhile to look further than our national borders where curriculum development is concerned. I support the idea that curriculum development needs to be restructured. That it must be given a higher priority. While staying totally in line with the prevailing circumstances of the Dutch education system, of course.
We could, for example, involve teachers from the outset by establishing interactive projects, we could learn from the example of other countries, we could make use of theoretical and practical research and be aware of the delicate balance between knowledge and the transfer of culture and between the desires of society and the personal development of pupils. And who better to take the lead in this than the Netherlands Institute for Curriculum Development?

I would like to present the SLO with the challenge of coming up with a proposal for providing Dutch curriculum development with a more contemporary structure. And I would like to add that my expectations are high. After all, over the past thirty years the SLO has shown that as a professional curriculum development institute it delivers added value – for the education world as well as the government.

Ladies and gentlemen,
I would like to propose a toast: to the treasure that you can offer our education system, to a more contemporary structure for our curriculum development and to the SLO on its 30th anniversary. Congratulations!
B. Case studies and discussion
5. Curriculum policy and school practice in a European comparative perspective

Wilmad Kuiper, Jan van den Akker, Hans Hooghoff, Jos Letschert
5.1 Introduction and research questions

In many countries, the roles of national governments, curriculum development agencies and schools are shifting. In a number of cases the trend is towards more decentralization of curriculum policy. In the Netherlands, for example, the government recently has legislated national curriculum frameworks - in terms of attainment targets - for primary education (ages 4-12) and lower secondary education (ages 12-14), but these attainment targets are much less detailed and much less in number than before and only cover a portion (70%) of the available instructional time. Schools and teachers have got more opportunity for site-specific curriculum choices, emphasizing local ownership and commitment.

At the same time the latitude provided is somewhat restricted as schools have to realize the national attainment targets and are held accountable for the way they give this ‘freedom in restraint’ a personalized interpretation. In other countries, however, the pendulum seems to move into just the opposite direction (often in response to a too strong decentralization), emphasizing centrally formulated prescriptive standards, often combined with high-stakes assessment of student achievement and with accountability by schools and teachers ‘at every corner’.

Those different tendencies elicit numerous questions, with as a common denominator: What is wisdom? Do those countries that opt for more school’s autonomy take a salutary road, contrary to the ones that consider a more centralized curriculum policy of paramount importance, or should they seriously fear the opposite? Related issues for curriculum debate and research in the context of school improvement are amongst other things: How much commonality is required for equity? How open or closed should a common core be? How to align such a common core with student assessment, for example via national examinations? How to hold schools and teachers accountable for realizing intended student outcomes? How to support curriculum renewal initiatives at school level in such a way that at the same time professional development of teachers as well as school development is fostered, and what, in such a situation, is the added value of external support?

In this context an international comparative trend study has been initiated. The study focuses on school-wide curriculum practices in the compulsory age of schooling in a variation (centralized or decentralized) curriculum policy contexts. Interim results of this study are described in this paper.

The study is sponsored by the Netherlands Institute for Curriculum Development (SLO) and is jointly conducted by the University of Twente and the SLO. The study started in the beginning of 2004 and has a follow-up through 2005 and 2006. It has a two-fold aim: (i) getting a sharper understanding of (de)central curriculum policies and practices in various countries in comparison with the Dutch context, and (ii) contributing to a reflection on possibilities for SLO (and possibly also other members of CIDREE, the Consortium of
Institutions for Development and Research in Education in Europe) to enlarge its expertise in supporting schools in the perspective of more school-based curriculum development.

The study is guided by the following four research questions:

1. Within selected (primarily European) countries, what does curriculum policy for compulsory education look like with particular regard to (de)centralization and school autonomy?
2. How do schools and teachers in those respective contexts address their curriculum challenges?
3. What forms of external support are in place to support schools and teachers with those tasks?
4. How are schools and teachers held responsible for the education they provide and its outcomes?

The first research question aims at getting an understanding of curriculum policy features and backgrounds (macro), especially of the position of the pendulum on the scale ‘central - decentral’ as well as of the direction of the movement of the pendulum. Via the other three questions the effects of the prevailing policy on curriculum practices at school and teacher level (meso) are addressed. In order to find answers to these three questions the study focuses on an analysis of promising practices of developing/improving a site-specific curriculum by schools for (especially) lower secondary education, of the role of external support to do so, and of intelligent and productive school and teacher accountability.

5.2 Research design

So far, the study consists of nine cases studies, each representing an education system: Belgium/Flanders, England, Finland, Germany (North Rhine-Westphalia and Schleswig-Holstein), Hungary, Portugal, Sweden, U.S.A./California, and the Netherlands. Some of the case studies were conducted in 2004 (Hungary and California), some were carried out in 2004 with a follow-up in 2005 (Belgium, England, Germany/NRW, and Sweden) and some were conducted in 2005 only (Germany/SH, Finland and Portugal). The Netherlands is part of the comparative analysis, based on amongst other things data that have come available via a related R&D project between a number of schools, SLO and the University of Twente. In that project (completed in the fall of 2005) it was explored how Dutch schools for lower secondary education can be successful in addressing curriculum challenges in the context of increasing autonomy. It especially focused on the potentials of teacher design teams as a means to integrate curriculum development, teacher development and school development (Nieveen, Handelzalts & van den Akker, 2005).
In each case study three perspectives are analyzed: policy, research, and practice. The **policy** perspective is studied via an analysis of policy documents and interviews with policy-makers and/or curriculum developers. Topics addressed are: the nature of and reasons to the prevailing and/or envisaged curriculum policy, with particular regard to (the why of) the movement of the pendulum swing; the design and implementation strategy.

The **research** perspective is analyzed via literature and interviews with curriculum researchers who are encouraged to critically reflect on school curriculum policy-making in their country/state, design and implementation strategy applied, and approaches to and results of curriculum development and curriculum research.

The **practice** perspective is portrayed through visits to three to four schools that provide education in the compulsory age of schooling, with a particular focus on lower secondary education. The visits encompass interviews with school management, teachers and students. The focus is on analysis of promising practices of - within the variation of policy settings - developing/improving a site-specific curriculum (including perceptions on the prevailing curriculum policy), of the role and perceived added value of external support to do so, and of intelligent and productive school and teacher accountability. A core issue is the interaction between curriculum, teacher and school development in combination with factors and conditions affecting the interaction positively or negatively.

A basic assumption as regards those factors and conditions is that teacher collaboration in curriculum development initiatives is of major importance to school-wide curriculum improvement (Nieveen, Handelzalts & van den Akker, 2005; see also Hord, 2004; Lieberman & Miller, 2004; Little, 1990; McLaughlin & Talbert, 2001).

Against this background, more specifically it is analyzed to which extent the schools selected: foster a culture that addresses collaboration and accountability in a meaningful way (Hargreaves, 2003) and embraces distributed leadership (Hargreaves, 2003; Harris & Lambert, 2003; Harris & Muijs, 2005; McLaughlin & Talbert, 2001; Spillane, 2006); dispose of an infrastructure that provides teachers with sufficient time to co-design and learn and with suitable workplaces for joint work (Hargreaves, 1997; McLaughlin & Talbert, 2001); have implemented cross-over structures to support conversation and exchange (Fullan, 1999); and have an integrating and synthesizing school management which helps staff attack incoherence, makes connections, and fosters selectivity in policy initiatives impinging upon the school (Fullan, 1999; McLaughlin & Talbert, 2001).

The data collection per case takes about four to five days, preparation and case reporting not included. Results are summarized in a written report for each case, next to which cross-case analyses are conducted. Preliminary results of cross-case analyses have been and will be presented to and discussed with a number of the interviewees during two validation conferences (December 2004 and 2005).
5.3 Interim results

The results summarized in this section only pertain to the cases conducted in 2004 and 2005 and are still preliminary in nature. The nine cases conducted so far have been positioned on the scale ‘centralized – decentralized curriculum policy’ as follows (Figure 5). The figure shows a country/state’s current position on that scale as well as its movement on that scale in the recent past (up till 15 to 20 years ago) and in the near future. The positions, arrows and question marks reflect ‘educated guesses’ that have been validated by interviewees.

Fig. 5. Characterization of curriculum policies in past, present and future  Note: CAL = California; ENG = England; B/FL = Belgium Flanders; FIN = Finland; HUN = Hungary; G/NW = Germany/North Rhine-Westphalia; G/SH = Germany/Schleswig Holstein; NET = Netherlands; POR – Portugal; SWE = Sweden
In explanation of Figure 5 and based on the school visits and interviews conducted so far (especially the practice perspective will get more emphasis in the data collection ahead), the following can be summarized about curriculum policies and practices in California, England, Belgium/Flanders, Germany/North Rhine-Westphalia/Schleswig-Holstein, Hungary, Sweden, and the Netherlands.

### 5.4 California

Curriculum policy was decentral in the 70’s and 80’s, since the 90’s it is very central. There is much top-down pressure at input level via detailed prescriptive standards, aiming at quality improvement and at fostering equity, in the context of the No Child Left Behind Act (implemented from 2002 onwards). There is hardly space for site-specific choices. Schools and teachers are held in an almost iron grip. High fidelity implementation of the standards along with student performances in the basics (English, mathematics) are enforced and controlled via state-wide, rigorous and regular assessments. Student outcomes are published in school performance tables state-wide. The key-word for this top-down, evidence-based approach is ‘accountability’ for student performances at every level thinkable: there is great pressure and control by the state on the district, by the district on the school principal, by the school principal on the teacher, and by the teacher on the student. The Bay Area School Reform Collaborative (BASRC) offers school support via very frequent and systematic feedback on students’ performances in the basics.

School and teaching practices are very much standards- and test-driven. Standards and tests almost exclusively focus on the basics, at the expense of the ‘non-basics’. For each subject there are two state-approved textbooks. The use of these standards-aligned textbooks is a prerequisite for textbook expenses. The high level of prescription and top-down control focuses the attention on fostering the quality of instruction and indeed seems to be conducive to the performances of children left behind (due to continuous teaching to the test), but at the same time it elicits great frustrations at teacher level. Teachers feel kept after too much and have the feeling of having been put in the role of ‘operators of external scripts’. What is left, is a kind of a ‘Karaoke curriculum’.

Especially from researchers the criticism is voiced that schools and teachers are only held accountable for test scores. The excessive focus on test scores for the two basics also results in the neglect of the other subjects (phrased as ‘curriculum deadening’).
5.5 England

In the 60’s and 70’s curriculum policy and practices in England were characterized by a substantial autonomy for schools. However, from 1989 onwards (Margaret Thatcher’s third term), England has a statutory national curriculum that applies to all students aged 5-16 in state-maintained schools. It is defined in, amongst other things, four key stages of learning and assessment, programs of study which set out what students should be taught in each subject and in each key stage, and attainment targets which set out the expected standards of students’ performance at the end of each key stage. Along with the national curriculum there is a statutory program of age-based achievement testing at the end of key stages 1 (7+; English, mathematics and science), 2 (11+; same subjects) and 3 (14+; all subjects). At the end of key stage 4 (students aged 14-16) there is the centralized GCSE examination. The prevailing version of the national curriculum is in effect from September 2000 onwards. Compared with earlier versions, this version is less prescriptive (i.e. more a framework) and more flexible (i.e. less overloaded).

Besides the national curriculum, there are non-statutory but highly recommended and very influential literacy and numeracy strategies in primary education (key stage 1-2: literacy since 1998, numeracy since 1999) and junior secondary education (key stage 3: literacy and numeracy since 2001), meant to raise standards in these domains. The amount of time to be allocated to each curriculum subject is not officially prescribed for key stages 1-4. However, the strategies have resulted in government recommendations for daily literacy and numeracy ‘hours’ in key stages 1 and 2, and a recommended minimum three hours of English teaching plus a recommended minimum three hours’ mathematics each week for all students.

Ofsted - Her Majesty’s Inspectorate of Education - publishes school performance tables, showing for each secondary school its GCSE examination performance data pertaining to the 15 year olds. School and teacher accountability is established via external inspections by Ofsted, with a primary focus on student performances. At policy level, there is some room emerging for school’s self-evaluation - as a device for more bottom-up school improvement inside national curriculum.

The national curriculum was reviewed by the Qualifications and Curriculum Authority (QCA) in 1995 and 1999. QCA provides online support for schools to teach the national curriculum by means of, amongst other things:

- **National Curriculum Online**, which sets out the legal requirements of the national curriculum, provides information to help teachers implement it in their schools, and links every national curriculum program of study requirement to resources for teachers,
• *National Curriculum in Action*, which illustrates standards of pupils’ work at different ages and key stages and how the programs of study translate into real activities,
• *Schemes of Work*, which shows examples of how the national curriculum programs of study and attainment targets can be translated into a practical plan.

From school visits (four in total) it appeared, among other things, that there is much top-down target setting, not only in the context of the national curriculum but also as part of the strategies. School and teaching practices seem to be very much assessment-led. Perceptions about the national curriculum differ, varying from the view (expressed by the head master of a relatively poorly performing comprehensive school) that ‘the totally prescriptive and overloaded national curriculum is a straight jacket’, to the view (expressed by the head mistress of another comprehensive school that belongs to the country’s top 50 in student achievement) that ‘the national curriculum offers sufficient freedom as it only defines learning outcomes, not how to get there. As long as you are successful, you have more autonomy’. Schools also differ in the way they cope with policy pressures from outside. A low achievement comprehensive school apparently rather uncritically accepts policy edicts and anxiously strives to implement these directives in order to improve the school’s performance, while a school with high achievement results critically faces new policy initiatives coming to the school with a balanced mix of cautiousness and self-confidence (‘If we consent with the spirit, we embrace it; if not, we only pay lip service or let the shower blow over. We carefully pick what we think is most appropriate to this school’).

### 5.6 Belgium/Flanders

A 1991 Decree marks the starting point for, as it is called, working in the direction of more autonomy for schools. The Decree regulates a core curriculum in terms of attainment targets for primary and secondary education (in effect since 1997) and for the so-called *eerste graad* and *tweede graad* of secondary education (in effect since 2003). There are subject-specific and cross-curricular attainment targets. The former have been formulated as ‘goals to be attained’ (knowledge, skills and attitudes), the latter as ‘goals to be pursued’. Both types have been developed by the Flemish Department for Educational Development (DVO). Attainment targets need to be elaborated in a school curriculum, which is statutory in primary education and is perceived as statutory in secondary education. Devices to do so are the so-called *Net* curricula, which are developed and disseminated by four umbrella organizations (*Nets*) that, among other things, exist for Catholic and public schools. *Net* curricula are meant as support for schools to translate the attainment targets into their school curriculum. There are *Net* curricula for primary education and for all subjects in secondary education, all covering about 80% of the time available. The *Net* curricula are
quite influential, in the sense that, to some extent, they have a centralizing counter-effect on the pursuit of realizing more curriculum autonomy.

The Inspectorate of Education (established in 1991) is responsible for quality assurance via school inspection every six years (*schooldoorlichting*). These school inspections focus on the quality of schooling and, as far as secondary education is concerned, also on the quality of schooling in specific subjects, based on context, input, process and output indicators (CIPO model). The Inspectorate mainly focuses on external inspection, although it also encourages schools to build change capacity. However, a formal link between outside evaluation and self-evaluation by schools does not exist. Pedagogical support is offered by Net-bound Pedagogical Support Agencies (PBD’s). Contrary to England, there is no ranking of schools.

From one school visit (primary education) it appeared that schools need to make a transition from a situation in which they only had to operate externally provided ‘ready-to-eat-chunks’ (curricula in the 70’s and 80’s) to school-based curriculum enactment. Making such a shift is hard, as most schools don’t know how to cope with the freedom offered. At the same time the freedom is perceived to be restraint by pressure from the Net curricula. There seems to be a common feeling amongst teachers that the attainment targets are too detailed and need to be reduced in number. Teachers seem to perceive the Net curricula as overloaded and too prescriptive.

At the moment, additional data is being collected at four schools for secondary education (*eerste graad*).

### 5.7 Germany

Education policy belongs to the responsibility of the federal states (*Länder*). All federal states have a layered education system. After the *Grundschule* (years 1 through 4, from age 6 onwards) there are four secondary education tracks: the *Hauptschule* (years 5 through 9 or 10), the *Realschule* (years 5 through 10), the *Gymnasium* (years 5 through 10 plus *Oberstufe* during years 11 through 13, from 2006-2007 onwards years 11 and 12), and the comprehensive *Gesamtschule* (years 5 through 13).

Inspired by poor performances in PISA and TIMSS and in the context of political changes, curriculum policy in *North Rhine-Westphalia* is on the edge of shifting from a heavily centralized system (*Lehrplane*) to an approach that aims to combine goal steering and output control (via standards) at the federal state level with carefully fostering school
Main features of this new policy in NRW are:

- A core curriculum (Kernlehrplane), defined in statutory attainment targets/standards, for mathematics, German and the foreign languages (in effect since September 2004).
- School-based parallel assessment (Parallelarbeiten, i.e. assessment in all schools at the same time) for a selection of subjects in years 3 (ages 9/10), 7 (ages 13/14), 10 (ages 16/17) and 11/12. Initially, this assessment was mandatory for all years mentioned. Next, the obligation was cancelled for the years 3 and 7. Recently, the same happened for year 10.
- State-wide statutory assessment for the core subjects in year 4 and at beginning year 9, related to the Kernlehrplane (in effect from November 2004). Schools are allowed to compose a test based on an own selection of items from a central item bank.
- Central exams at the end of year 4 (ages 10/11) and at the end of year 9 (ages 15/16), directly linked with the Kernlehrplane (in effect since 2006).
- Independent school inspection. The inspection system is currently under revision, in the sense that one is searching for new ways to combine inspection and inspection for improvement in a meaningful way in all five districts in NRW.

At school level the new curriculum policy implies more leeway than already available for schools to set their own priorities and internal evaluation of school development (via the so-called Schulprogramm, statutory from 1997 onwards). As it seems, schools have difficulty in coping with the latter task due to a ‘tsunami’ of rules. At the same time both the new standards and the central examinations impose many restrictions. Like in Belgium/Flanders, there is no ranking of schools in school performance tables. A prominent external support agency is LfS (Landesinstitut für Schule). This agency is currently shifting from curriculum development to quality assurance tasks (based on the standards). By means of 300 moderators LfS provides schools with support at implementing changes. As yet, schools don’t seem to make much use of the support provided, as they are primarily interested in trying to articulate what they would like to do themselves.

From school visits the picture emerged that schools are still fully autonomous in assessment. There are no central school-leaving examinations yet at the end of lower secondary education (ages 10-16). The envisaged implementation of central exams at the end of the highly selective lower secondary education is perceived as a top-down threat. Schools vary in the way they anticipate the implementation of the attainment targets as well as the assessment regime. One school watches this development with shiver and resistance; another perceives it as a next opportunity for school development. There is much space for own choices offered and taken, but schools feel insecure about how the Inspectorate will respond to the way schools fill in the space.
**Schleswig Holstein** has frame curricula which offer a rather substantial amount of freedom for schools’ own choices. However, schools perceive these frameworks as rather overloaded and partly irrelevant for school practice. Parts of these frame curricula are currently being specified via the implementation of standards for the subjects German, mathematics, biology, chemistry and physics. The standards describe knowledge and skills to be attained at the end of the *Grundschule*, year 9 (*Hauptschulabschluss*) and year 10 (*mittleren Schulabschluss*).

Changes in curriculum policy in Schleswig Holstein are due to the poor performances of German students in PISA, worries about the quality of teachers as well as a recent political shift. The current government headed by the CDU (since 2005 a political majority in the *Landtag*) puts much emphasis on improving the quality of education, on making outcomes transparent, and on improving the communication with parents and relationships between teachers and parents. Fostering the autonomy of schools goes hand in hand with more schools’ accountability. An important means for doing so is *Externe Evaluation im Team* (EVIT): external school inspections by especially set up teams using protocols. IPTS, an institute formerly responsible for teacher training and school support, has made a shift towards quality assurance and the development and implementation of standards (and has been renamed into IQSH). Pre-service and in-service training of teachers takes place via subject-bound conferences. In-service training has been centralized and is voluntary. Teachers indicated not to be convinced of the added value of these changes (Grabbe-Letschert & Letschert, 2006).

### 5.8 Hungary

Hungary has been a centralized country for decades. In the early 80’s a first diversification from centrally directed curriculum policy came to the surface. From 1998 onwards a two-polar curricular regulation system was implemented, obliging every school to prepare its own school curriculum within the broader framework of a national curriculum (NAT) for Years 1-10 (students aged 6-16). In 2000, the two-polar system was replaced by a tri-polar one: *school curricula* within the broader context of a *national curriculum* plus, in-between, statutory so-called *frame curricula*. The national curriculum 2000 is defined in terms of attainment targets for ten ‘cultural domains’ for years 4 (age 10), 6 (age 12) and 8 (age 14) and addresses cross-curricular themes. The attainment targets cover 50% to 70% of the compulsory teaching time. The frame curricula contain detailed content prescriptions per subject per year, including the minimum time allocation per subject. The frame curricula were developed and implemented in order to assist schools and teachers in the interpretation of the national curriculum and to re-ensure more quality and uniformity of
education across the country. Since 2002, schools have to prepare their school curriculum based on a revised (competence-based) national curriculum. In addition, the status of the frame curricula changed from compulsory to non-compulsory in order to reduce over-regulation and to restore professional autonomy of schools and teachers. In 1998, central tests were introduced at the end of years 4, 6 and 8, meant to support teachers’ assessment. The matriculation examination at end year 10 (age 16) is the only summative assessment. Hungary does not have an Inspectorate of Education.

From school visits the following picture emerged. The ‘intermediate’ frame curricula are rather traditional in nature. Nevertheless, they are perceived as valuable for schools lacking reform capacity. So far, the frame curricula combined with textbooks and the matriculation examination are more influential on school and teaching practices than the national curriculum. An educated guess by teachers interviewed is that the national curriculum will increase in influence due to the implementation (from 2004-2005 onwards) of a revised matriculation examination that reflects the national curriculum 2002. There is a clear tension between the revised national curriculum (innovative and ambitious) and the more traditional, subject-based frame curricula. Assessment arrangements and facilities are poor. Schools have much autonomy. However, amongst teachers there is a common feeling of frustration combined with innovation tiredness due to the lack of any external support as well as the fact that a new government means a new curriculum policy. As a consequence, it seems teachers have gradually developed a strong ‘laissez faire’ attitude to the government’s education policy. As far as external support is concerned, there are county pedagogical institutes, but the service they offer to schools is weak. Schools need external support, but it is hardly available. From 1994 to 1998 the National Institute for Public Education (OKI) offered external support to schools by providing them with examples of local school curricula. As it appears, this data bank of about 600 examples did not work.

5.9 Sweden

Sweden had a strongly centralized curriculum policy for a long time. However, since the 60’s and the 70’s the country has been slackening the reins of government control a bit. Nowadays, curriculum policy can be characterized as goal steering at the national level incorporating substantial local responsibility. Sweden has a national curriculum (Läroplan) for the comprehensive school (grundskola) since several decades. The most recent curriculum was introduced in schools in 1995 (Lpo 94) and it pertains to the compulsory school for students aged 7-16 (year 1-9). Since 1998 it also includes the pre-school class for children aged 6-7 where this is provided in the grundskola, and after school centers. It describes goals and guidelines of two kinds:
• aims (or goals to be pursued), which indicate the direction of the school’s work and thus
the development of the desired standards
• attainment targets (or goals to be achieved), which express the minimum achievements
required on leaving school.

It is the responsibility of the school and the school authorities to ensure students are given
the opportunities to attain these goals. The national curriculum also prescribes a minimum
teaching entitlement, in terms of the total amount of teaching time for the nine years of
compulsory schooling broken down by subject. It is up to the schools (in casu the school’s
board of governors) to decide how these hours should be allocated in the timetable over the
nine years of schooling. Some schools, for example, allocate more hours to the teaching of
Swedish and mathematics in the early years of the grundskola. Apart from the national
curriculum there are binding subject syllabuses. These syllabuses determine the goals and
content of teaching per subject and thus define the conditions governing teachers’ choice of
methods and materials.

Municipalities are responsible for the implementation of the national curriculum. Each
municipality must state in a skolplan how it intends to attain national goals for its schools
and how schools are to be organized and developed. Each school has to draw a yearly
quality review. From 2006 onwards an adapted national curriculum will be in effect.
Schools have the obligation to enact students’ personal development plans and to
implement with cross-curricular projects. Some people perceive this change as a sign of a
growing interference by the central government and, as a consequence, as a slight course
correction in the direction of centralization.

Common national tests in Swedish, English and mathematics are given at the end of year 5
and 9, but are only compulsory for schools (and not for students) at the end of year 9 (age
16). Marks are only awarded from Year 8. There are no national examinations on completion
of post-compulsory upper secondary school. The Swedish National Agency for Education
(Skolverket) is responsible for the curriculum development and enactment (national
curriculum and syllabuses), inspection, and improvement support. Since 2003, the
inspection function has been accommodated by the National Agency for Education’s
Educational Inspectorate, and the improvement support by the National Agency for
School Improvement. Both are part of Skolverket.

Visits to three schools in the Stockholm area resulted in the following characterization of
school and teaching practices:
• Teams of teachers are responsible for a large group of students (80). Teachers follow a
group for a number of years.
• Each term (so, twice a year) there is a ‘developmental dialogue’ of about one hour between teacher, pupil and parents.
• Students are given a great responsibility for their own work as well as for the school environment (based on regulations in the national curriculum).
• The schools visited look like a learning environment for teachers (teaching, collaboration with fellow teachers, professional development), with individual and shared working places for teachers.
• Schools seem to deliberately invest in teacher and team development.
• The yearly quality review varies in format and procedure.
• There is quite a lot of autonomy for schools within the municipality skolplan. It is up to the school to decide upon how to achieve the goals set by the municipality.
• The national government exerts more influence via the Inspectorate than via the läroplan. At the same time the central tests taken at the end of years 5 and 9 are more influential than the national curriculum. The general impression is that those central tests are quite a proper representation of the national curriculum.

5.10 Portugal

In the mid 70’s Portugal started to struggle itself out of a dictatorial regime that had hold the country firmly in its grip for more than half a century. Not surprisingly, curriculum policy in Portugal still has strongly centralized features. At policy level there is a tendency towards more curriculum autonomy for schools against the background of the national curriculum for basic education. In practice, however, the autonomy movement hardly affects the meso level. Basic education has been implemented from 1986 onwards. It takes nine years (compulsory education) and encompasses three cycles: years 1 through 4 (1st cycle, ages 6-10), years 5 and 6 (2nd cycle, ages 10-12), and years 7 through 9 (3rd cycle, ages 12-15). The first national curriculum for basic education dates from 1986 and was reviewed in 2001. For every cycle it describes attainment targets, contents (subjects and cross-curricular activities) and the minimum time allocation per cluster of subjects and cross-curricular activities. Portugal has a school inspection system.

A major problem in Portugal is that a coherent implementation strategy is lacking. Reforms are hardly facilitated. Schools complain about much top-down pressure, lack of support, lack of budget, huge bureaucracy as well as poor professional development supply and facilities. The national curriculum is perceived as rather prescriptive and impedes flexibility and the making of own choices. In addition to that, teachers use to operate rather solitarily. The inspectorate focuses primarily on school management quality (no quality improvement support). Although school self-evaluation is mandatory, schools don’t perceive it as such.
5.11 Finland

From the beginning of the 70’s Finland has gradually changed from a tracked and very centralized education system towards a nine-year comprehensive school for children of the ages 7 to 16 (compulsory basic education). There is a national curriculum for the comprehensive school since 1985. Completely in line with the then time spirit in Finland, this national curriculum consisted of very detailed prescriptions defined in terms of goals and contents. It provided hardly space for schools’ own choices. This situation changed rather radically with the introduction, in 1994, of a revised national curriculum. This version was half as voluminous as the 1985 one and was the exponent of what one of the Finnish interviewed designated as ‘the most decentralized curriculum policy in the world’.

The freedom offered to schools was so substantial that they didn’t know how to cope with. According to the Finnish National Board of Education (responsible for the development and review of the national curriculum) it also caused too much variety across schools. So, in order to offer more structure and in order to create more uniformity, the 1994 curriculum in its turn was replaced by a more prescriptive document that will be implemented from 2006 onwards and is almost as voluminous as the 1985 version. The 2006 national curriculum is defined in terms of objectives, core contents per subject for a cluster of years (1-2, 3-5, 6-9) and final assessment criteria at the end of year 9. A major difference with the 1994 curriculum is the insertion per subject of standards (phrased as ‘descriptions of good performance’) at the end of years 2 and 5. Along with the increased emphasis on the monitoring of students progress, these ‘bus stops’ are meant to provide schools with more structured support not only for reaching the final destination (objectives) but also for finding the route to it. Part of the 2006 national curriculum is also a new distribution of lesson hours in terms of the minimum amount of weekly lessons per year per subject or cluster of subjects.

Finland has not an inspectorate of education. Interviewees indicated that there is no need for an inspectorate system as there is a great trust in the professionalism of teachers who all need to have a master qualification and are generally respected. There is a strong focus on school self evaluation as well as on external evaluations conducted yearly by the Evaluation Council for Education and Training at the end of year 9 in a sample of schools. Every school sampled is provided with written school specific feedback.

Finnish students are high achievers in PISA. Possible explanations for these good performances are the following:

• Contrary to the Netherlands, children in lower secondary education (years 6-9) are grouped in classes based on age and ability level. Schools receive extra funding for grouping children in smaller classes for certain subjects (e.g. mathematics, foreign languages), while for other subjects class size can be enlarged. In doing so, it is possible to pay more attention to poorly performing students.
• The composition of the student population is strongly homogeneous.
• Both the teacher profession and the quality of teacher training are highly thought-of (although there is also some criticism on the pedagogical-theoretical character of teacher training). Only 15% of the students who sit for the entrance exam is admitted to enroll.
• The noses of Finnish teachers point in the same direction. As far as there are rules, they are generally followed dutifully.

Anyway, the good performances in PISA are put in perspective strongly here and there: what the PISA tests measure, it is reasoned, matches only partly with ambitions reflected by the Finnish intended curriculum.

A visit to a school (years 7-9 plus upper secondary education for children ages 17-19) in the outskirts of Helsinki learned that at the moment there are two parallel developments. Firstly, the 2006 national curriculum clearly marks a slight but undeniable movement towards centralization. Nevertheless, schools keep a substantial amount of curriculum autonomy, which still is perceived as a great good (‘Schools are different and should be different.’). Second, cooperation between schools is strongly fostered at the local level. This offers schools the opportunity to assume a certain profile in mutual agreement.

5.12 The Netherlands

In the Netherlands the content of education was not an object of great dispute in education policy in the 70’s. In fact it was a non-issue. Contents were rather stable and had been laid down in examination programs. There was hardly any doubt about the quality of education. However, from the 70’s to the 90’s the government’s commitment with the content of education gradually increased, in order to stimulate the continuous development of students as well as equity. The government started to pursue a ‘constructive’ education policy, featured by a strong top-down control of large-scale innovations. In order to support schools an extensive school support system was created, amongst which national institutes for educational measurement (CITO) and curriculum development (SLO). SLO’s task was to design and develop ‘models for’ curricula at various levels. The phrasing ‘models for’ was crucial, as any appearance of centralized curriculum policy from the side of SLO should be avoided.

The times are changing though since a decade. Trust in the top-down steering of large-scale changes has been replaced by fostering site-specific commitment and ownership, initially as regards school administrative issues, increasingly also pertaining to the process and outcomes of education. A strong movement has been emerging - not only in education but
also in other societal sectors - towards autonomy and market forces. The basic assumption is that local ownership contributes to the quality of education. However, as regards curriculum policy there is still some ambiguity. On the one hand, schools are given ample room to make site-specific choices (resulting in more variation). On the other hand, there is still an undeniable tendency to central regulation and control by means of both the obligation to accountability, external evaluation by the inspectorate of education, and pleas for standards.

Nevertheless, curriculum policy is very decentralized and can be designated as ‘fewer rules and more ambition’. There are curriculum frameworks for both primary education (ages 4-12) and lower secondary education (ages 13-14). The frameworks have been defined in terms of attainment targets (general goals to be pursued, covering two-third of the teaching time available) and, for lower secondary education, a non-mandatory timetable. Schools have much space for (re)designing their site-specific curriculum. The attainment targets differ substantially from those in, for example, California and England in the sense that they are much less in number. They have substantially decreased in number as time went by (for primary education, for example, the number decreased from 464 in 1988, via 122 in 1993 and 103 in 1998, to 58 from 2005 onwards; more or less the same is true for lower secondary education). Also, they are much less detailed and at the same time different in nature. They do not specify content and teaching methodologies. They are meant as a source of inspiration for schools and teachers to make site-specific choices as well as a frame of reference for public accountability as regards choices, efforts and outcomes. Schools and teachers are accountable for the way schools give ‘freedom in restraint’ a personalized interpretation. The attainment targets for lower secondary education, for example, have been grouped per content area: ten for Dutch language, eight for English, nine for mathematics, eight for science, twelve for social science, five for art and culture, six for physical education. As an additional support for schools ‘scenarios’ have been developed.

These scenarios, representing four ‘levels’ of innovative ambitions, are the following:
• scenario 1: separate subjects; arrangements between teachers with regard to overlap between related subjects
• scenario 2: separate subjects plus, at regular intervals, cross-curricular projects or themes
• scenario 3: clustering of separate subjects into learning domains, like social science, science, art and culture, and physical education
• scenario 4: not contents/subjects but competencies are the starting point for teaching and learning.

There is no statutory program of age-based achievement testing at end of primary (age 12) and lower secondary (age 14) education. There are influential school-leaving examinations
at age 16 (vmbo), age 17 (havo) and age 18 (vwo), consisting of both an external (i.e. central) and a school-bound (de-central) part. The school-bound part is partly practical in nature. About 80% of the primary schools participate in a standardized test that is administered in grade 8 (age 11/12). This is a non-mandatory but very influential test, developed by the National Institute for Educational Measurement (CITO) and meant to help teachers, students and their parents in choosing the appropriate level of secondary education. Based on a 2002 Act, the role of the Inspectorate of Education is twofold: (i) inspection, by assessing the quality of education in terms of the education a school provides as well as its output (student outcomes and progress) and by reporting on it, and (ii) inspection for improvement, by fostering the self-regulative power of schools (school development).

A school’s self-evaluation report is the starting point for a quality review by the Inspectorate every four years (periodiek kwaliteitsonderzoek). So far, the primary focus of the Inspectorate is on inspection. Schools and teachers are accountable, but accountability not exclusively pertains to test scores. Inspection results are published in newspapers and magazines, but these rankings are much less influential than those in California and England.

In the context of increasing autonomy for schools, in primary and secondary education a reform is taking place in which two main streams can be distinguished. There is a small group of literally and metaphorically newly built schools, which have started recently or which are making preparations to start in the very near future based on an innovative philosophy of teaching and learning. In addition to these newly developed schools, there is a rapidly increasing number of schools that strive to renew (‘renovate’) their existing curriculum and school organization.

5.13 Tentative main findings and conclusions

From the preliminary case-specific findings described above, the most striking cross-case results are the following.

All countries and states studied have a national curriculum for compulsory education. These documents have been defined in terms of goals and objectives (attainment targets, whether or not specified into standards), an indication or listing of contents (subjects or clusters of subjects, sometimes also cross-curricular themes) as well as generally a rationale. In some cases also a distribution of lesson hours per (cluster of) subject(s) is provided. This distribution is either mandatory (minimum amount of teaching time, e.g. Sweden and Finland) or non-mandatory (the Netherlands). Goals, objectives and contents vary from detailed prescriptions (e.g. California) to rather an open-ended, more or less frame of reference (e.g. Hungary, the Netherlands). However, all are mandatory in nature.
Striking phenomena are the ‘intermediate’ curriculum frameworks that are meant to (further) specify the national common core. Examples of those are the schemes of work in England, the ‘net’ curricula in Belgium/Flanders, the frame curricula in Hungary, and subject syllabuses in Sweden. These intermediate curriculum frameworks are generally rather traditional and detailed in nature.

In several countries/states (Hungary, the two German Länder, Sweden, Finland and the Netherlands) schools have (some) space for site-specific choices in the context of the national curriculum. As far as space is available, schools vary strongly in their capability to enact the autonomy offered. Schools also vary in the way they cope with policy pressures from outside (see, for example, England).

In Finland and Sweden the pendulum is slightly but unmistakably swinging back in the direction of centralization. This pendulum movement is not as much (Sweden) or not only (Finland) caused by increasing government control as regards goals, objectives and contents (the ‘what’), but more by a growing government’s involvement in teaching and learning (the ‘how’). In both countries tailor-made instruction is fostered via an intervention at the central level. Tailor-made instruction is also emphasised in the Netherlands (see the ‘newly built’ and ‘newly rebuilt’ school development), but strikingly enough this is being strived for by a more relaxing government policy.

England and California are exemplary for countries/states with a nation and state-wide, rather rigorous assessment system, with school and teacher accountability (based on assessment results) on every corner. Curriculum policy in North Rhine-Westphalia and Schleswig Holstein seems to tend into the same direction. Such an outcomes-based accountability culture does not exist in the Netherlands. In a number of countries (e.g. Sweden and Finland) also interim of final tests are administered, but those are not geared towards the measurement (and improvement) of outcomes at the level of the individual student but towards monitoring the quality (and improvement) of education at system level.

There is room for self-evaluation by schools - as a device for school development - in the two German states (Schulprogramm), Sweden (yearly quality review), Finland, the Netherlands (hesitantly), and England (on the policy agenda, within the national curriculum).

In a number of countries/states (England, Sweden, the Netherlands, the two German states) the role of the Inspectorate is changing from inspection only to inspection plus improvement support. These twin roles seem to be at odds and, as a consequence and not amazingly, seem to get off the ground only with difficulty as inspection and inspection for improvement
differ from each other as regards function and goal. In addition, school management and teachers are inclined to perceive inspectors primarily as external evaluators (‘judges’) rather than partners in school improvement. Also, the Inspectorate itself seems to be not familiar enough with its new role and its implications.

Schools dislike too much centralism, get frustrated by too frequent policy swings (e.g. Hungary) and appreciate a balance between central structure and local autonomy.

With regard to external support there are many differences across countries. Support offered to schools varies from much to little, from tailor-made and bottom-up to forced and top-down, from large-scale to school-based, from varied supply to focused supply, and from support via Internet to personal support.

Conclusions
One of the aims of this study is to get a sharper understanding of (de)central curriculum policies and practices in various countries in comparison with the Dutch context. When we compare the Netherlands with the other eight cases, then the final conclusion is inevitable that the Netherlands is the uncrowned king of curriculum autonomy.

However, some nuances and comments should be added to this main conclusion. First, there are large differences between education sectors in the Netherlands. There is much more curriculum autonomy in primary and lower secondary education than in upper secondary education. The room of movement drastically decreases - or is perceived as drastically decreasing - as school-leaving examinations come closer (pre-shadowing effect).

Second, several schools for primary and lower secondary education are trying to enact the freedom offered (see, again, the ‘newly built’ and ‘newly rebuilt’ school development), but by sticking to the textbook much ‘strategic space’ (a famous phrasing of a former team manager of the Dutch soccer team) stays unutilized. In addition, from a monitor study on curriculum (re)design efforts in lower secondary education (2005) the picture emerges that schools have taken up the gauntlet, but that there are large discrepancies between innovation rhetoric and actual functioning of schools, and beliefs and perceptions of principals and those of teachers.

Third, a recent study conducted by Nieveen, Handelzalts and van Eekelen (2006, in preparation) shows that, in the opinion of teachers, the 58 attainment targets for lower secondary education have been formulated so broadly that they are perceived and used neither as guiding nor as inspirational tool. Instead, they are used as a kind of a control and accountability instrument *afterwards*, in the context of external evaluations conducted by the inspectorate.
Figure 5 shows that pendulum movements between, on the one hand, government steering and control and, on the other hand, school autonomy can be violent (see, for instance, California, England and Hungary). There are also striking differences between countries as regards their position on the scale in the past, at the moment and in the future. An intriguing question is the why of the various movements and especially the why of reversals (which is still under analysis). The movements seem to be a repeating chain of action-reaction. In the context of (often but not only) a political field of force, a too strong movement towards decentralization in the end results in a movement in the opposite direction (more top-down steering and control), and the other way around. The figure shows that in a country with an extreme position on the scale centralized-decentralized, sooner or later (and apparently by a physical law) a reaction will take place or can be expected. Basically, this is what is happening in countries like England (less prescription more flexibility), Finland (insertion of descriptions of good performance or standards, in order to create more structure and uniformity) and Sweden (nano curriculum).

From this perspective, a reversal in the Netherlands seems only to be a matter of time. In a letter sent to a national newspaper, van den Akker and Peters (2006) in their role of director curriculum development respectively general director of SLO, put forward the proposition that, although commitment from the side of schools and teachers has proven to be extremely conducive to the effectiveness and sustainability of improvement and renewal efforts, also school autonomy has its limits - like tight government steering has. There are, both authors argue, considerable challenges of major public importance and beyond separate schools (e.g. careful decision-making about what knowledge is most worth teaching) that call for a combining of forces as well as a coherent direction and a regulating role from the side of the national government. A government that wants to promote diversity is at the same time responsible for stimulating substantive and social cohesion, fostering equity, and promoting collective socio-economic interests.

This begs the question what would be a wise strategy. It seems to make sense to keep away from tight prescriptions via detailed standards, from an exaggerated belief in ‘nothing moves unless tested’, and from an obsessive focus on test scores only (cf. California). Rather it seems sensible to maintain and reinforce the major strength of current curriculum policy: i.e. fostering bottom-up renewal initiatives. Schools, van den Akker and Peters put forward, are not looking for national prescriptive frameworks. Instead, they gladly would be inspired by promising and prototypical practical examples of how to (re)design their site-specific curriculum in the context of the attainment targets. The expectation is that such procedurally and substantively specified examples - possibly including ‘descriptions of good performance’ for certain age levels (cf. Finland) - will be more inspiring for schools and teachers than the current set of attainment targets. In combination with the development
and diffusion of these curricular examples, much more time, money and effort should be invested in teachers’ professional development.

In the following chapters we present an anthology of case studies carried out in the context of the collaborative project between SLO and the University of Twente, focused on curriculum policy in European countries. A selection of case studies was presented at the ‘Leiden-conference’.
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
total 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 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).
7. Curriculum in Sweden: use and discussions

Mats Ekholm
7.1 Introduction

Sweden has a long tradition in the use of extended central guidelines. In 1919 the first detailed centrally produced document was presented that was telling the teachers of the Folk school in the country what they were expected to help the students to learn. The name of the document ‘Undervisningsplan för rikets folkskolor’ told that the content gave the teachers ideas about the way the teaching could be managed. The document describes in great detail what teachers should do in all the subjects that the student learnt. The teaching in several of the subjects was based on ideas about activity learning that had been discussed among Swedish teachers since the late years of the 19th century. The Royal Board of Education produced the document.

7.2 Overview of Swedish curriculum policy

Traditions among teachers have been established to use the central guidelines as a basis for the planning of teaching in Swedish schools since that time. During the period of 1920 to 1990 the school system went on to have a highly centralised structure. In 1955 a new formula was created for the Läroplan as the term is in Swedish. Three different parts were presented – one with a more overarching content, one with descriptions of the content of each subject and in a third part the time allocated for each subject was presented. In the first part more broad expectations were put forward, like demands that each student would learn to act independently, to learn to cooperate, to develop positive attitudes towards international interactions, to show tolerance towards others, to get used to democratic decision makings etc. In both the more overarching part and the descriptions of the different subjects, content as well as working methods were described and discussed.

During the 50’s Sweden invited its kommuns¹ to participate in a large experiment to find out a new formula for the school system. Committee work during the 40’s had landed in a shared view among the political parties, that the old parallel school system, with a selection of a small elite from when students were eleven years old, should be left in favour of a comprehensive school system. All students would receive nine years of compulsory education instead of seven. A choice was made on the basis of the many different designs that the kommuns had tested during the 50’s and the first central Läroplan for the new Grund school was presented in 1962. As a consequence of the new system for basic education a new ‘gymnasie’ school was introduced in 1966. During two or three school years students were offered studies directed either towards vocational life or preparing for further studies.

¹ Sweden has today 290 kommuns. These are geographical areas with certain political and administrative autonomy in relation to the state. The largest kommun is Stockholm with about 800 000 inhabitants. Bjurholm is one of the smallest with 2 500 inhabitants. In 1950 the country had around 2 500 kommuns, most of them very small. The politicians of that time saw that it was important to change the structure of the kommun to be able to carry the economy of a new school system. So within 25 years the kommun structure was changed from about 2 500 to 276.
The formula of the 1955 guidelines was used in the new Läroplans that were introduced in the grund school as well as in the gymnasie school. Aims and guidelines together with common directives were presented for the central overarching part. The time budget of the different subjects was followed by directions and comments for each subject. A critical review of the way schools used the first Läroplan for the grund school was made during the late 60’s and a new revised version was presented in 1969, where the same formula was used again. A first step towards a less centralised school system was taken in the middle of the 70’s, where a vision of a changed distribution of the responsibilities for the work in the schools was presented. Less responsibility was going to be placed at the central level and more responsibility was going to be given to local schools and to kommuns. At the same time the politicians stated that Swedish schools should be directed by central guidelines as before. The changes in the signal power that the three different editions of the Läroplan for the grund schools was sending may be reflected through the length of the messages that has been put together in table 1.

<table>
<thead>
<tr>
<th></th>
<th>1962</th>
<th>1969</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overarching aims and directions</td>
<td>88</td>
<td>98</td>
<td>48</td>
</tr>
<tr>
<td>Time budget</td>
<td>12</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Aims and directions for subjects</td>
<td>310</td>
<td>92</td>
<td>86</td>
</tr>
</tbody>
</table>

*Table 1. Number of pages used for the three parts of the the Läroplan of the Grund school in Sweden, 1962, 1969 and 1980.*

Fewer pages are spent on detailed discussions on overarching themes and on the time budget in the 1980 edition. The less detailed prescriptions of the teaching that is expected are already introduced in the revised version of the Läroplan of 1969, where a new age is indicated.

The directions described in the Läroplan were not only used by teachers when planning their teaching. The most important users of the Läroplan were the authors of text books. To be able to sell a textbook before 1992 in Sweden you had to pass the critical examination of the state agency for textbooks that used the Läroplan as a guide for what could be accepted or not. This agency was closed in 1992 and since then the local schools are trusted to make a selection of learning materials without the help of an acceptance from a state agency. However, the authors of textbooks are as eager as before to base their texts on the Läroplan as the schools also use the text of the Läroplan as a support for their decision for buying learning materials.
When the Grund school was introduced in 1962, the school system not only got a new structure, but also a new marking system was introduced. A seven grade scale based on teachers’ understandings of the quality of knowledge of the students was shifted into a five grade scale where marks were made in relation to the achievement of all students of Sweden of the actual year group. As one basis for the grading of the students the teachers could rely on standardised knowledge tests. These tests, which were used from 1962 and onwards, were based on experiences made during the 50’s. The constructors of the tests were very well acquainted with the content of the subject parts of the Läroplan and made their tests close to the criteria that were described in these directions. The tests were used both in the grund school and the gymnasie school. Tests in Swedish and mathematics were given to the students of grade 9 and in English to the students of grade 8 of the grund school. In the gymnasie school tests were given to the students in Swedish, English, German, French, mathematics, physics and chemistry.

In 1997 a new grading system was introduced in the Swedish school system and the old system with its relative basis was left. Instead of knowledge tests where the achievements of the students are compared with the achievement pattern over the country, students are now faced with tests that are trying to measure if the students reach certain criteria. In the new grading system that was introduced in 1998 three grades are used – accepted, well accepted and very well accepted. The subject guidelines contain descriptions of the criteria for reaching the different steps of the grading system. The national tests give examples of what sort of knowledge the students need to have developed to reach the different grades.

The changes of the school system were taking new large steps in the beginning of the 90’s, when the kommuns were trusted to take responsibility for all the money used for schools. Since 1993 all the kommuns receive a lump sum of money that they distribute to their schools. The schools are responsible to decide on the more detailed use of the money. The money that the school has at its disposal is used for individual salaries for the teachers, for learning materials, for transports to and from the school for the students, for a daily meal and for all other parts of school life. At the same time as this large trust is given to the kommuns and the schools, the state regulates that the learning that takes place in the school shall reach the aims that are formulated in the central Läroplan. The government decided in 1994 on new Läroplans both for the Grund School and for the Gymnasie School. The old formula of the Läroplan is kept, but the length of the different parts is shortened. The description of the overarching aims and directions for the Grund School now takes 12 pages and for the gymnasie school 14 pages. The description of the subjects in the Grund School takes 50 pages and the time budget is presented on one page. The aims of the 16 national programmes that the Gymnasie School contains are described on 13 pages and the
content of the core subjects of the Gymnasie School takes ten more pages. A large amount of different subject courses appears in the Gymnasie School of today, where each has its own description over three to four pages. The content of these subject curricula is developed by the National Agency for Education that also decides on the final content of the descriptions. In these latest versions of Swedish Läroplans a distinction between aims to strive for and aims to reach is used. For each of the subjects this distinction is used as well as the detailed criteria for the demands that need to be reached for different steps on the grading scale.

The 1994 version of the Läroplan is more focused on describing the aims of the education and leaves the recommendations about different ways to reach the goals to the actors on the school scene. This has led to the strained design of the text. When the earlier versions contained a mixture of prescriptions, proposals and discussions, the latest edition stays with the aims and with some few demands on processes, like for instance the demands that the students shall participate in different decisions in the school. Teachers are good users of the Läroplans and especially of the subject centred parts. They make their year plans on basis of the texts and base their grading and testing of the knowledge of the students on the content of the Läroplan. The textbook authors are still eager to find out what the Läroplan says and the national knowledge tests are based on the demands that are put forward in the central curricula.

In 2000 the subject curricula for the Grund School as well as the Gymnasie School were revised. The National Agency of Education directed this work. For each subject a team was given the task to present a new curriculum. The team had one member of the staff of the National Agency of Education as a leader. The other members of the team were invited teachers or subject specialists from working life. When the development work to produce a new subject curriculum had reached a phase where a preliminary text could be presented, this was done on the internet. Teachers were invited to react to the proposal and communicate with the National Agency for Education about improvements of the content. The reactions of the teachers were very positive about this open way of developing a new curriculum. When the revised subject curricula were presented in 2000 many teachers felt that they really had contributed to the new descriptions of the content of the subjects. In many ways the shared and open construction process made the implementation of the new curricula much faster than it used to be.

The descriptions of the subject curricula follow the same formula. In an introduction the aim and role of the subject is explained in the educational context where it appears in the school. It is also specified in what way the knowledge of the subject may fill needs of the individual as well as of the society. Thereby the aims to strive for are described followed
by a description of the character of the subject and of its structure. The aims that need to be reached by the learner are also described. The final part of the description of the subject curriculum consists of the criteria for the assessment of the quality of knowledge that the learner may develop.

The Swedish Läroplan and the subject curricula of today are documents that need to be interpreted by teachers and school leaders in each school. Each school is obliged to formulate a local working plan in which the school explains how it will realise the central guidelines in their specific situation. Each school is also obliged to assess the quality of its inner work and find out to what degree the school has reached the aims for the students. A quality review report is presented to the kommun each year and the kommun reports to the National Agency of Education about the quality of its schools. All this information is openly presented on the internet, where you can also find statistics for each Grund School that has grade nine students of the markings and of the results of the national knowledge tests at the school level. The same statistics are available for the Gymnasie Schools (go to skolverket.se, find ‘statistik’, then go to SIRIS and SALSA).

The Läroplan and the subject curricula are used documents in Swedish schools. Teachers have to use them when they assess the quality of the students’ learning, when they plan their teaching and also when they assess the quality of their own work. Some critical reviews however show that not all teachers use the documents as are ideally planned for. In a study of the way in which teachers grade their students made in 2000 in 40 of the 290 kommun’s that exist in Sweden, the National Agency of Education found that many teachers do not use the Läroplan and the subject curriculum to such a degree that you would expect. This study also showed that hardly any teacher communicated the content of the Läroplan and the subject curriculum to the students. The same findings were reported in a study of the way teachers tried to make their own grading criteria during the late 90’s, before these were built into the subject curricula (Tholin, 2001). In this study the interpretation of teachers of English, chemistry and physical education working at 93 schools were interviewed about their use of the Läroplan and subject curriculum.

Tholin found that when local criteria were first set up, the learners had not been involved. The system was not presented to them in a clear way so they could not understand the content. There were not held any in-depth discussions in the staff room about assessment. As the Läroplan and the subject curriculum are formulated in such a way that both students and their parents find it difficult to understand the content, Tholin concludes that it has been very difficult for them to understand what is required to achieve a certain mark.
The National Agency of Education, that is responsible for the formulation of the subject curricula, has listened to the critical voices that say that these kind of documents ought to be written in such a way that not only teachers can understand them, but also the one who is expected to learn. In an interview study made with teachers and students of the gymnasie school in 39 of the kommuns of Sweden (Sandqvist, 2005) it is reported that few teachers get the students to read the text of the Läroplan or the subject curriculum. Some teachers translate the subject curriculum into a less professional language than the original formulation and discuss the content with the students, so that they can participate in the planning of their own education. Most teachers that were interviewed and all the students told that they would like to see the subject curricula and the Läroplan to be formulated in such a way that the students could understand what is required of them.

In his study how teachers used the subject curriculum of English before centrally formulated criteria for the grading system were formulated, Tholin (2001) shows that teachers left the descriptions of the subject curriculum and fall back on other ground to deal with the problem of making assessments. He was interested to see what new ideas had made their way into the English syllabus and how they were interpreted in the local documents that each school had to formulate. He found that only few schools had integrated the most significant new ideas, like learner influence and intercultural competence in their goals and criteria. The most characteristic feature was however, that many schools created new goals for English and most frequent were criteria that had to do with grammar. More than half of the schools in Tholin’s study presented a number of criteria for grammar skills, while in the syllabus grammar is only mentioned once. Tholin draws the conclusion that the over-use of grammar as a criterion for assessment has to do with teachers’ need to find practical ways to test knowledge. A recent study of teacher produced knowledge tests (Lindstedt, 2005) has shown that teachers in different subjects use rather restricted parts of the knowledge territory that are described in the subject curricula. Five domains of subject areas were used to catch what school subjects try to cover in the learning process.
Domains of the subject area

<table>
<thead>
<tr>
<th>School subjects</th>
<th>Cognizance</th>
<th>Tools of the area</th>
<th>Conventions</th>
<th>Understanding cause and effect</th>
<th>Taking a stand</th>
<th>(Number of items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical aesthetic</td>
<td>84</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>(187)</td>
</tr>
<tr>
<td>Language</td>
<td>45</td>
<td>25</td>
<td>22</td>
<td>8</td>
<td>0</td>
<td>(340)</td>
</tr>
<tr>
<td>Science</td>
<td>63</td>
<td>18</td>
<td>3</td>
<td>16</td>
<td>1</td>
<td>(560)</td>
</tr>
<tr>
<td>Civic</td>
<td>87</td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>(561)</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>13</td>
<td>6</td>
<td>9</td>
<td>1</td>
<td>(1648)</td>
</tr>
</tbody>
</table>

Table 2. Areas of school subjects that teacher cover when they construct knowledge tests to assess student achievement. Percentage of items of the tests that measure five different domains of the school subjects.

One domain is ‘cognizance of’, another ‘tools of the area’, a third is ‘conventions’, a fourth is ‘understanding cause and effect’ and the fifth domain is ‘taking a stand’. The expectation was that the assessment of student achievement ought to reflect all five domains when teachers produce knowledge tests. Lindstedt (2005) has made an analysis of knowledge tests that teachers have sent to a ‘test exchange’ bank, where teachers have delivered tests that they perceive as excellent.

Only teachers in language use a wider variety of the subject when they try to assess the quality of knowledge among their students. Teachers in other areas are highly occupied to test if the students are oriented in the subject and do not use the richness of the subject that are described in the syllabus.

7.3 Closing remarks

The experience in Sweden is that teachers appreciate the Läroplan and the syllabus of their subjects. They use these documents in restricted ways. The syllabus helps teachers to make plans and to assess the students’ quality of knowledge. But teachers do not study these steering documents together with the students, among other things because the documents are mainly written by teachers for teachers. When teachers create concrete knowledge tests they only use parts of the syllabus that are in line with strong traditions for what is measured by these tests. The curriculum documents in Sweden are not well tuned with the far-reaching ambitions to redefine responsibilities in the school system. A state committee therefore has proposed that a more interactive model of steering should be introduced (Utbildningsdepartementet, 2001).
In this model the committee recommends the government to leave the task to create syllabuses for the school subjects to the 600 gymnasie schools in the country, and withdraw the task from the National Agency of Education. The committee also proposes that the Läroplan should be used for a restricted period of seven year. At the end of such a period all grund and gymnasie schools of the country should use some of their yearly produced quality reviews to react on the content and demands of the Läroplan. The National Agency for Education would analyse the reactions and summarise proposals of changes in the Läroplan that could be put forward to the central politicians that would take a new decision on the basis of the practical use of the Läroplan and the reactions of the schools in the country. The committee has found that the distinction in the Läroplan and in the subject syllabuses between aims to strive for and aims to reach is not working well. The aims to strive for are left aside, so one kind of aims in the steering documents would be enough, the committee says. The coming years will show what will happen with the initiatives that are discussed in Sweden.

During the first years of the new millennium 79 of the 290 Swedish kommuns participated in an experiment to work without any central regulations concerning the use of time in the schools. The experiment has shown that the schools get as good and sometimes better results among the students than schools that have followed the central guidelines for time use. The committee therefore has proposed the government to abandon the regulations of time use in schools as soon as possible.

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8. Perspectives for curriculum development: new trends and tendencies in Germany

Eike Thürmann
8.1 Introductory remarks

For centuries, school development in Germany was based on input, respectively context factors defined by rules and regulations issued, administered and controlled by state authorities. The educational framework as well as daily classroom practice were – and still are – determined by a closely knit fabric of individual pieces of low-order school law: regulating e.g. subjects to be taught; duration and number of weekly periods and breaks; number of pupils per class; subject-specific content; number and duration of tests; details how to grade tests; assessment and certification; the do's and don'ts of the bilingual classroom; how to handle an outbreak of lice, etc. The local/regional inspectorate was – and still is – responsible for the management of the resources allotted to the individual school (teachers, funds). They also control in detail whether the school correctly implements the statutory framework. Any deviation from this framework has to be discussed with and approved by the regional inspectorate.

In short, we are talking about a highly centralised input-driven state educational system dating back to the 19th century evolution of a strong middle-European nation state. There used to be an age-honoured strong belief that the responsibility for school development and educational quality improvement could only be handled by a strong professional force of school administrators – structured like a pyramid - with the ministry of education at the top, the individual schools at the bottom and supervision and support agencies in between.

The undisputed belief that school development can only be handled in an effective as well as feasible way through a hierarchically structured input-driven system with relatively little pedagogical and managerial responsibility at the level of the individual school has only recently been drastically shattered. There are two factors – extensively discussed in German public – which triggered a paradigmatic change in the fundamental philosophy of school development:

• The results the German school system scored in large-scale comparative assessment (such as TIMSS, PISA etc.) have been devastating for the state of self-complacency the German public had been in for many decades with regard to its nicely structured selective school system.
• The public expenditure for the school sector with a two-level inspectorate (local and regional) and central as well as regional support agencies for teacher training and other support agencies has reached a level which is extremely challenging for a national economy characterised by slow growth and huge public debts.
So it became quite clear that the whole educational system had to be restructured with three main objectives:
• more effectiveness in terms of the outcomes of teaching and learning, i.e. visibly moving upwards in the PISA league-tables
• more competitiveness within local, national and international contexts
• more cost-awareness in management, support and control of the state-school system.

Thus, a new philosophy for school development and school management has emerged since the late 90’s (1997 Konstanzer Beschlüsse der KMK). It is a fascinating experience that this philosophy is being accepted across the spectrum of party politics, the media and the main societal players. However, one has to add that teachers’ organisations and academic experts are less enthusiastic about the intended fundamental changes.

Now, what is this ‘new philosophy’ all about? Teachers still tend to interpret it as contradictory in nature, while curriculum experts and senior administrators underline its dialectic subtleness and complementary functions.

State authorities nationwide now hold the firm belief that the quality of mandatory education can no longer be guaranteed by schools with little responsibility for their own development operating within a narrow framework of state directives. Besides, such a system is extremely expensive (that is a system which is centrally driven by detailed curricula, by rules and regulations concerning all conceivable school routines, by supplying in-service teacher training no matter if there is a demand for it or not, and by a large number of well-staffed local and regional school boards). And it seems that the cost-effectiveness of such a system is comparatively poor. Thus, almost all of the 16 in educational matters autonomous German Länder make more or less large strides towards decentralisation, more school autonomy, market models for teacher training. Prima vista the overall picture looks controversial. On the one hand, state authorities take a firm stance on issues such as accountability, quality management, standards and assessment. On the other hand, there is a stronger focus than ever on the individual school to take care of its own affairs being endowed with more responsibility in educational as well as organisational matters and with a modest budget for teacher training.

I shall try to explain the basic architecture of this new system – being well aware of the fact that at the moment both systems (the old and the new regime) coexist side by side. It should be quite clear from the very start that the 16 German Länder are politically as well as administrational autonomous as far as schools are concerned. There is no direct responsibility in any respect of the federal government for the running of schools. Thus, matters are rather complicated when it comes to drawing up a country profile for Germany.
You probably come up with 16 different profiles when you stick to details. Rather than boring you with differences and similarities between the 16 Länder, I will focus on North-Rhine-Westfalia, demographically the largest of the Länder and a very suitable example for the shift in paradigm I mentioned earlier.

8.2 The blueprint for quality development in schools

In this paragraph the following issues will be elaborated:
• achievement standards on the federal level
• empirical validation of (federal) achievement standards
• core curricula on the level of the German Länder
• central assessment of achievement on the level of the Länder
• school-based assessment of achievement and assessment of learning needs
• central elements for school-leaving examinations and certification
• external evaluation and school inspection.

Achievement standards on the federal level
Keeping the federal set-up of schools and school curricula in mind, it must come as a surprise to our European neighbours that subject-based standards have evolved on a national basis in a comparatively short period. Here are the facts:

In December 2003 the Standing Conference of Ministers of Education (= KMK) passed educational standards as a central element of a ‘comprehensive system of quality control that also comprises systematic school development as well as internal and external evaluation. Educational standards describe expected results of learning. Their implementation furnishes the system with indicators for supporting individual schools as well as individual learners.’.

So far the Standing Conference (KMK) has issued such standards for the transition from primary to lower secondary education (10+) and the transition from lower secondary to upper secondary education (15/16+). Development focused on so-called core subjects (German as L1, mathematics, first foreign languages, sciences)5.

Empirical validation of (federal) achievement standards
The federal standards are conceptually based on a study by Klieme, Avenarius and Blum (2003) which was commissioned by the Federal Ministry of Education.

5 There is also a federal framework for subject-specific achievement levels for school-leaving certification at the end of upper secondary education, Abitur. However, this reference system (Einheitliche Prüfungsanforderungen in der Abiturprüfung, EPA) still has a more traditional curricular format. It has not yet been transformed into educational performance standards (= outcomes).
They define standards as the centrepiece of a complex system of school / classroom development:


According to Klieme et al. (2003) subject-based standards should have the following three components:

- They should be directly related to or derived from general educational objectives. Without a strong link to these general objectives, subject-based standards would be nothing more than arbitrary expert opinions, neither would they have any legitimacy nor professional acceptance by educators and social leaders. Thus, one indispensable feature of core curricula is to explicitly spell out the educational ‘philosophy’ of a school subject and its specific contribution to general educational objectives.

- Standards should be derived from a coherent framework of reference and should be attributed to levels of competence. A system of competence levels facilitates the development of model tasks and assignments and the construction of assessment systems. Competence levels are also of great help to teachers, pupils and parents to understand what should be achieved and what actually has been achieved (cf. Weinert, 2001; Klieme et al., 2003).

- Standards should specify competence in such a way that the nature of expected performance becomes transparent. Consequently, core curricula should contain model tasks and assignments, which can be used in school-based as well as national assessment of classroom results. Without assessment, standards would not have any serious impact on quality improvement.

Thus, the federal standards contain model tasks for assessment in order to unambiguously specify expected competences. For foreign languages, expected competences and tasks are based on the internationally accepted Common European Framework for languages and its competence levels (Council of Europe, 2001). For mathematics the Principles and Standards of the American NCTM were highly influential. For German as a first / native language such a framework of reference with competence levels does not exist. Neither do such systems
exist for other subject areas (social sciences, ethics, art work etc.). The issue of calibrating standards in such a way that (a) teachers have the impression that ‘no child will be left behind’ and (b) subject experts agree that all the relevant competencies to be acquired (e.g. in Mathematics) are included – will be on the agenda until more empirical data are available. For the time being, the new standards seem to be rather ambitious, both on the federal and on the Länder level. The results from piloting demonstrate that teachers – especially from schools for the lower ability range (= Hauptschule, lower stream of Gesamtschule) are in doubt as to whether or not they will be able to achieve the performance standards which have been made mandatory through the new core curricula on the level of the German Länder.

Empirical data will soon come in either to substantiate the standards or to cast doubt on their attainability under present conditions. A new institute has recently been established on the federal level (Institut zur Qualitätsentwicklung im Bildungswesen) – associated to Humboldt-University, Berlin – with expertise in psychometrics, standard development as well as large-scale assessment.

The new federal framework of standards will soon be put to the empirical test. This institute is also commissioned to develop and empirically validate a reference system with competence levels – at least for the core subjects.

**Core curricula on the level of the German Länder**

In the meantime, most of the German Länder have followed in so far as they have ‘notified’ the federal standards through Länder-specific core curricula. Those core curricula break down the national exit standards into a sequence of desired outcomes at certain points in time of a school career.

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6 306th plenary session of the KMK, 04.06.2004,
The new core curricula are rather slim documents with very explicit imperative messages.

**Fig. 6: Format of standards for 1st foreign language in NRW**

**Communicative competences**
- Listening comprehension
- Spoken interaction
- Spoken production
- Reading comprehension
- **Writing**
- Mediation

**Intercultural competences**
- Knowledge for socio-cultural orientation
- Attitudes and values
- Social interaction

**Language repertoire / Correctnes**
- Pronunciation, intonation
- Lexis
- Grammar
- spelling

**Language repertoire / Correctnes**
- Pronunciation, intonation
- Lexis
- Grammar
- spelling

**Study / language learning skills**
- Receptive skills
- Productive skills
- Skills for working with texts and media
- Skills for collaborative and autonomous language learning

**Writing - End of grade 6 (=second year of English)**

The pupils are able to write short coherent texts which relate to their every day life and to topics they are familiar with.

They are able

- to make short notes and to summarize in a written form of what lessons were about
- to rewrite elements from their textbook (e.g. change of narrative perspective, invent an alternative ending, transform prose into dialogue)
- to write short poems following a given pattern
- to write personal messages (e.g. invitation, postcard, e-mail, sms, short personal letters)

They are structured into four chapters:

- general aims and objectives of a particular subject
- a profile of competencies all pupils should have acquired at the end of (lower) secondary education (15+)
- way stage profiles for grades 6, 8 and 10
- model tasks for assessment.

Current news on core curricula and their implementation is accessible at www.learnline.de/angebote/kernlehrplaene/
Basically, the documents contain mandatory performance standards (= competencies + model tasks) and leave everything else to the schools and their responsibility for the quality of teaching and learning.

This diagram shows the curricular pattern (‘structure of the discipline’) for English as a first foreign language and gives an example of how standards are structured. In the case of English it is a two-level technique with a fairly general ‘descriptor’ of a competence as a mandatory attainment target followed by several ‘indicators’ relating the standard to more practical and concrete activities.

The development of core curricula for German (L1) and English was dominantly a matter of re-formatting existing curricula (Lehrpläne) and of harmonising curricula for the four types of secondary schools. For mathematics the situation turned out to be different. With the new curricular structures, a new didactic structure was introduced to the schools.

<table>
<thead>
<tr>
<th>Fachbezogene Kompetenzen</th>
<th>Inhaltsbezogene Kompetenzen</th>
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<tbody>
<tr>
<td>prozessbezogene Kompetenzen</td>
<td>inhaltsbezogene Kompetenzen</td>
</tr>
<tr>
<td>Argumentieren/Kommunizieren</td>
<td>Kommunizieren, präsentieren und argumentieren</td>
</tr>
<tr>
<td>Problemlösen</td>
<td>Probleme erfassen, erkunden und lösen</td>
</tr>
<tr>
<td>Modellieren</td>
<td>Modelle erstellen und nutzen</td>
</tr>
<tr>
<td>Werkzeuge</td>
<td>Medien und Werkzeuge verwenden</td>
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<tr>
<td>X+Y</td>
<td>Arithmetik/Algebra</td>
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<tr>
<td>2</td>
<td>Funktionen</td>
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<td></td>
<td>Geometrie</td>
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<td></td>
<td>Stochastik</td>
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<td></td>
<td>Mit Zahlen und Symbolen umgehen</td>
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<tr>
<td></td>
<td>Beziehungen und Veränderung beschreiben und erkunden</td>
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<td></td>
<td>Ebene und räumliche Strukturen nach Maß und Form erfassen</td>
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<td></td>
<td>Mit Daten und Zufall arbeiten</td>
</tr>
</tbody>
</table>

Fig. 7: Competence domains for mathematics in NRW

The ‘old’ generation of Lehrpläne was exclusively focused on competences related to content areas such as geometry, arithmetic etc. The new core curricula define subject-based competences through two columns of competences relating to:

• process: communicating/arguing, problem solving, modelling, applying methods and tools
• content: algebra/arithmetic, mathematical functions, geometry, stochastic theory.
Both are carrying the same didactic weight.

For the first time in the history of the Northrhine-Westphalian educational system, the curricula for the four types of school (= Hauptschule, Realschule, Gymnasium, Gesamtschule) in lower secondary education are in complete sync. For each of the core subjects the commissions (with members representing the four types of schooling) first established a curricular paradigm (= structure of the discipline). Then they defined the
common core of subject-based standards. Finally, they defined the specifications for the four different types of school and the three different attainment levels of school leaving certification. At least for the core subjects the system now is transparent and coherent.

When the work was done, it came somehow as a surprise that the four types of schools shared approximately more than 2/3 of the standards although the commissions were asked to differentiate as much as possible in order to represent the individual learning and teaching cultures of Hauptschule, Realschule, Gymnasium and Gesamtschule.  

Although the concept of performance standards is completely new to German schools, teachers seem to accept them as a new curricular format and to value their transparency and coherence. Northrhine-Westphalia’s new core curricula were extensively piloted in a considerable number of so-called reference schools and have been discussed with leading schoolbook publishers, teachers unions and parent associations. Presently, the climate in Germany seems to be favourable for compact and unambiguous curricular orientation by the state administration.

Central assessment of achievement on the level of the Länder
There are a number of approaches to central assessment of achievement within as well as across the German Länder focussing the core subjects German as L1, first foreign language and mathematics.
So far Northrhine-Westphalia has institutionalised central assessment for two age levels: for the 10 as well as for the 15 year-old pupils. Both projects share a set of common features:
• mandatory participation of the whole age group (cohort)
• classification of schools according to socio-economic factors (= context groups)
• piloted task development and standard alignment
• modelling competence levels (on Rasch scales)
• central sampling, benchmarks for types of schools and context groups
• online feedback (= items, competence levels) for individual learning groups (forms) and schools for the purpose of comparison and analysis on the individual items
• school-based analysis of results and specification of objectives/procedures for classroom development.
For the 15 year-old pupils we have just completed the second run of LSE (= Lernstandserhebungen Klasse 9) – without any major technical problems or upheavals on the side of the schools and teacher unions.

**School-based assessment of achievement and assessment of learning needs**

Northrhine-Westphalia has also established a system of school-based assessment in year 7 (12/13 year-old pupils) for three core subjects (= Parallelarbeiten) based on a set of manuals with a typology of model tasks. Its main objectives are: strengthening the professional discourse of staff (because (a) they have to agree on the construction of test papers and grading criteria, (b) they have to analyse the results, (c) they have to come up with strategies of classroom development, (d) they have to identify pupils and groups of pupils with special learning needs and come up with strategies to support their learning in a subject-specific way).

**Central elements for school-leaving examinations and certification**

The German Länder without any central elements for school-leaving examination and certification have become the exception to the rule. Northrhine-Westphalia, as one of the Länder which used to be very critical concerning the dangers of teaching to the test and of narrowing the general curricular framework prior to high-risk assessment, has only recently opted for a fundamental policy change. Presently, LfS is in the process of establishing two exam systems with central task setting and grading criteria:
• one for the end of mandatory general education (15+): three core subjects only; tasks prepiotated and in alignment with curricular standards; central grading criteria; decentral grading of test papers; 50% of necessary credits for certification
• one for upper secondary education and the entrance to universities (= Abitur, matura, Bac): central task setting for more than approximately 50 subject areas; central grading criteria, decentral grading of test papers.

Two years in advance, schools receive specification of content and performance standards relevant for up-coming examinations so that there are (ideally) equal and fair learning opportunities for all pupils across the Land.
There are certain issues on which decisions by the administration are still pending.
Most of them are crucial with respect to system monitoring:
Should there be
• central grading of a representative sample?
• context groups and context-specific benchmarks?
• a reporting back of individual results to a central agency for further statistical analysis?
• a thorough evaluation of achieved results and reports for a (classified) public?
• league tables for school success or similar documentation?

External evaluation and school inspection
The majority of the German Länder has recently established school inspection systems (e.g. Lower Saxony) or is piloting or at least seriously considering mandatory external evaluation of schools by specially trained experts based on a coherent and comprehensive set of quality indicators. This is completely new to the traditional set-up of the German school system, which so far has relied on a well-staffed inspectorate whose responsibility is to control the schools’ compliance with input regulations and the management of resources. Northrhine-Westphalia has just completed a first pilot run of inspection in primary and secondary mainstream education with 50 schools. The set of quality indicators and inspection procedures – partially influenced by the Dutch system - has basically passed the test and the schools’ as well as the public’s reaction were quite favourable. The new administration has announced that the system of external ‘quality analysis’ will be in full operation by August 2006.

Special attention should be paid to the so-called school portfolio, which is a collection of data and documents prepared by the school and subject to desktop analysis prior to the actual inspection visit. It contains information – among other domains - on all the areas of standards and standard control mentioned above, e.g.:
• documentation of school programme development and the initiatives/results of internal assessment and assessment of learning needs
- initiatives concerning classroom development
- transformation of core curricula into school-based curricula and syllabi
- parallel assessment
- results achieved in central assessment – calibrated against benchmarks
- results achieved in the central elements of school-leaving exams.

The results of portfolio analysis plus evidence from the inspection visit are aggregated into an inspection report that identifies strengths and weaknesses, i.e. challenges for further development.

**More autonomy for schools and new responsibilities**

There is no denying the fact that the new initiatives in standard setting and standard control must be balanced against more responsibility and more autonomy on the side of the individual school. In Germany, politicians tend to pay lip service as far as increase in school autonomy is concerned. However, there is still an over-abundance of input, respectively context defining statute law, heavily infringing upon the authority and responsibility of staff and school management.

![Fig. 9: Areas of special concern for school development](image-url)
For Northrhine-Westphalia one can ascertain modest first steps to hand over managerial as well as pedagogic responsibility to the individual school. In a large-scale pilot project almost 300 schools are allowed to take their own decisions in four domains: staff development, management of resources, classroom management and school curriculum, involvement and participation.

Regional players support the schools in acquiring professional expertise in management and self-governance. This could very well be the blueprint for the regular set-up of schools in the near future. The new administration seems to be rather ambitious to implement this model in 2006 or 2007.

8.3 Perspectives for curriculum agencies

Curriculum development - and there is no doubt about it - will keep its central position at the heart of a comprehensive support system for schools. However, it has to broaden its scope and it has to bring itself into alignment with other domains of the newly defined support system.

Provided that features such as central standard setting, central external standard control, internal evaluation and more autonomy on the level of the individual school will dominate the educational scene for the next centuries in Germany, one has to take a closer look at the support system as a whole and a possible medium-term option for change:

• Regional school authorities (= the ‘old’ inspectorate) will hand over functions of staff development and management of funds to the schools.
• Local school authorities will be strengthened in their functions of counselling and guiding individual schools.
• Central state agencies for in-service teacher training, training the trainers and moderators, developing training materials, manuals, websites and online platforms will suffer a loss of funds and staff since schools will be able to 'buy' training wherever they can find it on the market. Such agencies might serve as accreditation agencies for commercial training providers.
• Regional state agencies for in-service training will suffer a similar loss as the central agencies. They might be stripped down to a minimum of resources.
• Formal accreditation of schoolbooks, teaching and learning materials by state authorities might not be needed any more.

On the other hand, new players/agencies are appearing on the scene and are gaining importance. Only recently (= 2004) the central Institute for Quality Development in Education (= IQB) was founded. It is financed by the 16 Länder and based in Berlin as an
add-on institution to Humboldt-University. Its main objectives are:
• to empirically validate and further develop standards in education
• to construct and pilot subject-based competence models with a number of distinctive levels of competence in order to reliably describe performance on the systemic level and also on the levels of schools, groups/courses and individual learners
• to lay the basis for long-term quality management of schools on the systemic level.

These ambitious aims are completely new to the German scene and relevant empirical expertise has to be built up gradually. In the meantime, the IQB has defined middle-term goals and is almost fully operational. Some of the intentions are to:
• produce a large number of model tasks (item banking) for the sake of illustrating specific standards in core subjects
• generate and empirically validate competence models – levels of competence – for core subjects (similar to procedures and techniques of OECD-PISA
• furnish systems/schools with tests (sets of items/tasks) for comparative assessment
• develop computer-based test-, evaluation- and feedback systems.

It seems that the IQB has a fair chance of bringing together expertise from various domains, which traditionally focus on different aspects of teaching and learning in schools: general pedagogy, empirical pedagogy and psychometrics, subject-specific applied pedagogy (‘Fachdidaktik’). It is strongly connected to politics and administration and already embedded in professional network on a national and international level. There are also strong links to the PISA consortium.

Thus, curriculum development agencies might gradually have to cater for new needs and new demands. They might have to develop expertise in fields like:
• empirical validation of standards and communication of socio-/psychometric expertise
• development, piloting and documentation of model task items (item banking) for internal assessment
• providing and disseminating papers for external assessment and examinations
• external evaluation of schools, school inspection as semi-independent agencies
• support for and evaluation of school inspection
• accountability and reporting on the effectiveness and progress of the school system
• quality control and accreditation for commercial providers of training and other services.

Within such a changing support system curriculum development is faced with new challenges. It has to:
• professionally handle new curricular formats, especially performance standards rather than content standards or opportunity-to-learn standards
• overcome its preoccupation with core subjects and to extend new curricular formats to the whole curriculum
• bring standards and assessment/examinations into alignment
• come up with models, formats and procedures for schools to develop their own curricula and to be professionally responsible for internal evaluation of achievement
• analyse data and report on the efficiency of teaching and learning in specific subjects.

<table>
<thead>
<tr>
<th>The traditional curricular format</th>
<th>The new curricular format</th>
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<tbody>
<tr>
<td>Curricula were rather bulky documents – often well above 120 pages, occasionally more than 200 pages</td>
<td>Lean documents - approx. 50 pages</td>
</tr>
<tr>
<td>Teaching objectives</td>
<td>Learning outcomes</td>
</tr>
<tr>
<td>Very much knowledge- and content-oriented</td>
<td>Outcomes defined in terms of competences, performance standards</td>
</tr>
<tr>
<td>–</td>
<td>Model tasks to illustrate performance standards</td>
</tr>
<tr>
<td>Mandatory framework for classroom practice and methodological priorities</td>
<td>–</td>
</tr>
<tr>
<td>School-based assessment and evaluation performance</td>
<td>School-based assessment &amp; centrally of organised assessment of performance</td>
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_Table 3: Curriculum formats_

To a large extent curriculum development has to see to it that the comprehensive system of quality development is transparent and coherent when it comes to subject-specific teaching and learning since curriculum development is one of the few agencies of the support system working with subject experts.
9. Universities/schools partnerships: a strategy for curriculum improvement in Portugal

António F. Cachapuz
9.1 Introduction

The theme of partnerships between schools and universities is nowadays a promising field of educational research and development. This is probably because ‘truly democratic partnerships between university and schools are a potentially powerful strategy for changing communities, schools, and higher education itself’ (Harkavy, 2005). In particular, universities/schools partnerships may help teachers and schools to be more autonomous and better prepared to deal with curriculum challenges and thus improving the quality of teaching. Bullough, Birrell, Young and Clark (1999) suggest that a possible way to strengthen the connection between theory and practice in teacher education is through partnerships.

Sutherland, Scanlon and Sperring (2004) present new perspectives in partnerships, and Gaskin, Helfgot, Paarsons and Solley (2003) and Harkavy (2005) give examples of innovative programs of partnerships between university and schools. Carpenter and Russell (2002) present the evaluation of successful studies and these authors suggest that sustainable partnerships require ‘careful consideration and thoughtful research if they are to be effective and efficient in the long term’.

In this paper we analyse a specific case of long-term partnerships between the ‘Didactics and Educational Technology’ Department of the University of Aveiro and primary and secondary schools as examples of how to explore the potential of partnerships. A thorough description of the ‘Didactics and Educational Technology’ Department of the University of Aveiro may be found in www.dte.ua.pt.

This educational department of the University of Aveiro was formed in 1986 with staff from more traditional departments such as chemistry, physics, biology, earth sciences, educational sciences, arts (at the present time, four professors, thirteen lecturers and twelve assistant lecturers, nine of which are experienced school teachers working in the department on a full time basis). The main idea was to create in the University of Aveiro an interdisciplinary department capable of developing teaching and research in specific areas of didactics and teacher education, with an emphasis on the so called pedagogical content knowledge (as defined by Shulman, 1987); staff members have a degree (or substantial experience) in education and also a degree in a given disciplinary area. Different types of undergraduate and postgraduate studies taking place in our department are presented below in order to facilitate the understanding of what follows.
Undergraduate studies
The department is responsible for the ‘Licenciatura’ in primary school education (four years degree) and cooperation with other university departments in several other ‘Licenciaturas’ for secondary teaching education (five years degree) (e.g. physics and chemistry teaching, geology and biology teaching, arts, languages teaching); mainly through didactic courses, educational technology/multimedia courses and supervision of pedagogical practice in schools. The major involvement is in the ‘Licenciatura’ in primary school education. The rationale to integrate in the University of Aveiro such a teacher education degree is in line with Thornton (1990): ‘primary education is itself a specialism and should be recognised as such’.

Post graduate studies
Master degree in: Portuguese language education in primary school; science education in primary school; curriculum planning; physics teaching; physics and chemistry teaching; languages didactics; geology and biology teaching; educational multimedia; supervision. The department also offers PhD degrees in maths didactics, science didactics, language didactics, supervision, and educational technology.

A partnership model
There are three different dimensions through which we explore universities/schools partnerships (figure 10). The functioning of this (non-prescriptive) model has been refined over the years and its strength depends on our competence to articulate (as much as possible in a circular way) the three dimensions represented, namely teacher education, research and extension activities. The more we are able to coordinate decisions involving these three dimensions the greater are the chances of success. Such an articulation needs a strategic plan, mutual respect and close cooperation at the institutional level between university and schools.

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Fig.10: Types of partnerships
For each of the three dimensions we now present examples of programs developed/under way and comments about their completion.

### 9.2 Partnerships through extension activities

The example chosen is our participation since 1996 in the national project ‘Ciência Viva’ (Science is alive) sponsored by the Ministry of Science and the European Commission, aiming to promote the experimental teaching of sciences from basic education (children between 5/15 years) to secondary education (15/17).

Examples of one year sub-projects developed with different levels of education together with information about their impact are presented in figure 11. The rationale behind all sub-projects is a perspective of curriculum development in line with the science/technology/society movement of science education. The emphasis on the first cycle (children between 5/11 years) was because it is usually recognized that science education lacks an adequate development in this educational level.

![Fig. 11: Ciencia Viva Project](image)

The project mobilized all the science education staff of the ‘Didactics and Educational Technology’ department. A key aspect for the development of the project was the bridging role played by school teachers: those working on a full time basis in the department as assistant lecturers (see Introduction) and the so called ‘Pivot’ teacher, experienced school
teachers working in schools frequently with a post graduation in science education taken in our department (thus connecting the extension and the research dimensions in figure 10).

The project report refers to several important results, namely: increased level and variety of experimental activities in schools designed with a strong participation of school teachers; closer links between the research community and school teachers; higher cooperation between school teachers and between schools. During the project, students and their teachers visited our department, and particularly the science education laboratories. By the end of the project, teachers involved were also requested to present in a public symposium the results obtained with their students and to discuss how their experience in the project contributed to their professional development.

9.3 Partnerships through research activities

Partnerships between universities and schools are a powerful strategy to bring together research and innovation, a critical aspect of present educational efforts. Both universities and schools may benefit from partnerships through research activities. In our case, experienced teachers help research teams to identify research questions with a potential impact on teaching practices. On the other hand, classroom based research is a powerful instrument for teacher professional development, in particular through action research projects usually developed in the context of master dissertations.

The institutional instrument created by our department in 1994 and used since then to explore such kind of partnerships was through the Centre ‘Didactics and Technology in Teacher Education’ of the University of Aveiro (CIDTFF), sponsored by the Ministry of Science. Although the Centre is physically based in our department, it is a trans-institutional Centre including lecturers from other universities and other departments of our university and 25 full time PhD students. Most important, a variable number of school teachers (depending on the nature and number of the projects carried out) are also associate members of the Centre.

More specifically, the Centre aims:
- to promote a critical stance towards educational reality in the socio-cultural and historical context of the country
- to develop research in line with the construction of new theoretical frameworks within teaching and teacher education, in several disciplines and at several levels of teaching
- to further the design, experimentation and evaluation of innovative teaching methods in curricular didactics as ways towards the interactive construction of knowledge
- to design, develop and evaluate continuous education programs, emphasizing the value of
articulation between research/ training/innovation, namely post-graduate courses and action-research projects with school teachers
• to develop diversified supplementary teaching materials and evaluate their application
• to disseminate the research work carried out, in particular through suitable publications within the scientific and educational communities
• to promote cooperation and exchange with other research units or centres, national and foreign, with the aim of internationalizing research and developing cross-disciplinary projects (multi, inter and transdisciplinary)
• to support the development of innovative research projects, in particular those proposed by the young researchers of the Centre
• to support intervention proposals in the area of the definition of educational policies and educational research.

Aims 3, 4, 5 and 6 involve the participation of schoolteachers and schools in different ways. Research teams developing projects belonging to research lines 1, 2, 3 and 4 of CIDTFF (see figure 12) involve, in diverse ways, a substantial participation of experienced school teachers. Some of these teachers had already taken master courses in our department.

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**Fig. 12: Research lines of CIDTFF**
Successive international evaluations of the Centre point out the cooperation between our department and schools as a salient aspect. For the purposes of this study, three specific domains should be mentioned: action research projects in the area of multicultural education such as the teaching of Portuguese language to non native children (mostly immigrants), in particular the development of the competence in linguistic-communicative repertoires (lines P1 and P2); the construction and validation of didactic materials and teaching strategies in different disciplinary areas (line P4); the impact on teaching practices of post graduation courses (described in the Introduction) (line P3).

9.4 Partnerships through teacher education

A good example of such kind of partnership is the joint supervision of the pedagogical practice of pre-service teachers in the context of the different teacher education courses (see Introduction). Training of pre-service teachers takes place in schools (usually small groups of three/four pre-service teachers) under the supervision of a university supervisor and a school supervisor. The general idea is to provide pre-service teachers with real experiences of teaching thus providing them with opportunities to articulate theoretical knowledge with practical aspects of classrooms and schools. The way our supervision program is developed places an emphasis on the critical reflection of pre-service teachers about their teaching and a particular aspect developed along constructivist lines is to place student learning at the centre of pre-service teacher professional learning.

Besides the resolution of specific aspects of the supervision process aiming to improve the quality of teaching, the supervising teams (school and university supervisors frequently work together for quite a long time) are in themselves important instruments to make the bridge between the university and schools as well as to share professional knowledge.

The major difficulty we face is the lack of time available for the supervision of pre-service teachers. This problem was nicely described by Carpenter and Russell (2002): ‘How can university lecturers engage in an added role of developing a partnership with schools when they are also required to maintain an active research profile both nationally and internationally, engage in community service, prepare and teach courses, supervise post graduate students and be available for student consultation?’
9.5 Summing up

This study has provided a short overview of how our department explored a model of university/school partnerships involving three articulated dimensions: teacher education, research and extension activities. The most important result is that we have learned through experience and reflection. As a result, some general conditions for the relative success of partnerships between universities and schools are suggested in the following conditions, most of which in line with the literature.

The first condition is the commitment from the different stakeholders (in particular school principals and heads of departments). The second condition is the existence of adequate communication systems between both sides. The third condition (see Teitel, 1994) is that quite frequently, partnerships are launched in a haphazard way and are driven by short term rather than long term gains without a proper consideration about their costs and benefits. A fifth condition that should be considered is the mutual respect between the professionals in school and universities so that ‘knowledge of the two areas is presented in an accessible and integrated manner’ (Graham & Thornley, 2000, referred to in Carpenter & Russell). In our view, these arguments may help schools and universities to take adequate decisions about future partnerships.

For us, who struggle day by day in a teacher education department, the key question is always how to help teachers to promote their professional development and how to transform the creativity of individual teachers in creative educational organizations.
10. Challenges in European curriculum development: issues and propositions

Joanna Le Metais
10.1 Introducing a (new) curriculum

One of the marked characteristics of school curricula in developed countries has been the frequency and speed of change. The introduction of a new curriculum involves several dimensions: reasons for change and rationale, process, content, implementation, evaluation and accountability.

A new government is often the prime incentive for introducing different values or priorities. Whilst such changes are often justified ‘to raise standards’ or ‘to overcome curriculum failure’, they may equally be driven by ideological or philosophical desires to secure universal entitlement and equity, or to promote excellence. Modernisation, to take account of technological changes and manpower needs, stimulates changes in the content or skills taught, or in teaching approaches. Finally, changes are driven by the desire to enhance the country’s ‘international standing’, as identified in international comparisons such as OECD and European Commission publications (e.g.: Eurydice and Eurostat, 2002; OECD, 2005). Surveys have been particularly influential in bringing about change in content (Robitaille, Beaton, Albert & Plomp, 2000) and even in the control of curricula. For example, the OECD Performance Indicators of Student Achievement (PISA) has led Germany and Switzerland to reconsider the desirability of national (as opposed to Land or canton) standards.

The second element is process. Who should determine the curriculum? Who should be consulted, when, and to what extent? Who should be involved in its development: specialist curriculum developers, teachers or a partnership of the two? Is there reliable evidence of what works, and in which circumstances? In answering these questions, policy makers need to consider the effect of their answers on the quality and appropriateness of the curriculum, on its feasibility and implementation, and on responsibility for the outcomes.

Decisions concerning the content of the curriculum must take into consideration access, appropriateness and feasibility. What is the relative importance to be given to the different purposes of education, such as: the transmission of national heritage(s) and values; preparation for medium- and long-term economic and social needs; and the creation of
powerful learners with a range of skills which they can deploy in terms of their own interactions and their contribution to society (Hopkins, see chapter 3). In order to meet as many of these purposes as possible, most curricula have been found to be overloaded.

Successful implementation involves the effective introduction of, and long term commitment to, change. Teachers need to be engaged and appropriately skilled, well led and supported, and have the necessary time and equipment.

What constitutes an effective curriculum? How do we know that changes have been successful? Pupil examination performance - the most common indicator - leaves much to be desired, as it limits evaluation to what is assessed at a particular point in time. Formal examinations often ignore aspects which are acknowledged as important for economic and personal well-being, such as social skills, confidence, application and resilience, and may, as a result, lead to a narrow focus on the tested elements. Moreover, school-leaver performance indicators provide insufficient evidence to demonstrate the curriculum’s effectiveness in meeting two common objectives, namely to prepare young people for future needs and to develop them into lifelong learners.

Finally, who is ultimately accountable for the quality of education? Central or local governments? School owners or governors? Principals and teachers? Parents and pupils? Or employers and other community members who have influenced the policy governing the curriculum?

So what should the curriculum look like? A centrally imposed prescription? Devolved and discretionary provision to meet local needs? Or a blend of both, which draws on local strengths but does not constrain learners to local limitations, be they social, economic or attitudinal?

10.2 Propositions

Proposition 1: Curriculum prescription leads to deskilling of teachers

Centralised curricula were devised in an era when national values, aims, and needs were perceived as clear, constant and widely endorsed. Global immigration and global trade mean that this is no longer the case. Education seeks to prepare young people for a future – in this country or elsewhere – which cannot be predicted and which will be subject to ongoing and rapid change.
In many European countries, schools now have greater managerial and financial autonomy. In effect, they often operate as individual ‘cost centres’, in competition with one another for pupils and the funding which is linked to their enrolment. Governments promote ‘parental choice’ and encourage schools to develop particular profiles and specialisations. These may reflect curricular specialisations, or denominational or philosophical approaches. In some cases, such diversity is only available through private (fee-paying) schools, but in others, the state provides equivalent or even preferential funding to promote ‘choice’. In return for preferential funding, however, specialist schools are often required to share their expertise with neighbouring schools.

Greater autonomy normally requires schools to devise a development plan, in accordance with a more or less detailed framework, and which is subject to approval or inspection. They, too, are responsible for securing professional development for their staff, and many are involved - albeit to varying degrees - in providing or contributing to initial teacher training.

Drawing on his experience in England, Hopkins suggested that there is a limit to improvements in student achievement which can be produced by top down high fidelity curricula (see chapter 3). Despite policy statements concerning the need to meet individual differences, prescribed curricula rarely stretch to cover all. Teachers’ ability to tailor curricula depends on time, resources and, above all, on their willingness and ability to adapt their teaching style according to their perceptions of pupil needs. If, as Hopkins suggested, top-down change drives out capacity, who should determine the curriculum?

Letschert identified during his plenary introduction on the theme of the conference (see chapter 1), a model of curriculum development within the context of school development, with a greater role for teachers and principals. This approach has a number of benefits. First, the involvement of teachers in curriculum development is likely to increase their sense of ownership, understanding and commitment, which in turn have been shown to be important factors in the effective implementation of change. Second, it facilitates coherence between school, teacher and curriculum development. Third, if learning is to be perceived as relevant by pupils, then locating the curriculum in its context is essential. Finally, in terms of implementation, it is generally accepted that there can be no curriculum change without teacher change.
Proposition 2: Teachers are incapable of effective curriculum development

However, handing over control of the curriculum to teachers is not without its challenges.

The technical challenges are no different from those which face any curriculum developer, namely: securing breadth, depth and balance of content and skills; continuity and progression in learning throughout the compulsory education period; and coherence between the subjects or areas of study. Other challenges may be more difficult because teachers are so closely involved in their local community and have a vested interest in the ‘success’ of their school. Do the values and purposes which drive the curriculum offer pupils flexibility beyond local needs and opportunities? In determining appropriate and accessible content, are teachers sufficiently aware of their pupils’ (potential) position within the overall ability range? If not, the resulting curriculum might be insufficiently challenging for some of their pupils.

It has been suggested that teachers do not have as good an understanding of the present as (some of) their pupils. One example is young people’s widespread ability to use modern technologies that sometimes confound their elders. Second, western liberal societies constantly stress the rights of the individual, sometimes to the detriment of the collective society. On this basis, why should adults impose a learning programme on pupils? Third, if we want young people to become powerful learners to meet evolving social and economic needs, they need to engage with and understand what they are learning. Some argue that co-determination of their school curriculum would provide valuable training for young people to manage their own lifelong learning.

Proposition 3: Pupils should determine their own curriculum

As Hopkins pointed out in his keynote presentation, in learning, effort is a more important determinant than capacity. The same young people who devote hours to reading, constructive play and invention, memorising sports results over decades and exercising strategic and charismatic leadership in games, may be described in their school reports as having a short attention span, and lacking interest in, and even ability to complete, school work. Research and anecdotal evidence abound concerning the important contribution of ownership, autonomy and perceived relevance to learner motivation. Yet, ‘I’ve done my homework for you, Miss’, ‘This is boring’, and ‘What’s the point of learning this?’ resound in schools. Given these circumstances, it could be argued that responsibility for the curriculum should at least be shared with pupils, as it is they who will, literally, have to live with what they have learned.
However, school contexts vary widely; local resources and employment opportunities affect parents and pupils’ expectations and attitudes; each learner is different in his/her abilities, capacities, motivation and general attitudes, which may change considerably as s/he passes through childhood and adolescence.

Do pupils have – or do we trust them to have – the knowledge and maturity to make appropriate choices with regard to national priorities, economic needs, social cohesion and shared social capital, preparation for unknown future needs? Can a school reasonable be expected to meet the considerable demands, which may emanate from a diverse group of learners? And can society delegate responsibility for compulsory education to minors?

Or does this call simply mean that we have not made the curriculum rationale, purpose and expectations sufficiently clear to our pupils?

**Proposition 4: Curriculum development agencies will become redundant**

If curricula are individualised, then curriculum development agencies are redundant... unless they adapt their role to the changing needs and contributions of schools and learners.

**What next for SLO?**
Literature


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About the authors

Jan van den Akker
Executive Director Curriculum at SLO, the Netherlands.
Professor, heading the Department of ‘Curriculum Design and Educational Innovation of Education’ at University of Twente, Enschede, the Netherlands.

Hans Berkien
Site manager of Bonhoeffer College, a combined school for secondary education in Enschede, the Netherlands.

António Francisco Cachapuz
Professor of Education at the University of Aveiro, Portugal.
Member of the Portuguese National Council of Education

Mats Ekholm
Professor of Education at the University of Karlstad, Sweden. Former Secretary-General of the Swedish National Board of Education.

Adam Handelzalts
Researcher at the Department of Curriculum Design and Educational Innovation at University of Twente, Enschede, the Netherlands.

Maria van der Hoeven
Dutch Minister of Education, Culture and Science.

Sijbe Homminga
Project manager educational Innovation at the Bonhoeffer College, a combined school for secondary education in Enschede, the Netherlands.

Hans Hooghoff
Senior curriculum advisor at SLO, the Netherlands.

David Hopkins
Professor in International Leadership at the Institute of Education, University of London. Professorial Fellow at the Faculty of Education, University of Melbourne.
Jenneke Krüger
Senior curriculum developer in secondary education at SLO, the Netherlands.

Wilmad Kuiper
Associate professor at the University of Twente in the Department of Curriculum Design and Educational Innovation.

Jos Letschert
Staff member of SLO, the Netherlands. Lector at the Teacher Education College Edith Stein in Hengelo, the Netherlands. Professor at the University of Twente in the Department of Curriculum Design and Educational Innovation, the Netherlands.

Joanna Le Metais
Independent consultant in international education research and evaluation, Ascot Bergs, England.

Nienke Nieveen
Assistant professor in the Department of Curriculum Design and Educational Innovation at the University of Twente, Enschede, the Netherlands.

Eike Thürmann
Head of the Quality Agency working on behalf of the Ministry of Education, Northrhine-Westphalia, Germany.
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