# **Teachers Touch Lives**

### Improving the quality of teachers and teaching in Europe

A staff development seminar in cooperation with the NESSE network of experts

6.25 million teachers in Europe mediate between a rapidly evolving world and the pupils who are about to enter it. Drawing on state-of-the-art European and international research, professors Bernard CORNU (*Centre National d' Enseignement à Distance*, France) and Dylan WILIAM (University of London Institute of Education) discussed important aspects of teacher education and <u>drew conclusions for policy</u>. The seminar confirmed that the most important factors for quality, efficiency and equity in education and training are the quality and motivation of teachers and the types of pedagogy they use.

## Improving education at scale: the role of pedagogy



Dylan Wiliam showed that improving student outcomes depends principally on improving teacher quality, and argued that the only way to do this at a national scale is through sustained investment in coherent, career-long, programmes of teacher profess-

sional development. School development plans, argued professor Wiliam, will be effective only to the extent that they are also teacher development plans. While, he said, the research on teacher professional development shows that such changes have been possible at small scale in the past, radically new models of professional development will be needed to make this possible at scale. In particular, he argued, these programmes need to be founded on rigorous research about what kinds of practices improve educational and other outcomes for students, but need also to take into account the fact that each teacher needs to find a way to put this research faithfully into practice in their own classrooms. In his presentation, professor Wiliam outlined some models, currently being piloted in over 100 schools in the USA and the UK, of how this might be achieved.

Raising achievement is important, said the speaker, because it matters for individuals and it matters for

society. It matters for individuals, he explained, because if you have higher achievement, you live longer, you are healthier, and you earn more money. It matters for society, he continued, because people who earn more money pay more taxes, make lower demands on public healthcare services, and are less likely to be in prison. Given the size of these benefits, both for individuals and society, said prof. Wiliam, it is not surprising that people have been looking for solutions to improving the effectiveness of schools.

"The problem is that we have been looking in the wrong place", he argued. The fact, he said, that some schools get good results and others get less good results has resulted in a belief that schools make a difference. However, he added, when we look at the difference between what students know when they arrive at a school, and what they know when they leave (the so-called value added) we find that in most EU countries, the differences between schools are much less than the differences between teachers. More importantly, he continued, these large differences in teacher effectiveness appear to be more related to what they do, rather than what they know. Since replacing the existing teaching force will take a generation or more, argued professor Wiliam. improving educational achievement within the short and medium term requires improving the effectiveness of teachers already in post.

In recent years, there has been a growing acceptance that to be successful, teacher professional development needs to concentrate on both content and process, said the speaker. In other words, he continued, we need to focus on *what* we want teachers to change, or change about what they do, and we have to understand *how* to support teachers in making those changes.

#### The what: formative assessment

There is a large, and increasing, body of evidence, said professor Wiliam, which suggests that **improving the quality of teachers' day-to-day use of formative assessment is the most cost-effective change that we could make in schools within the EU**. The "big idea" of formative assessment, he explained, is that evidence about student learning is used to adjust teaching to better meet student needs—in other words that teaching is *adaptive* to the student's learning needs, in real time. More explicitly, effective formative assessment can be defined as:

Students and teachers Using evidence of learning To adapt teaching and learning To meet immediate learning needs Minute-to-minute and day-by-day

### For the speaker, **the key strategies of effective formative assessment are:**

- clarifying and sharing learning intentions and criteria for success;
- engineering effective classroom discussions, questions, and learning tasks that elicit evidence of learning;
- providing feedback that moves learners forward;
- activating students as instructional resources for one another; and
- activating students as the owners of their own learning.

#### The how: teacher learning communities

Implementing minute-to-minute and day-by-day formative assessment is not primarily a matter of providing teachers with new knowledge, although some knowledge will be important, said professor Wiliam. The crucial thing is to change habits -and traditional teaching structures do not change habits, he argued. After many false starts, he said, I have become convinced that the best way to support teachers in adopting minute-to-minute and day-by-day formative assessment is through building-based teacher learning communities (TLCs). Over the last three years, he continued, my colleagues and I have explored a number of different approaches to establishing and sustaining TLCs, and as a result of this experimentation, it appears to us that five principles appear to be particularly important: gradualism, flexibility, choice, accountability and support.

*Gradualism:* asking a teacher to change what he/she does is rather like asking a golfer to change their swing—in the middle of a tournament, said professor Wiliam. Teachers who try to add more than two or three techniques to their teaching at the same time almost invariably find that their teaching routines fall apart, and they go back to doing what they know how to do. In the long-term, he argued, they achieve less change than teachers who take smaller steps.

*Flexibility:* Techniques that work in one context may not work (or may not be appropriate) in others, said professor Wiliam. Only the teacher who is "on the spot" is able to judge this, so they need to be able to make adjustments to the techniques. By sticking within the framework of the five strategies, he continued, the chance that the modifications weaken the power of the technique is reduced.

*Choice.* the initial reaction of most teachers to being asked to adopt minute-to-minute and day-by-day formative assessment is that it is "scary", said professor Wiliam. However, he added, by putting the teachers in control of choosing which techniques they will try, it appears from our experience in American

schools that the challenge becomes a little less daunting.

Accountability: Although as noted above, teachers are free to choose what to change, they are accountable to the teacher learning community for changing something. Teachers have repeatedly told us, said the speaker, that the fact that they had promised to their colleagues to try something out is what made them prioritize this over all the other things they had to do.

*Support.* is the other side of accountability, said professor Wiliam. In fact, he continued, in our work with teachers we have used the term "supportive accountability" to denote the fact that we believe that the TLC structure is effective precisely because it offers both support and accountability.

### Competences for teachers and coherences for teacher education in a knowledge society



**Bernard Cornu** stressed that the demands placed upon teachers are increasing and that the environments in which they work become more and more challenging. He argued that there is a need to link teacher education to research and for teachers to become lifelong learners. ICTs offer some new

possibilities, he said, but do not solve the question of learning. *What are the main competences teachers need to possess?* he asked. *What are the main challenges for teachers and how can teachers prepare better?* 

The role of the teacher and the teaching profession itself change profoundly, said professor Cornu. For him, **teachers are the main actors of a changing school**: they have to work in networks and prepare the pupils to access networked knowledge, to involve their pupils in a "collective intelligence"; to integrate ICT in their profession; to deal with time and space, with distance and presence; to become lifelong learners.

Research shows, said the speaker, that **teacher quality** is significantly and positively correlated with pupil

attainment and that it is the most important withinschool aspect explaining student performance (its effects are much larger than the effects of school organisation, leadership or financial conditions). Furthermore, he added, research suggests that teacher training may provide a less costly means of increasing test scores than reducing class size or adding school hours.

Being a good teacher in a knowledge society requires a lot of competences, said the speaker. But, he continued, we cannot have unreasonable and everincreasing expectations from teachers. Instead of asking endlessly for "more and "better", we should focus on core competences.

The 2005 "Common European Principles for Teacher Competences and Qualifications", said professor Cornu, identified **four main principles** for the teaching profession, and **three key competences** for teachers:

- 1. A well-qualified profession;
- 2. A profession placed within the context of lifelong learning;
- 3. A mobile profession;
- 4. A profession based on partnerships.

The three key competences for teachers are:

- 1. Work with others;
- 2. Work with knowledge, technology and information;
- 3. Work with and in society.

Teacher education, argued professor Cornu, **is not only a matter of content.** Rather, he said, **training methods are essential**, since teachers teach as they are taught.

The speaker suggested that **six core "coherences"** are to be aimed at in teacher education; these may at times be in tension with dominant trends in teacher education policies:

 Tension and coherence between knowledge and pedagogy, between subject(s) and professional competences;

- 2. Tension and coherence between theory (academic input) and practice;
- 3. Tension and coherence between short term and long term objectives;
- 4. Tension and coherence between research and training;
- 5. Tension and coherence between initial education and lifelong training (the LLL continuum);
- 6. Tension and coherence between primary and secondary teaching.

Teacher education programmes, suggested prof. Cornu, should take into account all these tensions and ensure coherence in teacher education.

## The need to bridge research, policy and practice.

The speaker underlined that **a "research-based" teacher education** should enable them to continue to reflect on their practice in a systematic way; to undertake classroom-based research; to incorporate into their teaching the results of classroom and academic research. Reflective practice, he said, is a continuously interactive process.

For professor Cornu, teachers should be familiar with the concepts and methods of research, they should be able to access and apply the results of research; they should be involved in research activities themselves. Also, the teaching profession and teacher education should be permanently the focus of research.

The challenges of cultural and linguistic diversity, inclusion, immigration and inequalities call for a diversity of pedagogies, multi-disciplinary research, and **political decisions informed by reliable research**, argued professor Cornu. For him, teachers, teacher educators and researchers have a significant role to play in the decision-making process: *In order to help decision-makers and to make decisions meet the real needs, it is essential to bridge research, practice, experimentation and innovation with decision-making, concluded the speaker.* 

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