

**DIRECTORATE FOR EDUCATION  
EDUCATION POLICY COMMITTEE**

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**MEETING OF THE EDUCATION POLICY COMMITTEE AT MINISTERIAL LEVEL  
INVESTING IN HUMAN AND SOCIAL CAPITAL: NEW CHALLENGES**

**Issues Paper 3. Equipping effective teachers for the 21st century**

**Thursday 4 November – Friday 5 November 2010**

*This document is one in a series of four Issues Papers prepared as background to the discussions at the Meeting of the Education Policy Committee at Ministerial Level to be held at the OECD in Paris from 4 -5 November, 2010.*

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## ISSUES PAPER 3. EQUIPPING EFFECTIVE TEACHERS FOR THE 21<sup>ST</sup> CENTURY

### The issue

1. Ten years into the 21<sup>st</sup> century, we have already weathered an economic crisis and seen rapid changes in technology, geopolitical and economic shifts, increasing diversity and the inexorable demographics of ageing populations unfolding. And the pace of change appears to be accelerating.

2. Education plays a crucial role in equipping young people for their future working lives and broader economic and social well-being. At the same time, cutbacks and crises in public budgets pressure governments to do more with fewer resources and to focus education on the needs of the modern knowledge economy.

3. As professionals at the front-line of education delivery, teachers and school leaders face an increasing weight of demands and expectations. They are expected to equip their students with competencies for economic success in the 21<sup>st</sup> century and instill in them the values associated with good citizenship. They are expected to deal with increasing cultural diversity in their classrooms, differences in learning styles and children who are growing up in an increasingly complex and rapidly changing world. To meet these demands and expectations, they need -- and deserve -- to be equipped for being as effective as possible.

4. Teachers can only be considered effective if their students are effective learners. Evidence from learning science clearly points to the effectiveness of a learning environment that:

- Puts learners at the core.
- Has teachers highly attuned to what motivates learners, and
- Is rich in information about the learning taking place, with active assessment strategies to support learning and a strong emphasis on formative feedback.

5. But there is a large gap – perhaps even a gulf – between the evidence on effective learning environments for the 21<sup>st</sup> century and established practice in many of today's schools and classrooms.

### The challenges

#### *Implications of learning science for teachers and school leaders*

6. Bridging the large gap between the ideal learning environment and current practice means developing policy approaches that involve major changes for teachers and school leaders, including:

- Clear identification of key competences that 21<sup>st</sup> century teachers and school leaders need to be effective.
- Initial teacher education programmes that ensure teachers develop a more comprehensive understanding of how cognition, motivation, teaching and learning work together and can put this understanding into practice.

- Well-constructed induction programmes that support new teachers in their transition to full teaching responsibilities.
- Ongoing intensive teacher and leadership professional development, integrated with well-designed teacher evaluation, designed to support innovative learning environments.
- Appropriate resources to scaffold both teacher and student learning using inquiry-based approaches – such as models, public forums, tools, books, films and field trips.

7. To support effective learning, policy approaches also need to bring about changes in the way teachers work and in the school environment, including:

- Re-examining structures and practices that inhibit inter-disciplinary practice and providing the room to take time to learn deeply, or employ inquiry- and community based approaches, especially in the core areas of curriculum and assessment.
- Developing performance assessments with accompanying evaluation tools that encourage flexible, quality learning environments and responsiveness to individual and cultural differences.
- Designing technological applications and innovations to help young people learn to fit the nature and aims of learning rather than the features and potential of the technology.

8. Teachers and school leaders also play a key role in strengthening connections with families and communities as part of effective learning:

- Explaining effective learning to the wider community so as to elicit the support of stakeholders who may well be holding traditional goals and expectations.
- Personalising relationships with learners and their families, as well as promoting after school and extra-curricular programmes and supporting families as learning environments.
- Promoting different forms of service learning to widen the horizons and relevance of learning, enhancing the community-orientation of learning environments and making the links between formal learning and the wider world beyond schools more explicit.

9. The challenge for policy-makers is to get these well-established research findings about innovative learning environments transformed into reality in every classroom and school and to equip teachers – as key learning professionals – to play the lead role.

### ***How teachers see themselves and their challenges***

10. Understanding how teachers see themselves and their challenges is crucial information for designing policies to support teaching and learning. The OECD Teacher and Learning International Survey (TALIS) yielded important insights into current teaching practices in lower secondary school as well as teachers' beliefs and attitudes. The results show that:

- Teachers generally support modern constructivist<sup>1</sup> beliefs about instruction, rather than direct transmission, but there is scope for strengthening this support.
- In teaching practices, teachers were most likely to adopt structuring of lessons, followed by student-oriented practices and enhanced learning activities such as project work. Thus, teachers tend not to put into practice the beliefs about teaching they hold most strongly.

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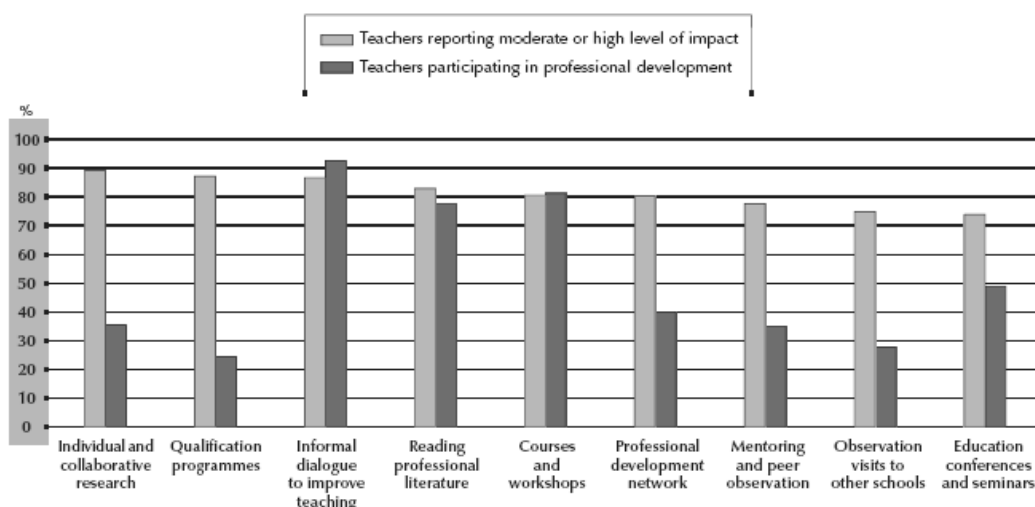
<sup>1</sup> This view of teaching considers students as active participants in the process of teaching and learning, with teachers facilitating student enquiry and encouraging students to develop solutions to problems and to play an active role in instructional activities.

- There is scope to improve teachers’ effectiveness by extending teacher co-operation and fostering an improved school climate.
- The importance of support of teachers’ classroom management techniques and a positive attitude towards the job. One in four teachers loses at least 30% of lesson time in disruptions and administrative tasks -- and the classroom climate affects individual teachers’ job satisfaction.

11. Participation in professional development is generally associated with more reported use of specific instructional practices, and especially student-oriented practices and enhanced activities.

**Figure 1. Comparison of impact and participation by types of development activity**

(2007-08)



Source: OECD (2009), *Creating Effective Teaching and Learning Environments: First Results from TALIS*, OECD, Paris.

12. Almost 90% of teachers participated in some form of professional development and on average, spent just under one day per month in professional development, although there are wide variations both within and between countries. More than half of the teachers surveyed felt they needed more professional development than they had received in the previous 18 months. Most often they did not do more because of conflicts with work schedules, but teachers also often cited lack of suitable development opportunities.

13. Teachers identify a wide range of professional development needs spanning teaching special learning needs students, ICT teaching skills, student discipline/behaviour, instructional practices, subject field, student counselling, content and performance standards, student assessment practices, teaching in a multicultural setting, classroom management, and school management and administration.

14. TALIS results also show that appraisal and feedback have a strong positive influence on teachers and their work and teachers report that it increases their job satisfaction and significantly increases their development as teachers. But only 70% of teachers in TALIS work in schools that had undergone an external evaluation within the previous five years. And 13% of teachers had never received any appraisal or feedback from either their principal, a member of the school management, another teacher or external evaluator.

15. Close to 80% of teachers reported that their appraisal and feedback was helpful in developing their work as teachers. It most frequently led to changes in the emphasis placed on improving test scores in teaching, student discipline/behaviour, classroom management and instructional practices. Almost half of them reported that it led to a teacher development or training plan to improve their teaching.

**Policy responses**

16. Policy-makers face broad challenges in equipping effective teachers for the 21<sup>st</sup> century. An obvious starting point is to focus on the creation and support of effective learning as the over-riding objective of education policies. How this policy supports effective learning can also be used as the key criterion against which both existing policies and new policy proposals can be assessed.

17. Equipping teachers for effective learning in the 21<sup>st</sup> century for many countries will require fundamental rethinking of initial teacher education programmes, redesigning and strengthening investment in professional development and providing effective and ongoing support and feedback for teachers in every aspect of their work. These endeavours need to be closely aligned with the requirements of the knowledge economy, 21<sup>st</sup> century skills development and the role of technology, as well as equipping teachers to face the challenge of increasing diversity within the classroom. They also need to be supported by conditions that foster well-designed innovation in education, including emerging models for recognising diverse cultures and addressing special needs, curriculum and the use of digital resources, as well as in teacher selection, training and retention.

18. However, if teaching is seen as a low-status profession and unable to attract and retain high-calibre candidates, then all these efforts to develop innovative learning environments and anchor teaching practices in learning science will be undermined. New approaches to selecting teachers and school leaders are also needed to identify those who can respond to the challenges of the 21<sup>st</sup> century and are most likely to achieve effective learning outcomes in their classrooms and schools. Thus, teacher education, professional development and support need to be designed within an integrated framework of policies concerning schools, teachers and school leadership.

19. The engagement and support of all stakeholders including teachers, school leaders and teacher educators and their active involvement in the policy design process itself is crucial to successful implementation and real changes in classroom practices. Design and implementation of effective policies will inevitably take considerable time and will probably encounter some resistance from those asked to change their ways.

**Questions for discussion**

1. How can countries improve policy design to enhance the effectiveness of teachers and school leaders?
2. How can countries attract more and better candidates into the teaching profession?
3. What tools are needed to measure whether the effectiveness of teaching and learning in classrooms?