



Emerging Models
of **Learning**
and **Innovation**

OECD/ MEXICO INTERNATIONAL CONFERENCE

EMERGING MODELS OF LEARNING AND INNOVATION

Merida, Mexico. 14 – 16 June, 2006

Background document for discussion:

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General Remarks and Questions for Discussion

Author:
CERI

1. The Urgency of Identifying Emerging Models of Learning and Innovation for the 21st Century

At the start of the 21st century, all countries are facing the challenges of global driving trends in which education is central. We live in knowledge societies; technologies develop apace; there are glaring inequalities within and between countries; and there are powerful demands for participation and citizenship. For many, education is still shaped by traditional structures that are inappropriate for the world of today and tomorrow. It is easy to be critical; it is another matter to define new models for learning and innovation that might inspire us and point the way ahead. To begin an international dialogue to address these questions is what this project, undertaken at OECD's Centre for Educational Research and Innovation under the Schooling for Tomorrow programme with Mexico in the lead role, has set out to do.

A great deal of reform discussion is grounded in school systems as we know them. Improving and reforming schooling is obviously very important, but it is now urgent to look with new, visionary perspectives at what might be possible when our aim is to 'reinvent' not just 'reform' education. This has been expressed as the need to address 'next practice' not just 'best practice'. A starting point and a conclusion of this study is that education will need to find new models and new forms of professionalism and engagement, and it will need to challenge excessively bureaucratic arrangements if it is to be relevant for the 21st century.

New approaches to learning emerge as a result of innovation, which are often relatively small scale and a response to perceived challenges or the need for change. The cases looked at in Mexico are good examples of this. However, there is need to understand more profoundly the nature of innovation and to focus on its encouragement and sustainability, rather than just gather examples of innovative practice without attention to how that might effect wider change. This is a key question for the Mérida conference and this has been carried over into the new OECD/CERI work programme as 'innovation in system change' has become one of CERI's overarching new themes.

2. The joint OECD/Mexico Study

This conference is the culmination of intensive reflection and field work on the Emerging Models of Learning and Innovation project over the past year, with Mexico in the lead role as part of CERI's "Schooling for Tomorrow" programme. The conference marks a culmination of this study but otherwise it is the launch-pad not the end-point of reflection.

The theme has been on inspiring models of learning and innovation for the future, with the initial focus on innovation for disadvantaged groups. The approach has been to combine the close study of learning innovation in concrete environments with broader reflection from a range of disciplines and countries, creating synergies between them. Accordingly, it brings together: i) the results of case studies in Mexico of innovations in learning among vulnerable populations; ii) transversal analyses and reflections by Mexican and international experts on the broad theme of emerging models of learning and innovation, informed by the case studies; iii) experience and analysis from related OECD work on innovation and learning.

The study and its culminating conference in Mérida aim to:

- *Advance international thinking regarding concepts and ways forward for 21st century education systems*, especially: moving from bureaucratic organisation to flexible learning systems; creating and sustaining cultures of innovation in learning systems; re-thinking the organisation of learning in schools, networks, and communities; innovation and equity.
- Contribute to the balance of reflection in OECD/CERI work by integrating *a substantial body of Spanish-speaking research into the international study of these issues*, complemented by the case experiences of Mexican innovations.

- Use the project and the Mérida conference to help *elaborate on-going OECD educational analysis* on Schooling for Tomorrow, Learning Sciences and Brain Research, and innovative designs of facilities (PEB) and *to help shape new work* in the next work programme starting in 2007. The ways in which this project is already influential are described at the end of this note.

3. The Framework of Analysis

This project has both developed and applied a framework for advancing the identification of emerging models of learning. A model of learning is “a particular mode of interaction between all the dimensions which directly or indirectly shape learning”; we are particularly interested in “non-typical” dynamics producing alternative models of learning. The framework combines different dimensions at four levels:

1. Critical Learning Factors

- Different approaches to who constitutes the *learner*;
- Alternative models of who and what constitutes the *teacher/facilitator*;
- The *re-organisation of the learning process and pedagogy*;
- New approaches to what constitutes “*school/educative*” *knowledge and curriculum*;
- New modes of pupils’ and teachers’ *feedback and assessment*.

2. Immediate Contextual Dimensions

- Innovative uses of *functional resources*, including those of time, space and facilities; and of ...
- ...*didactic resources*, including ICTs;
- New partnerships and relations with *families, communities, social groups and stakeholders*.

3. The ‘Meso’ Level

- *Networking* and other forms of partnership between learning organisations;
- Innovative forms of *financing* at the local/regional level;
- *Evaluation*, applied to teacher/facilitator work, the institution, etc. and *professional support structures*;
- Different, supportive forms of *local management* of education, methods and innovations.
- *Essential community beliefs* held by educators, families, and others.

4. The Macro Level

- *Governance and financing* consistent with the innovative learning, and the sustainability of structures;
- *Essential beliefs* related to the purposes of education and to race, social class, intelligence etc.;
- *Open or closed* nature of society to wider cultural and international influences.

The dimensions are organised from the micro level of teaching and learning through to the macro level of society and central policy. Focusing on emerging models of learning is not about emphasising more the micro and less the macro, for there are important interactions between them; changes at the macro level – government policy or broad culture – are among the key factors which foster or inhibit different models of learning. An important conclusion of this study is the need for *consistency and coherence* across the different micro, meso and macro levels in order for promising models of learning to emerge and for innovation to be sustained.

4. Key Questions in the Mexican Cases

How is learning conceived, supported and attained in the different cases?

The conceptions of learning found in the Mexican case studies are influenced by the fact that they all relate to the needs of vulnerable populations. They have been inspired a sort of ‘utopian realism’ - conceptions

of learning which are deeply rooted in the social and economic conditions where they are found, while at the same time aiming at their transformation. The four cases share conceptions of learning around the following characteristics.

Learning has to be situated - it has to be promoted so that it can become significant both for the learners and for the community educationally but also in political and social terms. These innovations put the learner in the centre of the educational process, in a way that (s)he becomes increasingly aware of the context and of his/her own social and personal responsibilities. Therefore, approaches such as social, experiential and authentic learning fit better into these models of learning than traditional educational practices. As a consequence, the role assigned to the teacher becomes that of a mediator between knowledge and the learner, while at the same time the teacher is also a learner. To do this properly, teachers need to be working collaboratively with others.

An important implication of this situated learning is the development of different curricula which pay more attention to personal and social development needs as perceived by the community. This can be characterised as the search for curricular justice or equity. All the cases have developed an educational innovation by drawing on, even relying on, the local community for setting an alternative model of learning. Community values and the resulting engagement have been a primary point of departure of these innovations. When these values become weaker, the impetus for educational change diminishes.

The importance of local influence means that tensions can arise between these developments and the educational authorities. The Mexican experience also shows, however, ways in which the authorities can co-operate with the 'third sector' supporting these emerging models of learning by, for instance, introducing more flexibility into regulations and requirements.

The emerging model of learning

The characteristics shared by the cases which help define their model of learning are:

- Considering the learner as a subject, who is actively engaged in learning while being a member of a social community - learning becomes an integral part of the daily experience of all community members.
- Conceiving the teacher as someone who is not a knowledge transmitter but rather a resource to help others to learn and who gets engaged in learning as well. Teachers are not alone with the responsibility for learning, the community is, too.
- Using the community and its values to make learning significant both for learners and for the community. The innovative approaches to learning are effective when they supply a response to a socially perceived need. The way to keep the community engaged in the whole process is to share responsibilities in terms of decision-making and management.

The pedagogical principles inspiring these innovations are not 'new' in terms of educational theory, but they become potentially transformative when put at the service of a community project and the values embedded in it.

The origins of the innovation, how it survives and what makes it function?

The Mexican cases have originated in the search for equity in educational provision; their starting point has been in the struggle for greater educational opportunities. They are not so much pedagogical innovations, which emerge from the application of alternative educational theories. Instead, they use pedagogy to serve their purposes, adapting known theories and principles to their own needs and circumstances.

There is a critical interaction in these cases between:

- A self-organised community, able to articulate and engage particular educational needs arising in contexts where traditional educational responses or provision are perceived to be either scarce or inappropriate.
- A team of educators, with a strong and visible leadership, able to articulate and to supply what the community perceives as an appropriate approach to these learning needs.

Genuine educational innovation implies radical organisational change, without which the chances of sustaining, let alone generalizing, it are much reduced. Some of the organizational characteristics shared by these cases are:

- The short time span between the perception of an educational need and the working out of a solution;
- A strong dependence on local perceptions, engagement and resources;
- Great flexibility and adaptability over time;
- Ability to find external support, including in financial terms, and excellent resource management;
- Stability of teams and continuity of the human resources with a shared vision and common community-oriented values;
- Clear and strong leadership.

Although technical competence might be thought to be a prerequisite for innovation, the Mexican cases show that, above a minimum threshold, the required competences can be built by the actors during the process of innovation. Leadership plays a significant part in sustainability and success. This fact raises concerns when there are no heirs to existing leaders or provisions for ensuring continuity.

Two key sets of tensions are raised by these cases and their associated characteristics. First, they rely strongly on existing community values and sense of identity. But what happens – a common situation across different countries today – when communities fragment and social capital diminishes? Does this mean that these forms of innovation inevitably decline as well, or can they represent a way of forging new relationships between education and communities? Second, how far is the important community basis for learning and action compatible or in conflict with the pursuit of personalisation of education which is emerging as a key policy direction in many countries? Even if ‘personalisation’ does not necessarily mean ‘individualisation’, how do these models of learning and innovation fit with the strong trends visible in many places in favour of individualism, even privatisation, in education at the expense of the social agendas?

The ‘ABC’ of Innovative Approaches to Learning and Equity

Many of the key messages of the study can be summed up under headings that might be termed the ‘ABC of emerging models of learning and innovation’. Using this device¹ to summarise does not of course mean that these are simple or trivial matters to achieve.

The Mexico innovations studied led to the identification of a ‘virtuous circle’ of six ‘As’:

- *Audacity*: To think ambitiously and aim to change difficult and challenging circumstances calls for boldness.

- *Authenticity*: there needs to genuine interest in working towards a shared social need; authenticity is generated by consistency between what is intended and its implementation.

¹ Clearly this depends on particular words in English or Spanish; we have tried to find ways of expressing these summary points in both languages as different points were generated by both English- and Spanish-speakers.

- *Appropriation*: leadership needs to be distributed, and the charismatic ideas of innovation leaders appropriated by the others who will carry it out, if innovation is to be more than isolated experiments wholly dependent on individual enthusiasts.

- *Ancestry*: The roots of innovation in communities of people and practice are essential to sustainability; innovation is more about finding new ways of using existing resources and interests than about generating the totally novel;

- *Authority*: acceptance of change to embark on new directions depends on the legitimacy of the proposed actions – technical and moral authority ultimately sanctions the actions of genuine innovators.

- *Amazement*: There is amazement – surprise - in the creative process of discovery, which is a human not a mechanical process.

This ‘virtuous circle’ is complemented by the more generalised conclusions that can be expressed in terms of three ‘Bs’...

- *Beyond Bureaucracy*: in the 21st Century education systems need to move beyond excessively bureaucratic routines, dominated by the needs of administration rather than those of learners. This means reducing bureaucracy in the sense of ‘red tape’, while recognising that bureaucratising change may be very necessary if innovation is to move from the isolated experiment to more widespread impact.

- *Breaking into the Black Box*: it is much easier to conceptualise and work on the big structures of education systems; it is a much more complex matter to go into the ‘black box’ of learning and innovation at the grass roots level in order to make significant big changes. But this is what is precisely what is needed if we are to find inspiring new models of learning and innovation.

- *Borrowing the Metaphors of Biology*: moving beyond mechanistic bureaucratic practices is about recognising the need for more organic approaches to learning, and to the relationship between education and its social and cultural environments. This is to recognise the natural systemic relationship between each organism and the wider eco-system, and to understand how innovations – as something new and evolutionary - both change the wider whole and are in turn changed by it.

... and the following C’s:

- *Commitment to the Educational Cause*: to devise and sustain new innovative approaches to learning, especially those which address the situation of vulnerable populations in society, calls for care and commitment. It is about identifying new forms of professionalism for all the agents of change which go beyond the mechanistic and bureaucratic...

- ... in *Culture of Creativity*: accountability is an unavoidable reality of contemporary education systems but to move towards ‘intelligent accountability’ means to harness the natural instinct simply to control and avoid risk. This instinct stifles the experimentation and innovation on which schooling depends in the 21st century. This is, as much as anything, about fostering cultures where creativity is recognised, indeed encouraged.

- *The Courage of Charisma*: the sustainability of innovation cannot depend on charisma but it is often a key ingredient to convince others – immediate colleagues and those in other parts of the educational system - to contemplate the change to routines with which they are familiar.

Shaping New OECD Agendas

The conference marks a culmination of this one study but otherwise it represents the start not the end-point of reflection. This is seen first and foremost in that ‘Emerging Models for Learning’ is included in CERI’s programme for 2007 onwards, meaning that it has raised already important questions that need to be continued. We will be looking for new partner countries to help consolidate the progress that has been made through Mexico’s leadership.

It has also refocused the Schooling for Tomorrow programme: by stressing the importance of helping education systems to find and sustain new models of education. It complements the value-neutrality of the futures thinking scenarios work of OECD by showing that a commitment to different ways of organising education – reinventing not just reforming schools - is needed for the long-term vitality of education.

It has broadened the scenarios work of OECD/CERI Schooling for Tomorrow by complementing the focus on education and learning systems with one on the nature and organisation of teaching and learning. It has thus begun the development of tools for futures thinking which are about the nature of learning, not just the nature of systems.

The Mérida conference agenda shows how closely this study relates to other on-going projects both in CERI (Learning Sciences and Brain Research) and elsewhere in OECD’s Education Directorate, especially PEB’s work on new designs and school facilities (PEB = Programme for Education Building).

‘Innovation in system change’ has now been recognised as a key issue for it has become one of the overarching themes in the new OECD/CERI programme; a new activity to take place in CERI from 2007 onwards will be reviews of innovation policies in education. This study has both helped to identify this priority and the study’s findings will feed into its operationalisation.

Beyond this, CERI is already working on new studies which are being presented in Mérida, in particular ‘New Millennium Learners’, and ‘Globalisation, Linguistic Competencies and Cultural Diversity’, and these new activities which will also be informed by our work on Emerging Models of Learning and Innovation.

In short, this study has proved to be influential and timely in meeting its main goal – to help set and shape the international education research agenda through OECD over the rest of this decade.