

## **Innovative Learning Environments**

### **1. Introduction**

In recent decades, OECD economies have experienced a rapid transformation from industrial to knowledge-based systems in which lifelong learning and innovation are central. At the same time, many of today's schools still operate as they did at the beginning of the last century and are not encouraging the deep learning and skills that underlie innovative activity.

For both the individual and society, the successful management of learning is essential. Individuals who become self-directed learners are able to acquire expert knowledge in various fields, to change careers, and to endow their lives with creativity and variety. Developing these capacities is not only important for a successful economy, but also for effective community and social engagement, participatory democracy and for living fulfilling and meaningful lives. Thus, society cannot risk leaving the acquisition of learning to chance.

How can individuals be helped to achieve their fullest potential? How can today's schools be transformed so as to create environments that result in the type of teaching and learning that makes individuals lifelong learners and prepares them for the 21st Century?

### **2. Our Focus**

Our project will focus on teaching and learning at the micro-level as opposed to educational policies, management or organisational structures. This is based on the fundamental belief that to search for new approaches within the education system calls for close attention to the nature of learning itself.

Our work aims to serve the educational reform agenda by generating evidence from the learning sciences and providing innovative examples from the field which invite questions about transforming teaching and learning practices in today's schools. The specific aims of the project are to:

- Analyse and synthesize current international research findings on learning, teaching and learning environments
- Identify and analyse examples of innovative learning environments from all over the world

- Engage with the community of policy reformers, innovators and learning scientists to discuss how to better use these findings to make OECD education systems learningdriven

### **3. The Project**

The project will include three different types of activities.

#### ***Analytical Work***

The common image of a teacher standing in front of a class, providing information to students sitting passively at their desk is archaic, according to contemporary scientific views of the learning process. But what exactly do we know about learning? While traditional education has emphasised memorization and the mastery of text, research on learning has shown that people construct new knowledge and understandings based on what they already know and believe. The importance of allowing students to take control of their own learning and thereby become active learners who are able to understand complex subject matter is also underscored by the learning sciences. Learning needs to be understood as a social, cultural, and, most of all, an active and differentiated process.

While there is no universal best teaching practice, we believe that we can now identify general principles of learning that emerge from the learning sciences. The goal of the analytical strand of the project is to provide an evidence base on the cognitive, affective, social, motivational and developmental dimensions of learning. The key research findings will be synthesized to help redesign classrooms and other learning environments so that students learn more deeply and effectively.

A first outcome on learning sciences and principles is due end of 2009.

#### ***Empirical Work***

A multitude of innovative educational initiatives can be found all around the world. The learning sciences provide support for core features of many of these innovative learning environments: their instructional methodology focusing on experience and reflection, their integrated curriculum, and their focus on independent and customised learning combined with formative assessment. They are ahead of mainstream education and can serve as meaningful examples for the renewal of learning environments in schools around the globe.

The empirical strand of the project will identify concrete examples of the innovative learning environments that already exist in OECD countries as well as in non-member

countries. There will be a first compilation of cases from which a subset will be selected for case study analysis. The field work teams will include researchers, local experts, policy makers and Secretariat staff.

The outcomes will take different forms, including reports and the knowledge bases of the innovations which go into the public domain.

### ***Policy Analysis***

The third component of the project will focus on making the bridge between research and practice, on the one hand, and on implementation and policy on the other. Throughout the project, we will engage with the community of policy makers and innovators to identify and discuss the implications of the results from the analytical and empirical work. The outcomes will be connected to policy experiences in different countries and to already-existing policy approaches that foster effective learning environments and respond to key challenges such as high drop-out rates. It will provide analysis of the systemic context of today's learning environments.

In addition to these concrete activities, the project will offer different stakeholders – countries, foundations, researchers, innovators and practitioners – the basis to engage in dialogue about the possibility for change in today's schools. This dialogue will not only take place at the conferences and meetings throughout the lifetime of this work but also through the project's website – which will include a database of the cases covered by the empirical work of the project and give the means for innovative learning environments from all around the world to connect.

## 4. Innovative Learning Environments - illustrations

During the project's developmental phase prior to 2008, several innovative learning environments were identified in different OECD countries and in some nonmember countries, in both urban and rural areas. Some are specialised schools (technology, sports, arts), some are virtual or mobile, while others are community centres that draw on different sources of knowledge, expertise and support.

Box 1 contains information about such an innovative learning environment, which can be contrasted with traditional forms of schooling. It may not be the most prototypical, nor will it necessarily be included in the list to be generated by the project. It serves to illustrate, however, what innovative learning environments can look like in practice and give a flavour of our empirical focus.

### *Box 1. The Met Center*

The Metropolitan Regional Career & Technical (MET) Center is a network of six small high schools in Providence, Rhode Island, USA. In 1996 it was founded by 'The Big Picture Company', a non-profit educational change organisation whose mission is to catalyse vital changes in American education.

There are 700 students in the MET Center. The student population is ethnically diverse and half of the students come from low-income families. The staff at the MET comes from diverse fields. MET aims to teach students empirical reasoning, quantitative reasoning, communication, social reasoning and personal qualities. MET addresses the whole learner, including the student's physical, mental and emotional well-being. Students are organised into advisories: groups of 15 individuals in the same grade level and led by an advisor, who stays with them for all four years of high school. Students are also paired with adult mentors who share their career interests. This is because school based learning is blended with outside experiences through an internship programme. For each student, a challenging and personalised learning plan is developed every quarter by the students themselves, their advisors and their parents. Instead of multiple choice tests and exams, each student defends his work in exhibitions each quarter in front of advisors, parents, mentors and peers. Instead of grades, students receive quarterly narratives from their advisors, in which the advisor describes the student's academic and personal growth in detail. There are no standard fixed-time classes.

The MET is not just a school but also a community centre where community members are involved in the daily workings of the school. In addition, parents are involved in the development of their children's learning plan and in assessing their child's work. A health centre is also part of the MET.

The MET Center has been very successful: on average, 98 % of the graduates are accepted to college, the graduation rate is 94 % (the city's average is 54 %) and the attendance rate is 92.1 % (the city's average is 80 %). According to the 'Rhode Island's School Accountability for Learning and Teaching Surveys', the MET has consistently ranked among the state's top high schools for parent involvement, school climate, and quality of instruction.

[www.metcenter.org](http://www.metcenter.org)

## 5. Why get involved?

This project offers a number of benefits for the participating countries/regions and institutions. Among the most relevant are the following:

- Involvement in an international initiative to develop a new education paradigm based on learning research and innovations, with a strong, practical focus on educational policy making and practice;
- Prominence in the international sphere and participation in the collection of evidence which will provide strong analytical insights on learning environments;
- Access to international and comparative analyses to complement what other countries/regions are doing to meet similar challenges;
- Linkage to researchers teams, innovators and reformers in other OECD systems, with the opportunities for networking and dissemination enhancing the value of ongoing work;
- Increased impact of national and more local initiatives via the broad dissemination of CERI's publications, in English and French languages, in both printed and digital formats in all OECD countries and non-member economies. We also support translations into other languages, though we cannot do this ourselves.

## 6. How to get involved

The successful implementation of the project will depend on the active participation of countries/regions, institutions and foundations concerned with improving today's schools as well as that of researchers, innovators and practitioners. Each of these stakeholders is encouraged to enrich the work of the project by sharing their own experience.

More specifically, the different groups of stakeholders are invited to play a specific role in the project:

### ... as a country/region

The active involvement of as many countries/regions as possible from the outset is essential for our project. All countries are invited to participate in the project while the implementation of the work will be facilitated by certain countries who take a lead role.

Participation includes proposing potential cases; identifying researchers, innovators and practitioners who might play a wider role in the project; providing detailed report back on cases featuring in the project's "universe" and "inventory"; engaging in the policy discussion about systemic implementation; and participating in different project meetings, seminars and conferences.

Those countries that would like to play a **lead role** will host certain events, such as advisory group meetings or conferences, and contribute to the international overhead costs of the project, both at OECD/CERI and with the international experts involved. (See next Section: Opportunities for cooperation and funding).

### **... as an institution or foundation**

Institutions and foundations sharing our belief that today's education system is not prepared for a knowledge society, and pursuing the same goal of transforming today's schools into communities of thinking and learning, are invited to become part of our network on innovative learning environments. We welcome them to share their expertise with us and to support the project.

### **... as an individual expert**

Are you a researcher occupied with the analysis of teaching and learning? Are you an innovator who promotes new and exciting learning environments for the 21st century? Are you a practitioner organising your classroom, school or learning centre differently from "traditional" practice? Then our project might be of interest for you and you might be of interest to us! The expertise of innovators and practitioners is very welcome as part of our larger network on learning environments. Providing interesting cases and initiatives from the field is another way of getting actively involved.

## **7. Opportunities for taking the lead - in kind and with funding**

All OECD countries are invited to participate in the project and no specific financial contribution is required for participation. However, in order to achieve all the goals of the project, countries/regions, foundations and other organisations might wish to take a lead role and finance, together with CERI, certain key areas of the project.

### ***Main areas for cooperation***

Countries/regions and foundations are invited to lead and finance the following areas:

- A. Literature and research reviews
- B. Secondments
- C. Expert meetings
- D. Pilot and cases studies
- E. International conferences

For all of these options there are costing estimates available (please contact Secretariat).

## **A. Literature and research reviews**

For OECD countries it is increasingly important to keep accounts of rigorous research findings. The literature on the nature and settings of learning environments is still fragmented or does not take account of research in other it is confined mainly to the national level. There is not yet a single reliable publication that synthesizes the main learning principles in an international, holistic and practical way.

CERI has engaged a number of the world's top researchers and practitioners in order to develop the *OECD Report on Learning Principles*. This will include research published in a number of regional/language areas. We will be exploring options for translations of this report into other languages than English and French. We may well follow up on key research topics. We are looking to keep our identified experts together as a network, with occasional face-to-face discussions and development work.

## **B. Secondments/scholarships**

The project would benefit significantly from the participation of secondments (staff from your organisation to work temporarily with OECD) or financial support for academic researchers for specified time periods.

Candidates for longer-term secondments (nine months or more) would be selected on the basis of standard OECD criteria for recruiting analysts. They would be working under the responsibility of the project leader, and indicative tasks, which may be tailored according to the level of seniority and expertise of the candidate, include:

- Undertaking or managing research reviews and drafting syntheses on relevant topics.
- Engagement in knowledge management or analysis relating to the innovations featuring in the empirical strand.
- Engagement in the piloting or fieldwork of cases in the Observatory.
- Assisting with the preparation of expert meetings and international conferences.
- Dealing with dissemination opportunities, particularly those arising in the secondment's country, but also using digital media.

## **C. International expert and participant countries/regions meetings**

CERI projects depend critically on international experts meetings and those taking place with participant countries/regions. These concern technical and scoping issues and discussion of substance and findings. International experts from a variety of countries, usually with a multi-disciplinary approach, are invited to participate on an *ad hoc* basis.

Countries and foundations are invited to host or support these meetings. It is possible for countries to invite the international experts also to participate in a specific national/ regional back-to-back event.

#### ***D. Pilot and case studies***

One of the pillars of the project is the empirical strand. Relevant cases in the field will be identified and studied in order to understand how they have combined learning sciences principles with daily practices. The lessons learned from them will be fundamental for the policy implications strand. The final number of cases for detailed study will depend on the funding obtained.

#### ***E. International seminars and conferences***

A first international seminar and meeting of participating country coordinators will take place in Norway end August/early September 2009. Further events will take place in 2010. These provide ample opportunities to engage in international debate and the development of agendas but they take resources, too. We welcome support for different international events of this sort.

## **8. Contact and Further Information**

### ***Project Team in Paris***

- *David Istance*, Senior Analyst, Head of the Project,
- *Adriana Ortega Orozco*, Project Officer
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### ***Project Email Address***

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