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Innovative Learning Environments (ILE)

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### ***“IMPLEMENTATION AND CHANGE” IN OECD/CERI’S INNOVATIVE LEARNING ENVIRONMENTS (ILE) PROJECT: AN INITIAL OUTLINE OF THE APPROACH***

This note outlines an initial framework for addressing the third ILE strand: ‘Implementation and Change’, including potential areas of analysis as well as operational activities for the participating systems. These will be firmed up following feedback at the October 2011 Banff conference and the CERI Governing Board in November 2011.

It presents the conceptual and analytic framework emerging from ILE work with its strong focus on the micro and ‘meso’ levels that are regarded as critical for realising 21<sup>st</sup> century learning agendas. It includes possible topics for work by small expert networks who would clarify particular issues, concepts and practices identified as critical to the ILE project. And it presents options for the work to be carried out by the project’s participating systems and organisations, which vary in terms of their demands on resources.

The Annex reproduces the main conclusions from the already-published 2010 report, as these closely inform the work on implementation and change.

## **‘IMPLEMENTATION AND CHANGE’ IN OECD/CERI’S *INNOVATIVE LEARNING ENVIRONMENTS* (ILE) PROJECT: AN INITIAL FRAMING OF THE APPROACH**

### **Introduction - Implementation and Change**

ILE aims to inform practice, leadership and reform through generating analysis of innovative and inspiring configurations of learning for children and young people. The first two main lines of work have sought, first, to identify the directions for change suggested by research (see Annex) and then, second, to have analysed inspiring innovations that have already been put in place. Building on these, for this third strand the natural question then is: *how to implement on a wider scale the directions for change suggested by our knowledge about learning and the practice of the innovative trailblazers?*

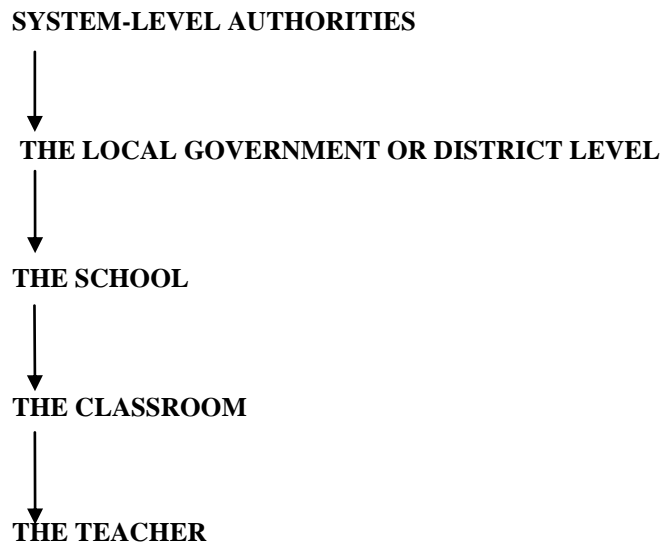
The challenge of changing schooling is indeed imposing. Realising the research-based criteria of effective learning as identified by *The Nature of Learning: using research to inspire practice* will call for substantial innovation and change given their distance from so much current practice. Traditional models of schooling are inadequate for delivering 21<sup>st</sup> century learning agendas especially for the least favoured sections of society. This means that it is not enough to fall back on the tried and tested solutions from the past, nor therefore on methodologies that rely on longstanding evaluations of previous practice, in order to clarify ways ahead.

The scale of the challenge derives also from the nature of educational organisations and systems. Educational institutions are characterised by structured interests, incentives and functions – the “grammars of schooling” - that help to explain why there is often such a wide gap between organisational priorities and practices, on the one hand, and appropriate learning agendas, on the other. At the more macro level, the variables of reform tend to those most amenable to change at the education system level that only very indirectly are able to filter through to the learning taking place on the ground. Governance arrangements will need to be appropriate to influencing learning organisations, a variety of hybrid learning environments incorporating formal and non-formal provision, and encouraging innovation. This instead of bureaucratic accountability arrangements based first and foremost on regulation and control.

Hence, this part of the *Innovative Learning Environments* project relates to other CERI work while bringing its own particular focus on changing learning; in particular, it contributes to wider reflections on change also being engaged by the work on Innovation Strategy (which is looking *inter alia* at how to make education and training systems more innovative) and that on Governing Complex Systems, with its focus on governance in an era of complexity.

### **The framework for the analysis**

Underpinning much policy discussion and analysis is the following framing of “levels”, which is couched in the conventional bureaucratic layers of systems and institutions:

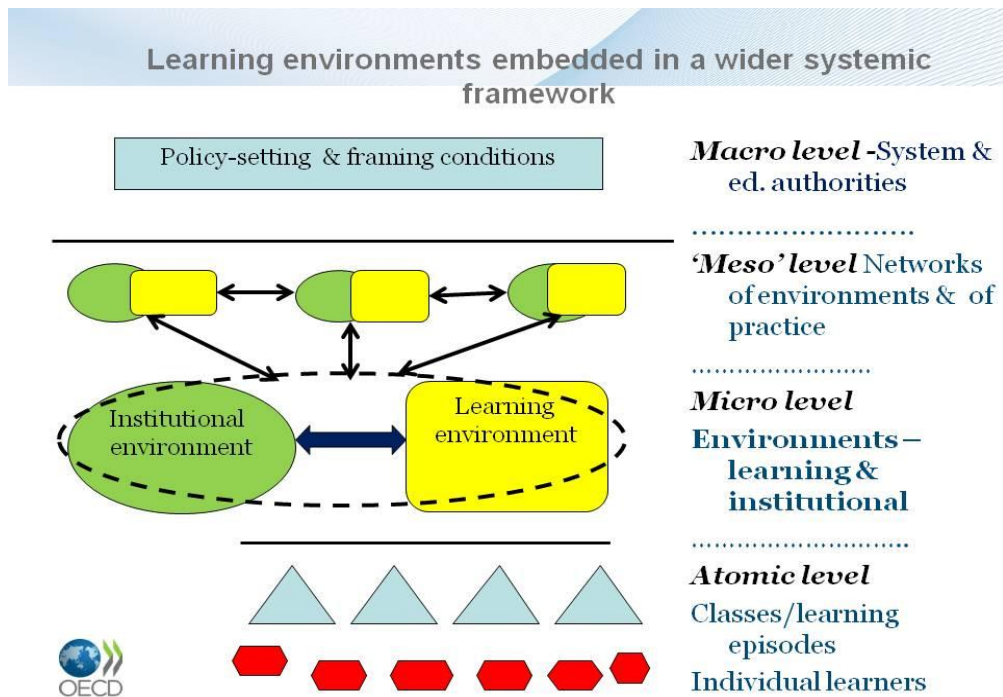


These hierarchical system layers are real of course and the framework they define will usefully map onto such matters as existing accountability structures. We would argue, however, that they are much less convincing when learning is the central focus; indeed, they may hinder the search after new forms of learning organisation:

- First, this framework is expressed in terms of institutional structures and positions, not configurations of learning. This is the wrong way round when learning is at issue; it is also excessively hierarchical.
- Second, by starting with existing formal educational institutions, it discourages consideration of innovations as well as of forms of hybrid or non-formal learning. Hence, this framing of foci and “levels” inhibits the imaginative consideration of alternatives.
- Third, this hierarchical framework conflates the relationships between institutional structures and the organisation of learning when instead these relationships need to be problematised and brought into sharper relief.
- Fourth, it is highly individualistic – it is cast in terms of *the* school, *the* class, *the* teacher not the wholes that are relevant to learners and learning. That is, it encourages fragmented and snapshot thinking.

We propose instead a framework with at the centre the arrangements for learning and networks/clusters across learning environments and which problematises the institutional settings of the ‘school’ and the ‘classroom’ rather than taking them for granted. The larger system context is important, of course, but is understood first and foremost as it enables or inhibits learning - within individual environments or in clusters of them. The “atomic” level of the individual classroom/learning episodes is understood as it contributes to the whole learning environment and then through the components and relationships outlined in Figures 2 and 3, not as a set of individual classes in parallel that it is hoped add up a satisfying diet of learning in total for the learners within them.

Figure 1



This formulation can be drawn on to organise our analysis of change strategies at the micro, meso and macro levels, as outlined below and elaborated in each section that follows:

1. ***Creating and sustaining effective learning environments around 21<sup>st</sup> century agendas***, while at the same time forging the learning episodes and units at the “atomic” level into these dynamic whole learning environments.
2. ***Ensuring consistency, even synergy, at this micro level between learning and the wider organisation***, i.e. between what some describe as the “technical core” – learning and pedagogy - and the organisational and institutional contexts in which this core is located.
3. ***“Going to scale” through developing learning networks and communities of practice*** across environments – creating a vibrant “meso level”.
4. Pursuing ***policy strategies that create conditions and capacity*** to allow the micro and meso levels to flourish.

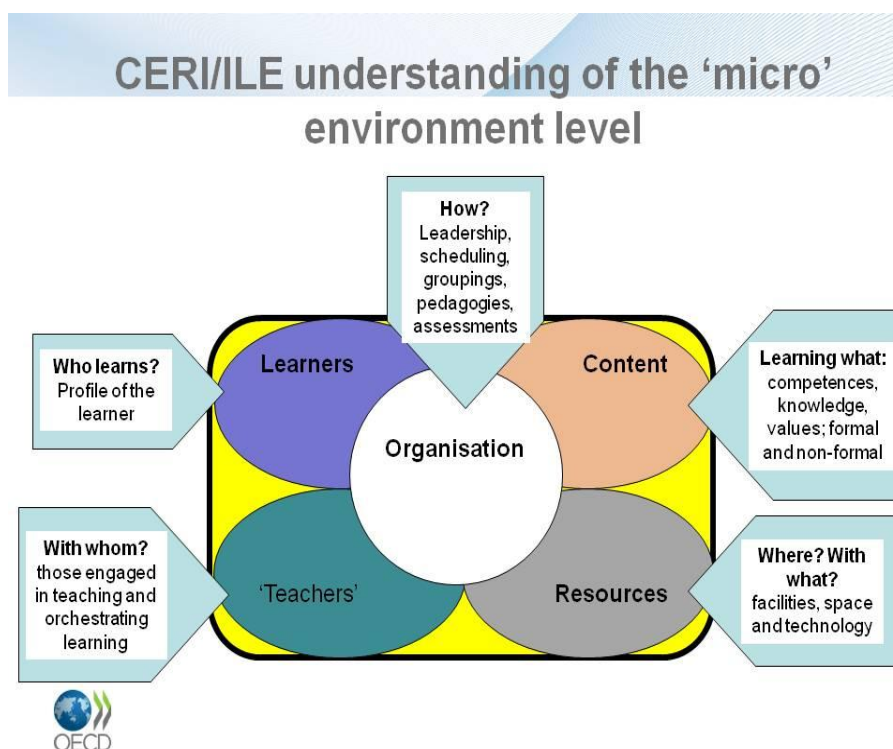
We propose that the most promising and far-reaching of the change strategies will involve all four of these working together. Without genuine change at the micro level, the “meso” and macro-level efforts will not be reaching learners themselves. But with only micro-level change, on the other hand, very limited scale is achieved and what progress there is may be rapidly undone by the fluctuations of individual leaders coming and going or the vagaries of other contextual circumstances. We elaborate this four-part framework in the following sub-sections with the main questions they define for further ILE work.

## 1. Implementing more effective learning environments around 21<sup>st</sup> century agendas

This focus will build on the insights of the first two strands of the ILE project focused on learning research and innovative cases. It will be able to draw on particular examples with innovative learning arrangements to meet 21<sup>st</sup> century agendas.

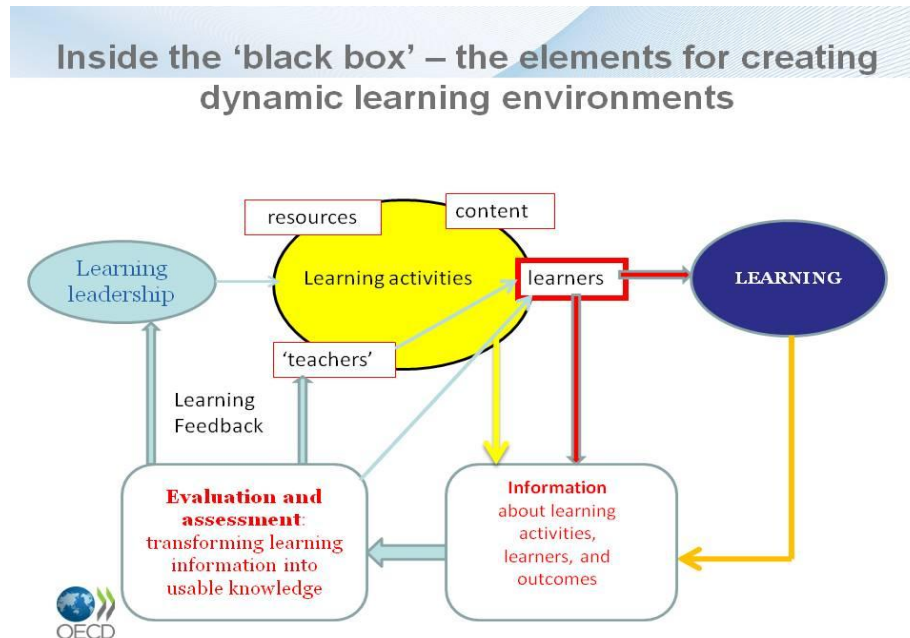
The rounded yellow rectangle in Figure 1 corresponding to the micro level learning environment is portrayed in more detail in Figure 2. We conceptualise such environments as the interaction of four key elements - *learners*, “*teachers*” (not always established teachers but also others engaged in promoting and facilitating learning), *content*, and *resources* (facilities and technologies) – through the intervening relational medium of the *organisation*. This is at the centre of our schema as the “engine room” connecting the other key elements –the “how”. As such, it is central to understanding implementation and change at the micro level.

Figure 2



Given its importance, we need a more detailed focus on “organisation”. For ILE, it is essentially defined by - over time - the structured mixes of learning activities and pedagogies, learning leadership, and the use of information on learning. They depend critically on the roles and capacities of the central players involved, most especially the learners and the teachers and other learning professionals. A more detailed schema as outlined in Figure 3.

Figure 3



This suggests the value of exploring change strategies to create effective dynamic learning environments around the key elements summarized in Figure 3. That is, we would focus on change strategies that:

- Promote the *principles* from “The Nature of Learning: Using Research to Inspire Practice” through their mix of pedagogical approaches and learning activities (the yellow sphere at the centre).
- Involve active *learning leadership* – distributed agency creating the visions and goals about learning and identifying the strategic means to achieve them in the environment and shaping a coherent learning environment within the organisation around those visions and goals.
- Demonstrate high capacity to *gather information on learning* and to transform that into actionable formats (assessments) and have *well-developed feedback practices* for getting that assessment information to learners, teachers and the learning leadership as a continuous function.

## 2. Aligning learning with the routines and management of the wider organisation(s)

Resnick, Spillane and colleagues in Chapter 12 of “The Nature of Learning” address issues around how learning in schools and other learning environments is embedded in wider organisations. The latter have their own particular functions, routines and priorities that can significantly limit the scope for change, including the scope for innovation:

*Research has documented how formal and informal organisational routines frame and enable interactions, provide stability across time, and assist in socialising new organisational members. Their very pervasiveness and efficiency, however, together with the fact that they often function without official or explicit recognition, can result in routines acting as inhibitors of innovation... The more*

*complex the organisation, the more stable the personnel, the more demanding the external demands — the more members resist changes in routines. Just as existing routines work to stabilise organisations, sometimes to the extent of inhibiting much-needed innovation, so too new routines can serve as sources of change.* (p.292, references omitted)

An important aspect of this would thus be re-examination of the “grammars” of schooling that have been identified as so powerful in inhibiting change within established educational institutions. This examination would seek to review the validity of the claims made regarding lack of change, and it would review the endeavours made in different settings and systems to alter them through new organisational “routines” strongly focused on learning (such as the “kernel routines” described by Resnick, Spillane and colleagues in their chapter). We could also look to the leadership literature for models and examples where there has been success in marrying learning leadership and the other institutional management needs of the organisation.

A further broadening of perspective would come not just by problematising the links between learning and the institution as a relatively closed organisation – the school – but by bringing into focus the different forms of ‘blended’, ‘hybrid’ and non-formal learning arrangements and the implications they may have for the institutional environments in which learning takes place. Do we recognise sufficiently the organisational complexity of the environments in which learning for young people increasingly takes place and what does the complexity mean for issues of leadership, management, and governance? This set of questions provides additional cause for caution in reliance on the simplifying terms ‘schools’ and ‘classrooms’. Below we propose that this area may deserve a specific network.

### ***3. Developing the ‘meso’ level – communities of and for learning***

Contemporary learning environments will not be sustained by working in isolation but instead need to be connected to diverse networks and professional communities, learning from others. Some will depend on technology to collaborate with others at a distance while others will rely on more direct forms of face-to-face dialogue and action. There will be active communities of practice and networking involving certain players within the learning environment, not only engaging the environment as a whole. The quality of the networking will not be a straightforward factor of numbers of partnerships and some professional communities involve relatively intense interactions of few participants.

We are not suggesting to widen the project’s focus to a blanket interest on networks, clusters or communities of practice but instead to those strongly addressing learning. What are the incentives in the examples we might bring together for participants to join such networks and to continue engagement in, if not the same network, some form of “meso” level grouping as a matter of routine?

Developing the ‘meso’ level via diverse networking and partnership arrangements is critical for growing the prevalence of innovative learning environments – the key issue in this strand on implementation and change. The connotation of the common term “up-scaling” is that the endeavour is to implement the same practice in many sites after evaluated pilots in a small number of sites have shown sufficient promise. A more sustainable but less orchestrated route to achieving scale may well be via this “meso” level – learning networking and communities of practice growing (and being encouraged to grow) in forms determined by the participants themselves. Scale in this case will not be achieved by all micro sites following the same plan but by sufficient numbers of them actively participating in networking or clustering arrangements focused on learning that they have had a hand in designing for themselves. (This does not by any means rule out an active role for policy in creating the conditions and incentives for such arrangements to flourish – see below).

#### ***4. System-level creation of incentives, conditions and capacity for growing ILEs and learning networks***

There is a rich literature, including through parallel OECD work, on strategies aimed at making education systems more innovative, including through appropriate knowledge management practices and accountability and evaluation policies. This will provide valuable background material.

The distinctive contribution of the ILE project will be to review the policy strategies that have been tried or that could be implemented in furthering the three areas above focused on the micro and meso levels. What can be done through policy to build capacity or to create conducive climates or incentives for learning leadership or learning-focused communities of practice? What can be done to encourage learning-focused organisational routines? What can be done to remove the barriers and obstacles?

This is an area where the inputs of examples by the active ILE systems and organisations will be especially important. A key dimension within capacity development concerns teacher professionalism as teachers are central players in orchestrating learning and redesigning learning environments. Hence, policy approaches focused on this are very relevant here.

#### **Operational activities in the new ILE strand**

Operational work covers both new analysis organised by the project team and contributions made by the participating systems, in which we intend the four-way schema to serve as the underlying framework, i.e.:

1. Creating and sustaining effective learning environments around 21<sup>st</sup> century agendas.
2. Aligning learning with the routines and management of the wider organisation.
3. “Going to scale” through developing learning networks, clusters and communities of practice.
4. Policy strategies that create conditions and capacity to encourage developments in 1 - 3.

Given the different contributions of the project team (“analytical work”) and the active systems and organisations, these can usefully be addressed separately.

#### ***Analytical work***

We can expect the ILE analysis of Implementation and Change at a very minimum to:

- Digest and reflect on the outcomes of parallel CERI work on Innovation Strategy and on Governing Complex Systems; and
- Ensure that we have extracted as much as possible from the detailed ILE “Inventory” case studies regarding how different innovations have emerged and were sustained.

Beyond this, it is proposed to further analytical work through small dedicated networks. Such networks would depend on new funding, and may well therefore be organised in partnership with other organisations or foundations. Those proposed below are identified as key areas from the above discussion or as particularly complex and hence in need of analytical clarification. They would draw on wider literature rather than the evidence already generated through the ILE project.

The model being suggested is that we would identify international experts from among those with the most original contributions to make. A typical expert network would be made up of 2-3 potential authors, a further small group (3-5) of “critical friends”, and 2-3 members of the core project team. There would be a mix of research and practitioner expertise. The network would be expected to meet twice face-to-face and



each network would result in a substantial written output (approximately 80-100pp.) A first meeting would clarify concepts and the writing tasks with a second meeting to discuss first drafts.

Five potential networks are proposed for consideration; as they will depend on new funding, not all of them will necessarily go ahead:

***Learning leadership:*** to develop and refine the concept as leadership specifically focused on the organisation of learning, to review different interpretations of such forms of leadership and promising means of building capacity for it, and to identify strategies for aligning learning leadership with more traditional forms of institutional management.

***Organisational routines focused on learning:*** This would bring together researchers and innovators who have worked with “routines” for placing learning at the core of organisational change (e.g. the ‘kernel routines’ (The Nature of Learning, Chapter 12) or Learning Study (Hong Kong)), reviewing approaches and identifying promising practice.

***Promoting and steering learning in complex hybrid organisations:*** the very meaning of “hybrid” organisations involving mixes of formal and non-formal provision warrants closer scrutiny, as do their implications for design, leadership and governance.

***Promising models for growing the “meso” level of communities of practice and networks across environments:*** review of approaches involving networks, partnerships and communities of practice to address learning, and the role that policy can play (see next section) in fostering the ‘meso’ level and achieving scale.

***Expert network on outcomes and evaluation of ILEs:*** To review appropriate ways of measuring outcomes and impacts from innovative learning environments: how to reflect the full range of appropriate impacts (21<sup>st</sup> century learning) and not narrow definitions based on test scores and how best to evaluate approaches that are uncommon rather than widespread?

The basic cost for organising such a network would, we expect, be approximately 100-120KEUR, apart from any events or publication costs. We are looking for organisations, foundations or lead countries who might wish to enter into partnership on a network of particular interest to them.

### ***Participating systems and organisations***

In the second “Innovative Cases” strand of the ILE project, the participating systems had a very full case study research agenda. We do not expect the participating systems to be required to make the same level of input in this third strand of the project though some may be willing to do so.

Hence, while as before we expect an active contribution from all participating systems and organisations in this strand of the ILE project as well as to participate in the international events, these will vary in intensity according to interest and resources.

- A basic minimum will be to *supply examples and research references corresponding to the four-level schema 1-4 above*. All participating systems/organisations should supply this. If a system is newly joining the project, it will be expected to identify at least one innovative learning environment for the project “Universe” (as in the Innovative Cases Strand) but not the detailed case study(ies) for the project Inventory.

It may be possible to add to this core information a short (5-10pp) note around two examples of reforms from their system or organisation that have been aimed at changing patterns, approaches, or levels of learning around a simple grid designed to bring out key issues for implementation and

change. We suggest two cases as one of these could be an initiative that seems to have achieved its objective of changing learning while the other could be an example where learning did not appear to change.

- A second, more demanding level of engagement would involve *more sustained monitoring of an on-going initiative or policy aimed at altering learning on the ground towards more innovative forms and configurations*. Based on criteria agreed with the ILE project, the input from the participating system would be a “case study” in implementing innovative learning, ideally across more than one site. While it might focus especially on one of the levels in the four-part schema, ideally such a case study would address more or all of them.
- A third level could be even more demanding as it would be “transformative” rather than evaluative. In this case, the volunteer system or organisation would be seeking to use participation in the ILE project to implement a “*laboratory of innovative learning change*”. The four-way framework 1 - 4 would serve as the point of departure and the aim would be to build capacity and develop strategy to introduce innovative learning change using tools developed through the ILE project, and evaluated according to agreed criteria.

We would not expect many systems to volunteer for this option, and adequate funding will be a critical factor to carrying it out. We would expect that this would depend on partnerships with other organisations and/or foundations and there would need to be careful specification of expectations and the roles of each.

We will be exploring with the different participating systems and organisations which of these options appeals to them, as well as clarifying via discussions in Banff in October 2011 and at the CERi Governing Board in November 2011 whether these are the best options for system engagement in Strand 3 of ILE.

## Looking Ahead

The proposed set of activities and analysis will require, to be realised in full, around 2-3 years. Hence, we look ahead to including ILE in the biennial CERi work programme for 2013 and 2014, i.e. beyond the currently agreed programme for 2011 and 2012.

On *events*, it is expected that the next ILE international conference will be held in Chile in January 2013, so as run back-to-back with the 2013 International Congress on School Effectiveness and Improvement (ICSEI). CERi (including ILE) will be contributing to a specific event focused on teacher professionalism together with Education International and Cambridge University, to be held in February 2012. In addition, the project team is seeking to participate as actively as possible within constraints of human and financial resources in specific ILE-related events in particular participating systems.

Many of the proposed areas of work suggest *collaboration with related projects and organisations*. We regard this as a particularly fruitful feature of ILE work over the next 2-3 years. We are actively searching for additional funding to realise as many of the proposed areas of work as possible.

As regards *outputs*, the main effort in the first half of 2012 will be completion of the publication from the second “Innovative Cases” strand of ILE. We will also be converting as many of our analyses and outputs as possible into accessible formats that may be used in participating systems and by leaders and practitioners including in the operational ILE work on Implementation and Change. The intention remains firmly to convert all project materials into an on-line knowledge bank; again, this will be facilitated by a co-operation with an organisation(s) with specific expertise in this field.

As for the most appropriate outputs from this work on Implementation and Change, it is already expected that there would be short published reports from each of the networks from 2013 onwards. Beyond these, it remains to be decided the nature of the main outputs (publication? Other?).

The proposals included in this note add up to a substantial endeavour to address the core ILE aim, which is “to inform practice, leadership and reform”. They would also make a significant input to the new Medium-term priorities identified for the OECD Directorate for Education for the period 2012-2016. Of the four priorities, this work will make a valuable contribution to that on “Improving Governance and Leveraging Reform” as well as offer many useful perspectives on “Raising Teaching and Learning Effectiveness” (the other two priorities are: “Developing skills for lifelong employability, economic growth and social progress” and Fostering social inclusion and social mobility”).

## ANNEX

### TRANSVERSAL CONCLUSIONS FROM *THE NATURE OF LEARNING: USING RESEARCH TO INSPIRE PRACTICE* (OECD, 2010) – CHAPTER 13 (ISTANCE & DUMONT)

To promote learning, environments should:

- Make learning central, encourage engagement, and be where learners come to understand themselves as learners
- Ensure that learning is social and often collaborative
- Be highly attuned to learners' motivations and the importance of emotions
- Be acutely sensitive to individual differences including in prior knowledge
- Be demanding for each learner but without excessive overload
- Use assessments consistent with its aims, with strong emphasis on formative feedback
- Promote horizontal connectedness across activities and subjects, in-and out-of-school

These 'principles' mean that learning environments should be:

- **Learner-centred:** highly focused on learning but not as an alternative to the key role for teachers
- **Structured and well-designed:** needs careful design and high professionalism alongside inquiry & autonomous learning
- **Profoundly personalised:** acutely sensitive to individual and group differences and offering tailored feedback
- **Inclusive:** such sensitivity to individual and group differences means they are fundamentally inclusive
- **Social:** learning is effective in group settings, when learners collaborate, and when there is a connection to community.