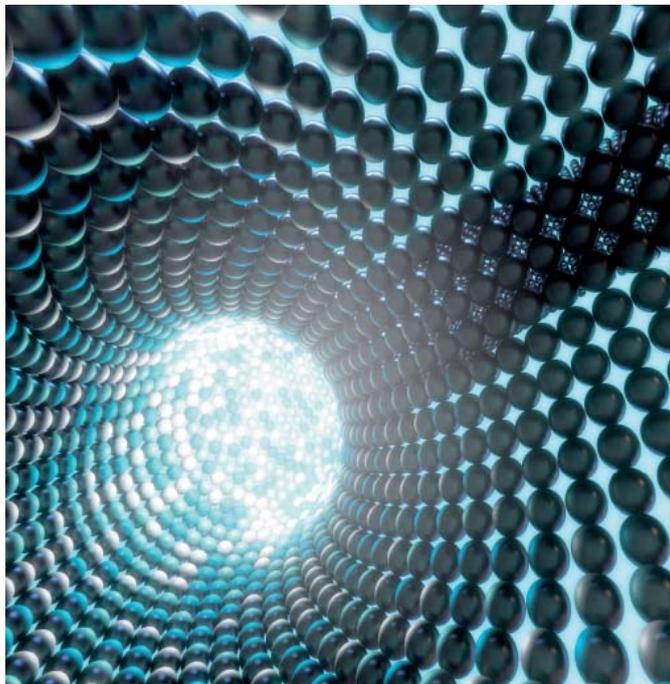# Learning Futures: Next Practice in Learning and Teaching

A Horizon Scanning Guide

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March 2008

Introduction

This guide was commissioned by the Paul Hamlyn Foundation and The Innovation Unit to support the development of the Learning Futures project. Since our project is investigating Next Practice in learning and teaching, it is important to look for examples of innovative pedagogy which are at the edges of current practice. This is what we mean by 'horizon scanning'.

The process has informed, and was informed by, a sister publication[1] - *Learning Futures: Next Practice in Learning and Teaching-* which set out the reasons why innovation in pedagogy is needed, summarised key issues, and identified a possible tool for self-evaluation in schools. Accordingly, the two documents should be read alongside each other.

A Framework for Next Practice Pedagogy

At the centre of the Learning Futures project is a conviction that we are most likely to improve the nature of 21st century learner experiences through adopting two overall strategies: increasing **engagement** in learning, and supporting the **integration** of learning.

From this, we have further identified four key 'domains' where actions should be focused in order to improve engagement and integration. The four domains are:

<div align="center">

Relevance   **Co-construction**

In/out of school   **Learner-teacher mix**

</div>

We suggest that a **balanced pedagogy** will consider and develop all of these characteristics.

How to use this Guide

In scanning the horizon, we have tried to explore the boundaries of current best educational practice, in the UK and internationally, and to go beyond education to see how pedagogical approaches from other fields might inform our thinking.

In using it, we encourage you to consider and combine elements from a range of the pedagogic examples, rather than looking for any one directly transferable model. Some will be close to your current thinking, while others may be more distanced. We have sequenced each section as follows:

1. The Framework

If you have read *Learning Futures: Next Practice in Learning and Teaching* you will be familiar with the framework. It offers a way of thinking about pedagogy that strives for learner engagement and integration. Here, it provides a rubric for the way in which we present the examples.

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[1] Learning Futures: Next Practice in Learning and Teaching can be downloaded from: http://www.innovation-unit.co.uk/projects/next-practice/learning-futures.html

2.   <u>The Framework Components – Characteristics of Next Practice Pedagogies</u>

This section allows you to get 'inside' the four main domains of the framework. Each section contains a short explanation and exploration of the domain. Each also has three crafted descriptors – high, medium and low – to differentiate between levels of learning. What follows are a few selected examples that we found through the horizon-scanning. They are described using a standardised analytical format so that comparisons can easily be made:

> **Who** – who leads the learners in their learning?
> **What** – what are the young people engaged in, and directed towards, in their learning?
> **Where** – where are young people involved in learning processes?
> **When** – when are young people involved in learning processes?
> **Why** – why has this approach been adopted?

Finally, there is an 'LED' table, which makes a rough-and-ready judgement for each example against all four domains – co-construction, relevance, learner/teacher mix, in/out of school – plus a similar judgement on the extent of implementation and the scale of the programme.

3.   <u>Wider Horizons – further examples for exploration</u>

This section offers the most scope for personalising the guide. In the previous section, we offered 12 examples to put flesh on the bones. In these there is much less detail, but each of the 36 (again grouped into the domains) has a short descriptor and a web link so that you can explore it for yourself. This is the point where we hope that the guide will enable you to discover some new horizons for yourself, and to make your own analysis of what these alternative practices have to offer. If you are reading this in paper form, you will have to make an effort to pursue the links. However, there is also an interactive version on our website (http://www.innovation-unit.co.uk/projects/next-practice/learning-futures.html) where a click of the mouse will link you to the appropriate website!
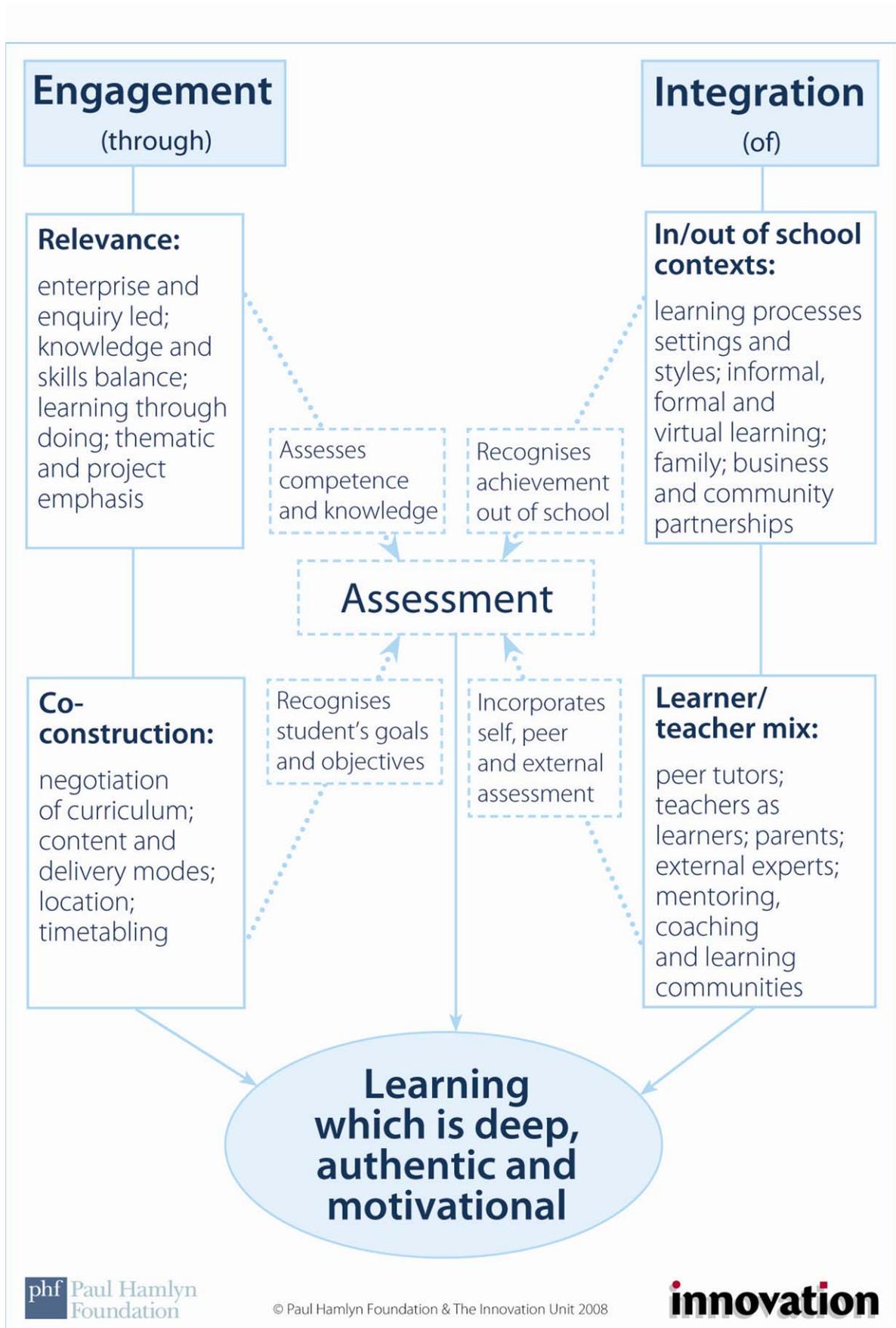
Should you find any of the examples particularly significant, or if you have physically visited any of the sites and been inspired by them, please let us know.

4. <u>The Horizon Scanning Methodology</u>

This describes the way in which Prof. Mark Hadfield and Michael Jopling sourced the material. We are indebted to them for the rigour of approach and flexibility shown throughout an iterative process. We hope that as a result of their work practitioners will be encouraged to consider and combine elements from a range of these pedagogic examples, in order to move towards a more responsive, engaging and integrated set of pedagogies.

David Price,
Project Leader,
Learning Futures

Section One:

The Framework

Engagement
(through)

Integration
(of)

Relevance:

enterprise and enquiry led; knowledge and skills balance; learning through doing; thematic and project emphasis

In/out of school contexts:

learning processes settings and styles; informal, formal and virtual learning; family; business and community partnerships

Assesses competence and knowledge

Recognises achievement out of school

Assessment

Co-construction:

negotiation of curriculum; content and delivery modes; location; timetabling

Recognises student's goals and objectives

Incorporates self, peer and external assessment

Learner/ teacher mix:

peer tutors; teachers as learners; parents; external experts; mentoring, coaching and learning communities

Learning which is deep, authentic and motivational

Section Two:

Characteristics of Next Practice Pedagogies

This part of the report introduces each of the four characteristics and introduces a number of Next Practice pedagogies using the 'Who, What, Where, When, Why' framework.

Engagement through: Relevance

Working definition

These pedagogies engage the learner through acknowledging and addressing the value of their current interests and future aspirations. They establish a sense of relevance for the learner by linking new learning, in terms of both focus and process, to the learner's context. They therefore enable the learner to connect with real world learning experiences, opportunities and processes through enquiry, enterprise or learning by doing.

In practice, these approaches are intended to make learning meaningful and authentic to the learner. Innovations where such pedagogies might be found include:

- Enterprise and enquiry-led models
- Simulations and virtual scenarios.
- Culturally responsive approaches.

Overview

Teachers have always sought to engage learners by adapting their pedagogy and curriculum to make them more relevant to learners' current needs and interests. On a simple level this is likely to involve teachers updating the content or format of resources, sometimes in collaboration with learners. These pedagogies tend to move the teacher into more facilitative role, possibly introducing experts or professionals from other fields to expand the role of the teacher, but do not necessarily allow learners to adopt learning approaches used in the 'real world'.

Other initiatives have focused on making learning relevant to learners' potential future needs, for example by combining academic and vocational education, typically in secondary schools but increasingly in primaries too. There are a number of examples of schools establishing mentoring relationships with local businesses or developing enterprises in collaboration with small businesses or university partners. Organisations like the Edge Foundation in the UK are concerned with promoting the integration of vocational learning into schools, colleges and universities. Similarly, Young Enterprise, Sweden, promotes entrepreneurial education and encourages almost 12,000 secondary students to become involved in running companies as part of the curriculum every year.

Furthermore, the use of new technologies has expanded the ways in which learners can access more relevant learning experiences. On one hand, the use of serious gaming approaches, for example, has enabled teachers to build on the learners' experiences and interests outside of school and use them to draw learners into the curriculum. On the other hand, simulations and virtual scenarios offer another means of providing learning which is closer to real world experiences. Examples include Second Life which has been used by a range of educational organisations to allow learners to practice skills and take risks or the use of virtual cases in medical or legal education, an approach which is likely to be adopted more extensively in schools and colleges.

Levels of learning

These can be differentiated as follows:

High	The learning foci are real world topics and issues and adopt approaches to learning akin to those which would be used in such situations. This would include simulations and games-based approaches.
Medium	Learners are presented with learning foci that they, or others, see as having real world relevance. They tend to learn about these areas using generic approaches, such as enquiry-based learning, that are not in themselves intended to give a 'real world' learning experience.
Low	Learners are presented with adaptations of existing curricula which are brought up to date or made relevant by the inclusion of current topics and issues.

Enterprise and enquiry-led models

Studio Schools (England)

Who?	*Who leads the learners in their learning?* A mix of teachers and non-teachers, although students are encouraged to develop and operate businesses themselves.
What?	*What are the young people engaged in, and directed towards, in their learning?* Studio Schools combines work experience running real businesses and learning through cross-disciplinary 'enterprise projects' with a focus on developing enterprising behaviour.
Where?	*Where are young people involved in learning processes?* Studio Schools are small schools (up to 300 14-19 year olds per school) closely linked to industries.
When?	*When are young people involved in learning processes?* Schools are based on a year round working model with students and teachers taking annual leave.
Why?	*Why has this approach been adopted?* The aim is to provide general employability and entrepreneurship skills, focusing on young people who are currently disengaged from learning.

H   M   L

Co-constructed

Relevance

Learner-Teacher Mix

In/Out of School

Implementation

Implementation and scale

Studio Schools was launched by the Young Foundation in December 2007 in partnership with national and local government, business and social enterprise. One field trial began in September 2007 and up to eight new schools are planned. Some details about the initiative are available at:
http://launchpad.youngfoundation.org/fund/learning-launchpad/portfolio/project/studio-schools

Simulations

Virtual patients

Who?	***Who leads the learners in their learning?*** This is an example taken from HE where virtual patients and virtual cases have been used in medical education for many years. There are a range of models, from learners working under the supervision of a tutor to more collaborative or independent learning.
What?	***What are the young people engaged in, and directed towards, in their learning?*** There are different approaches to using virtual patients and cases, most of which are characterised in terms of problem-based learning. In terms of replicability in other areas of education, approaches which engage learners in realistic scenarios from a range of perspectives and require them to address the needs of the patient appear to be most relevant
Where?	***Where are young people involved in learning processes?*** The virtual nature of the approach means that learners are able to access the virtual patient both during formal learning sessions and at other times.
When?	***When are young people involved in learning processes?*** Again, the virtual approach gives considerable flexibility as to when the learners are able to engage with the pedagogical approach.
Why?	***Why has this approach been adopted?*** This approach has obvious advantages for medical students, notably allowing them to experiment safely with real world problems and scenarios. Learners are able to take risks in a safe environment and examine the position of the patient in addition to that of the medical professional.

H   M   L

- Co-constructed
- Relevance
- Learner-Teacher Mix
- In/Out of School
- Implementation

Implementation and scale

Virtual patients and cases have been in use for a number of years and there are many accounts which describe their use. The following article gives some background and discusses some of the issues involved:http://meld.medbiq.org/primers/virtual_patients_cases_ellaway.htm.

Culturally responsive

Llano Grande Center (Texas)

Who? | *Who leads the learners in their learning?*

At the Llano Grande Center for Research and Development, learners are encouraged to take responsibility for their learning and develop leadership skills through their involvement in community-based projects.

What? | *What are the young people engaged in, and directed towards, in their learning?*

Projects are intended to bridge the gap between communities and schools by developing pedagogy of place curricula. Education projects have to be linked to the development of young people and/or the community and the local economy.

Where? | *Where are young people involved in learning processes?*

Projects are based in the community and young people are valued participants in sustainable development activities.

When? | *When are young people involved in learning processes?*

Learners are involved in a range of activities in the community at a range of times.

Why? | *Why has this approach been adopted?*

The Center has aimed to shift the emphasis of research and curriculum in local schools towards equipping students and residents with skills so they can conduct a sound assessment of their schools, community, and environment.

H   M   L

Co-constructed

Relevance

Learner-Teacher Mix

In/Out of School

Implementation

Implementation and scale

The Center has worked since 1997 to increase the educational opportunities for and expectations of young people in Edcouch-Elsa, where it is located on the Texas-Mexico border. Limited information about the Center is available on its website but it does claim to have significantly increased High School graduations among students with whom it has worked: http://www.llanogrande.org/index.html.

Engagement through: Co-construction

Working definition

These pedagogies engage the learner by enabling and allowing them to lead, negotiate and choose how they learn. In practice, co-construction is concerned with issues of power and ownership and the extent to which learners are able to decide what they learn and when they learn it. Innovations where such pedagogies might be found include:

- Democratic models of schooling.
- Dialogic learning.
- Approaches in which learners negotiate learning.

Overview

In recent years there has been a movement towards encouraging educators to consult with learners about how they learn and the enduring popularity of assessment for learning suggests that there is an appetite for involving learners in learning processes more actively and explicitly. At a simple level, co-construction allows learners to negotiate to some degree how they learn. It encourages learners and teachers to take their prior knowledge into account and begins to break down the barriers between teacher and learner. Dialogic learning approaches encourage learners to take a more active role in their learning, for example through collaboration with peers or using enquiry methods. Often dialogic learning remains teacher-led but learners are encouraged to build learning communities in which they are able to operate more independently. Learners may be empowered to take on responsibility for small projects or parts of the timetable may be left to be negotiated or led by learners in collaboration with teachers.

Co-construction is also central to democratic models of schooling which are founded on fostering independence among learners by encouraging them to take responsibility for where, how and when they learn and are assessed. Summerhill was the first democratic school, founded in 1921 in Suffolk, and remains probably the best-known example in the UK but the Alternative Education Resource Organization lists 208 schools in 29 countries which are based on democratic principles. Human Scale Education in the UK is associated with 33 small alternative schools which are based on democratic principles, linking with the community and environmentally sustainable values and practices. In many cases learners are able to choose their curriculum and emphasis is placed on developing a holistic learning experience.

Levels of learning

These can be differentiated as follows:

High	Learners lead and decide their own programme of learning, for example its focus, how they want to learn, where, from whom, modes of assessment.
Medium	Learners manage their own learning as they work within a given curriculum area/theme and are able to choose between different learning approaches or routes.
Low	Some consultation occurs with learners e.g. constructivist approaches which take prior knowledge into account and ask learners about the current state of teaching and learning.

Democratic models of schooling

Sudbury (Massachusetts)

Who? | *Who leads the learners in their learning?*

At Sudbury Valley School, students from preschool to high school age explore the world freely, at their own pace and in their own unique ways.

What? | *What are the young people engaged in, and directed towards, in their learning?*

Students are encouraged to think for themselves and develop knowledge from multiple sources. Emphasis is placed on self-initiated learning and on learners taking responsibility for their learning.

Where? | *Where are young people involved in learning processes?*

In school on a ten acre school campus. The school does not have a formal curriculum or formal classrooms and learning is founded on communication and dialogue.

When? | *When are young people involved in learning processes?*

In school although it is designed to be a community for learning.

Why? | *Why has this approach been adopted?*

Through being responsible for themselves and for the way the school functions, learners are said to gain the internal resources needed to lead effective lives through engaging with the school as a community.

H   M   L

- Co-constructed
- Relevance
- Learner-Teacher Mix
- In/Out of School
- Implementation

Implementation and scale

Sudbury Valley was founded in 1968. It currently has 210 students aged between 14 and 19, and 11 staff members. There are now over 35 schools based on the Sudbury model in the USA, Canada, Japan, Israel, and beyond. Its website gives a fairly detailed introduction to its ethos and approach to learning: http://www.sudval.org/index.html.

Dialogic learning approaches

Essential Learnings Framework (Tasmania)

Who?	***Who leads the learners in their learning?***
	The programme is teacher-led, but emphasises the value of consultation & co-construction with the community. Personal interests (elective options) are derived from a mix of student survey and staff interests.
What?	***What are the young people engaged in, and directed towards, in their learning?***
	The framework is founded on values-based and child-centred education, focusing on learning critical to the individual and community. Emphasis is also placed on learner enquiry; higher order thinking and understanding; problem framing and solving, teamwork; and independent learning. The five 'umbrella' essential learnings are: thinking; communicating; personal futures; world futures; and social responsibility.
Where?	***Where are young people involved in learning processes?***
	In school
When?	***When are young people involved in learning processes?***
	The project is classroom-based.
Why?	***Why has this approach been adopted?***
	The objective was to re-engage students with learning and the curriculum and prepare them for the demands of working in the 21st century.

H   M   L

■ Co-constructed

■ Relevance

■ Learner-Teacher Mix

■ In/Out of School

■ Implementation

Implementation and scale

The project began in 2001 and according to the project's evaluation report had been introduced in all Tasmania's High Schools by 2004. A case study of one of the schools involved gives some detail about how the initiative worked in schools:
http://www.dsf.org.au/learningchoices/case_studies/brooks_high_school/Brooks.pdf.

Approaches in which learners negotiate learning

Boston Pilot Schools

Who? | *Who leads the learners in their learning?*

Teachers engage learners in running their lessons and co-constructing knowledge.

What? | *What are the young people engaged in, and directed towards, in their learning?*

Learners work on integrated learning programmes and are required to demonstrate mastery over a set of competencies through portfolio review and exhibitions, rather than test results alone. Emphasis is placed on building a learning community with teachers working with a limited number of learners.

Where? | *Where are young people involved in learning processes?*

In the network's schools.

When? | *When are young people involved in learning processes?*

During school time

Why? | *Why has this approach been adopted?*

The schools are founded on the principles of autonomy, accountability and equity. They were intended to create nurturing school cultures which support high expectations and achievement.

H   M   L

Co-constructed

Relevance

Learner-Teacher Mix

In/Out of School

Implementation

Implementation

The Boston Pilot Schools Network is made up of 20 schools working together and considerable detail about how it operates can be found at http://www.ccebos.org/pilotguides/.

Integration of: In/Out of School Learning

Working definition

These are pedagogies that seek to remove the boundaries between learning in and out of school and support the learner in making connections between different learning experiences. They aim to provide a more integrated approach which enhances the learner's ability to apply their learning in different contexts and practices.

In practice these pedagogies seek to bring together knowledge and skills developed in both formal and informal settings. Innovations where such pedagogies might be found include:

- creating social learning spaces which blur the boundaries between formal and informal learning
- developing learners' ability to connect different forms of learning, for example through competencies-based models and project-based learning
- partnerships and mentoring relationships with businesses and local communities
- developing learning relationships that span a range of learning experiences, including mentor-based approaches, spending more time with fewer teachers, virtual learning.

Overview

Trying to support learners with a more integrated learning experience is probably the commonest innovation in the UK education system. Its initial popularity in the primary sector has now spread to the initial stages of secondary schooling. The least demanding approach, pedagogically, have been to develop cross-curricular themes which have challenged teachers to move outside of their subject specialism, often in small teams, to work more closely with smaller numbers of learners. More pedagogically demanding approaches, such as competency-based and learning to learn curricula, place greater onus on the learner to integrate their own learning,. These approaches require teachers to adopt more facilitative roles and develop very different forms of learning relationships. A common initial step in the process of integrating formal and informal learning in schools has been to develop social learning spaces. Within these spaces students may undertake self-study projects, work with peers, or use blended learning materials.

Approaches to integration which attempt to link the learner's experiences and approaches to learning outside of school with those inside it are much less common than those which focus purely within school. These approaches not only recognise the importance of external learning and community resources to what occurs within school, they also recognise the intrinsic value of such learning to the individual development of the learner. Social learning spaces also have a role in bridging community and school -based learning, such as after school and breakfast clubs or community learning resources within schools. In some instances groups of schools and colleges have come together to create shared facilities which provide a wide range of support for school and community based projects, for example Learning Space. Alternatively, approaches such as Musical Futures have looked at how tapping into the informal learning associated with an influential aspect of youth culture, music, can be used to change the traditional pedagogy of music education radically.

Levels of learning

These can be differentiated as follows:

High	Learners move through a range of learning relationships and activities which link in and out of school learning. Ways of learning, as well as the content of their learning, are integrated by both the learner and the school. The application of learning across different contexts is stressed.
Medium	Learning sources outside school are drawn upon systematically by the school. Learners are provided with comprehensive tools and processes to support them link their learning across a range of contexts. The curriculum is organised around cross-curricular themes and models.
Low	Reference is made in school to forms of learning outside of school. School curricula reflect the perceived interests and values of learners and the local community. There is evidence of a move away from single subjects to more cross-curricular activity.

Social learning spaces which blur the boundaries between formal and informal learning

Kunskapsskolan Schools (Sweden)

		H M L	
Who?	*Who leads the learners in their learning?*		Co-constructed
	The Kunskapsskolan pedagogy puts much of the responsibility in the hands of the learner by removing classrooms and, within limits and in a highly sequenced curriculum, allowing learners to choose when, where, and what to participate in during the school day. They are supported by a personal tutor in setting short and long term targets and managing their learning.		Relevance
			Learner-Teacher Mix
What?	*What are the young people engaged in, and directed towards, in their learning?*		In/Out of School
			Implementation
	The learners plan their own days, recorded in their log books, as they progress through a range of subject broken down into a series of up to 35 steps and a series of cross-curricular themes, which they might work on in groups.		
Where?	*Where are young people involved in learning processes?*		
	Kunskapsskolan schools follow a pattern of being open plan without corridors and with multi-functional Circulation areas, private study booths, tables for group work and tutorials, and social areas. This provides flexible accommodation for both students and teaching staff.		
When?	*When are young people involved in learning processes?*		
	Within school time but the high level of ICT usage and a dedicated portal allows for a degree of blended learning.		
Why?	*Why has this approach been adopted?*		
	The school aims to equip each learner with the skills needed to be able to thrive in a future world with vast quantities of free-flowing information and a rapid rate of change		

Implementation and scale

Kunskapsskolan is a publicly funded, privately run company founded in 1999 that now runs 21 secondary schools for students between the ages of 12 and 16 and nine sixth form schools for 16-19 year olds, totalling 9,200 students. A presentation by Anders Hultin, one of the founders of the organisation, describing the approach and its results can be found at
http://www.oecd.org/dataoecd/2/19/39761768.pdf.

Developing learners' ability to connect different forms of learning

Opening Minds

Who?	*Who leads the learners in their learning?*
	Opening Minds uses a range of approaches which are largely teacher-led but the competences at the centre of the curriculum focus on developing learners' ability to mange their own learning. In some schools learners spend more time with fewer teachers which gives them time to build stronger relationships and support each other through group work.
What?	*What are the young people engaged in, and directed towards, in their learning?*
	The curriculum is structured around a set of five competences; Learning, Citizenship, Relating to People, Managing Situations, and Managing Information. How these are introduced to learners varies across schools, which have adopted approaches based partly or wholly on topics, modules or projects.
Where?	*Where are young people involved in learning processes?*
	Mainly school based.
When?	*When are young people involved in learning processes?*
	Within school time.
Why?	*Why has this approach been adopted?*
	Opening Minds sprang from a conviction that the way young people were being educated was becoming increasingly distanced from their real needs. Opening Minds argues that these life-skills need to be taught directly and specifically.

H   M   L

- Co-constructed
- Relevance
- Learner-Teacher Mix
- In/Out of School
- Implementation

Implementation and scale

Overseen by the Royal Society for the encouragement of Arts, Manufactures & Commerce (RSA), the Opening Minds curriculum has been through an extensive piloting process and upwards of 200 schools are using the approach. There is a wide range of materials available to support whole school implementation and the recently launched Future Schools network aims to bring together up to 30 Opening Minds initiatives. Information about the Opening Minds pedagogy can be found at http://www.rsa.org.uk/newcurriculum.

Developing learning relationships that span a range of learning experiences

Designing engaging curricula for regional schools (South Australia)

Who?	*Who leads the learners in their learning?* One teacher, or a small team, works with the cohort throughout the learning time. Entry interviews with rights and responsibilities are discussed with the students and clearly articulated in the 'learning contract'.
What?	*What are the young people engaged in, and directed towards, in their learning?* There is a focus on individual students' skills and knowledge development through a range of scaffolding strategies
Where?	*Where are young people involved in learning processes?* Resources in and outside school are used. Learning is recognised within a range of contexts and different contexts are provided to meet the students' aspirations.
When?	*When are young people involved in learning processes?* Learning is flexible, at a time, in a place and by the most appropriate 'deliverer' to suit the cohort's needs.
Why?	*Why has this approach been adopted?* The schools offer a choice of programs to older students who do not wish to continue in a traditional classroom environment.

H   M   L

- Co-constructed
- Relevance
- Learner-Teacher Mix
- In/Out of School
- Implementation

Implementation and scale

A clearly articulated curriculum model exists but there is no apparent change management process associated with it. More details of the curriculum model can be found at: http://www.youthengagement.sa.edu.au/files/links/Designing_innovative_curri.pdf.

Integration of: Learner- teacher mix

Working definition

These pedagogies are based on an expansive view of the learner-teacher mix and recognise a breadth of learning relationships, characterised by flexibility and mutuality. They promote and nurture a range of relationships and support the learner in adopting different roles within them, so that in some instances learners might act as 'experts' or the facilitators of others' learning.

Innovations where such pedagogies might be found include:

- Peer tutoring, project teams and cross-age tutoring.
- Students as researchers.
- Use of external experts.

Overview

Peer and group work are familiar parts of classroom life but recently there has been a movement towards developing both the scope and intensity of these approaches. Their scope has been developed by increasing the frequency and amount of time students are engaged in learning from each other. Group work within a classroom has now being expanded to project teams that might work over several weeks or terms on specific projects. Similarly, their intensity has been developed due to the popularity of peer assessment, the introduction of peer coaching and mentoring schemes and a range of other techniques and models used to support learners in learning from each other. Increasingly schools are experimenting with learning models more often associated with the professional development of practitioners. This is moving teachers into roles more associated with these 'andragogies' as they facilitate and design programmes in which the learner is more autonomous and self-directed.

As teachers' roles are shifting, learners are increasingly being asked not only to manage their own learning but also to lead in its development. Although the student as researcher movement offers learners a range of roles, it is currently one of the more common approaches in which they are required to lead their own learning. The students as researchers approach has also been developed to focus on the nature and quality of learning and teaching, both to provide feedback to teachers and encourage risk-taking. In doing so, it has established partnership approaches to pedagogic innovation and curriculum re-design that represent a shift in the traditional power relationship between teachers and learners.

Pedagogies that that are based on an expansive view of the learner-teacher mix not only set out to change the nature of these relationships, and the roles individuals take within them, but also to recognise the value in learners' developing a range of such relationships. The inclusion of external experts within this range of relationships is a well established approach, but has often been restricted to infrequent presentations. Currently the use of outside expertise is the subject of a range of interventions such as Mantle of the Expert.

Levels of learning

These can be differentiated as follows:

	20
High	Learners move through a range of reciprocal learning relationships, from peer learning to learning from coaches or mentors, and experience a range of approaches to learning.
Medium	Learning sources outside of school are recognised and learning from others is encouraged, including peers, parents and community members.
Low	Teachers move away from an expert role and adopt a more facilitative approach to learning. There is some collaborative learning among learners.

Peer tutoring, Project Teams and Learning Communities

Waingels College, Wokingham: Toward a 21st-century curriculum

Who?

Who leads the learners in their learning?

The College established vertical learning communities of students of all ages, two from each year group who look at personal development and L2L issues. They place a strong emphasis on peer assessment

What?

What are the young people engaged in, and directed towards, in their learning?

The focus is on developing learning skills and much greater use of project based work.

Where?

Where are young people involved in learning processes?

Mainly school based

When?

When are young people involved in learning processes?

Year 7 students have a weekly schedule of 13 lessons of project work, 11 formal teaching sessions and a 25th period for special interest and sport.

Why?

Why has this approach been adopted?

The staff felt learners had become over-reliant on teachers and lacked confidence in their own abilities. They wanted learners to develop skills of learning 'why' and 'how' rather than just learning 'what'.

H	M	L	
			Co-constructed
			Relevance
			Learner-Teacher Mix
			In/Out of School
			Implementation

Implementation and scale

The College is more than midway through its five-year curriculum restructuring plan in which it is melding several new concepts with its own initiatives to create a unique multi-strand, multi-pathway 'Waingels Curriculum'. In part a development of the RSA Opening Minds programme (see above), the College is also drawing on learning to learn and assessment for learning approaches, all focusing on developing learning skills. It is also delivering the International Baccalaureate diploma as well as several vocational routes:
http://www.ncsl.org.uk/media/08C/C3/towards-a-21st-century-curriculum-waingels.pdf.

Students as researchers

Enquiring Minds

Who?	*Who leads the learners in their learning?*
	Students and teachers work together as partners. Children take increasing responsibility for determining the content and purpose of their learning. This is described as shift from a transmission to an enquiry pedagogy, aimed at nurturing independent learning and creative thinking
What?	*What are the young people engaged in, and directed towards, in their learning?*
	The programme is built on a four stage enquiry model consisting of: • Initiating and eliciting • Defining and responding • Doing and making • Communicating, presenting and evaluating
Where?	*Where are young people involved in learning processes?* In school
When?	*When are young people involved in learning processes?*
	A research programme has been developed and piloted with Key Stage 3 students in two schools over three years from 2005.
Why?	*Why has this approach been adopted?*
	The approach is described as: • a response to the challenges schools face in preparing children for a future characterised by rapid social, technological and cultural change. • a distinctive approach to teaching and learning that takes seriously the knowledge, ideas, interests and skills that students bring into schools.

H   M   L

Co-constructed

Relevance

Learner -Teacher Mix

In/Out of School

Implementation

Implementation and scale

Supported by Microsoft & Futurelab, Enquiring Minds is a £1 million research and development programme which aims to investigate how children can be effective in shaping their own learning. Launched in 2005 and scheduled to finish in 2008 Enquiring Minds has been developed and piloted with students in Key Stage 3 (aged 11-13). However, as it is an approach to teaching and learning and not a syllabus or curriculum, it could be developed as an alternative approach at Key Stage 4 or with younger children. A guide is included on its website at http://www.enquiringminds.org.uk/.

Using external experts

City Academy Bristol

Who?	*Who leads the learners in their learning?*
	Learning is led by teachers and learning facilitators but learners are given substantial responsibility for their own learning and organised into learning families. Year 7 students form project teams in which they select roles and responsibilities. A number of seminars are led by teachers and non-school presenters and external panels will be used to judge projects.
What?	*What are the young people engaged in, and directed towards, in their learning?*
	The curriculum is organised around the following learning themes: • Learning through collaboration • Learning with independence • Learning by using information • Learning through application of thinking skills • Learning though communication There is a project-orientated programme for six hours per week in Year 7 on a range of topics in which students can direct and plan their own learning with teachers operating as facilitators. Guy Claxton's learning power framework is used as a means of assessing personal development
Where?	*Where are young people involved in learning processes?*
	All school based but a degree of flexibility in format from seminars to blogs.
When?	*When are young people involved in learning processes?* In school time
Why?	*Why has this approach been adopted?*
	The school's objective was to construct a purposeful learning environment which emphasised engagement and a curriculum that improved learning dispositions as well as outcomes. In addition, the school aims to increase learners' independence and to meet their future learning needs.

H   M   L

▢ Co-constructed

▢ Relevance

▢ Learner-Teacher Mix

▢ In/Out of School

▢ Implementation

Implementation and scale

City Academy, Bristol opened in 2003 and has around 1,200 students aged 11-18. A case study outlines how it has developed its approach to learning at http://www.ncsl.org.uk/media/08C/4D/curriculum-renovation-and-learning-villages-bristol-city.pdf.

Section Three:

Wider Horizons- further examples for exploration

This section contains a number of additional examples uncovered during the horizon scanning phase of this activity but not included above. Under each of the four characteristics of Next Practice pedagogy, we have included brief outlines of these initiatives, developments or programmes along with a link through which to find out more about how they operate. For each of the characteristics we have identified four or five examples which we consider to be both interesting and contain some degree of detail about how they have been implemented. We have also included very brief descriptions of other examples that may be worth investigating further.

Engagement through: Relevance

High Tech High (San Diego)
High Tech High which began as a single high school adopting a project-based approach to learning has grown into a school development organisation with seven schools in 2007. Projects based inside and outside school form the foundation of the curriculum from the student's first year. By junior year, students are out in the San Diego community part time, in internships that match them with workplace mentors. Their role is not just to learn but also to create something of value for their employer, from websites to water quality proposals, documentaries, and community surveys.
http://www.hightechhigh.org/.
http://www.whatkidscando.org/specialcollections/student_learning/HTH/HTHintro.html.

Second Life
Second Life is an online, 3D virtual world imagined and created entirely by its Residents. Many universities, colleges and schools are researching the use of Second Life as an environment for teaching and learning which offers a community of practice. The Open University which uses two islands for teaching and learning has piloted the use of virtual classrooms for learners aged between 13 and 17 in association with the National Association for Gifted and Talented Youth (NAGTY) (see Schome below).
http://secondlife.com/.

Serious gaming
A serious game is a software application developed with game technology and design principles for a primary purpose other than pure entertainment. There is no single definition of serious games, though they are generally held to be games used for training, advertising, simulation, or education. A number of examples of serious games that have been used in education can be found at
http://en.wikipedia.org/wiki/Serious_game. In addition, the Serious Games Initiative has focused on uses for games in exploring management and leadership challenges facing the public sector. Part of its overall charter is to help forge productive links between the electronic game industry and projects involving the use of games in education, training, health, and public policy.
http://seriousgames.org/index2.html.

PROTIC (Quebec City)
PROTIC (Programme de formation au secondaire axe sur les technologies de l'information et de la communication), an alternative school in Quebec City, Canada, is organised around the development of social, cognitive and meta-cognitive competences through ICT-supported interdisciplinary learning projects. http://www.cmec.ca/international/oecd/OECD_Formative.en.pdf (pp.46-56).

St Margaret's (Liverpool)
St Margaret's High School, a Specialist Technology College for around 1,000 boys, has set up a games company with a company structure set up by students. Students are involved in deciding, designing and realising a computer game and local professionals are involved in the company's board. The project was launched as a social enterprise initiative to enable students to address real work-placed problem solving and so gain valuable insights into how companies are set up and run. The following case study gives some indication of how the project was established: http://www.teachingexpertise.com/articles/visions-of-social-enterprise-in-liverpool-2079.

Bridgemary Community Sports College (Hampshire) has focused on personalising learning through the use of ICT. http://www.bridgemary.hants.sch.uk/.

Grange Primary School in Derbyshire has created its own town in school through simulation to develop a range of skills and raise standards among its children http://www.standards.dfes.gov.uk/personalisedlearning/casestudies/.

Ontario has introduced a series of innovations based around blended and distance learning. http://www.edu.gov.on.ca/eng/parents/links.html#distance.

The **Edge Foundation** promotes the integration of vocational learning into schools, colleges and universities http://www.edge.co.uk/docs/home/.

The **American Creativity Academy** in Kuwait has focused on integrating technology into the learning environment. http://www.giuntilabs.com/info.php?vvu=11&pud=431.

The **Finnish National Virtual School** promotes the use of ICT across education and educational equality in basic education. http://www.edu.fi/english/pageLast.asp?path=500,572,5365.

Futurelab has produced a range of reports and publications about innovative uses of **mobile learning**. http://www.futurelab.org.uk/resources/publications_reports_articles/literature_reviews/Literature_Review203.

Engagement through: Co-construction

Forsöksgymnaset (Norway)

The Forsöksgymnaset (Experimental Gymnasium) is a free, democratic learning institution where all the learners, teachers, office staff, caretakers, and cleaning workers decide the school's policies collaboratively. Emphasis is placed on group work and individual study. If learners wish, for example, not to attend classes in a certain subject, they may reach agreements with the instructor to study on their own, documenting their progress with reports or conferences. Many students attending the Forsöksgymnaset have personal problems and would not have been able to attend a traditional school.
www.forsok.vgs.no/.

Mantle of the Expert

Mantle of the Expert is a system developed by the educationalist Dorothy Heathcote from the 1950s that uses enquiry and drama to create powerful contexts for learning. Learners gradually take on responsibility for running an enterprise in a fictional world. Learners and teachers interact predominantly as 'themselves'; imagine that they are interacting as experts who run the enterprise; and imagine that they are interacting as other people in the fictional world with whom the experts are concerned. Over time, the learners engage in activities that at the same time are both curriculum tasks and that would be professional practices in the fictional enterprise. The teacher must share power to position the learners (individually and collectively) as knowledgeable and competent colleagues and also ensure that they position one another similarly. (Adapted from Heathcote & Bolton (1995))
http://www.mantleoftheexpert.com/index.php.

Black Firs Primary School (Cheshire)

Black Firs is a 240-pupil primary school in Congleton, Cheshire. While its curriculum is largely teacher-led, learners are given the opportunity to suggest direction of projects and can chose and plan independent study weeks. From year 2 onwards, learners carry out projects or study work that comprises a number of project tasks or assignments. Older children are given the opportunity to negotiate assignment outcomes within specified time scales. In study time they are taught specific skills. As they progress more time is allocated to independent activities. The study work approach has been extended through the introduction of independent study weeks, occupying 20% of tuition time. On designated Thursdays and Fridays the students choose and plan their activities for the following week. Teachers only plan for three days a week and then are prompted by learners' suggestions to move in new directions.
http://www.ncsl.org.uk/media/08C/3D/learner-centred-study-work-blackfirs.pdf.

AIST Family (Ukraine)

The AIST family school (AIST stands for Alternative, Initiative, Sport, Theatre) serves children from kindergarten to eleventh grade. Freedom and democracy are highly valued, with the children able to choose the teacher, the activity and the team they want to work with. AIST seeks to create a unity between the child, teacher and parents through child-centred education facilitating creative potential, intellectual growth, and spiritual and physical development.
www.spinninglobe.net/eggstorkschool.htm.

John Cabot City Technology College in Bristol has focused on personalising learning for all students through developing the 'Cabot Competencies Curriculum' which essentially adopts an learning to learn approach facilitated by ICT.
http://www.cabot.ac.uk/.

Calhoun school in New York City offers provision from early childhood to 12th grade has concentrated on the promotion of active, experiential learning. http://www.calhoun.org/.

Shanghai Experimental School is a research-oriented institution that integrates education, instruction and scientific experimentation. It combines elementary schooling and secondary schooling into a ten-year system of continuing education. http://www.ses.pudong-edu.sh.cn/english_version/profile.asp.

Integration of: In/Out of School Learning

Schome
Not school not home (SCHOME) is a web based project run out of the Open University which currently focuses on the use of Second Life (see above) to give people 'a lived experience' of radically different models of education. They are using Schome Park, an island in the Teen Grid of Second Life, to collect evidence about approaches to supporting learners. Student residents are known as Schomers and the Staff as Sparkers. The key aim in Schome Park is to empower young people to take responsibility for the development of the island and the activities on it. Basic infrastructure and support are provided and young people are encouraged to come up with ideas for how Schome Park should be developed.
http://www.schome.ac.uk/.

Eastfeast
Eastfeast derives from a sustained programme of action research in the field of arts in education and the community led by LIFT (London International Festival of Theatre, www.liftfest.org.uk). It involves artist-teacher partnerships working with primary children on using a designated green space as a creative learning environment. This enables a lot of learning time to be delivered outside the classroom throughout the year. Schools self-manage their projects, selecting their own artist etc. with support from Eastfeast. The emphasis is on empowering learners to develop their own learning experiences and the social, emotional benefits of using a reflective approach in education.
http://www.eastfeast.co.uk/index.html.

Peel Park Primary
The school have developed a curriculum that aims to be more creative, child-centred, relevant and skills-based and that enables each child to enjoy learning and thereby achieve their potential. Learners have input into shaping the curriculum, the school improvement plan and in leading learning. Its competency-based curriculum includes visual literacy and drama techniques with an emphasis on speaking and listening and role play throughout the school, including 'Mantle of the expert'. There is also a school 'creative' council and learners have developed 'enterprises' around school such as a newspaper and radio station.
http://www.lancsngfl.ac.uk/projects/gp_award/getfile.php?src=124/peel_park005.017.pdf

Student Learning Profile (Hong Kong)
As part of the Hong Kong New Senior Secondary Curriculum Reform (commonly known as the '334' Reform), Student Learning Profiles are being developed to serve as a means to motivate students' on-going work and as a passport for entry into the world of work, further education and training. Under such school-based policy, some schools are exploring an electronic portfolio approach to help their students to 'tell their own learning stories' which will encompass both school and non-school activities. It remains at a relatively early stage of development.
http://www.eifel.org/publications/eportfolio/proceedings/asiapacific07/eP%2020HK%202020 07%20Abstract%20S%20Yip.doc/view.

Bishop's Park College
Bishop's Park College in Essex is the first school within a school (SWAS) to be designed and built as three small schools in the same building. The schools each have their own name and colour. The design embodies the principle that students learn best when they are known and valued as individuals in a framework of positive relationships with adults and peers. Students thrive when they are known by their teachers so that no one can slip through the cracks. Then their learning becomes the collective mission of a group of adults whom they have learned to trust.
www.bishopspark.essex.sch.uk.

Primary Matters is a modular drama programme developed in Greenwich which looks at all aspects of a learner's life, at home, school and in the wider community. It aims including eradicating racism and supporting children as they approach transfer to secondary school.
http://www.innovation-unit.co.uk/youinnovate/your-innovative-ideas/primary-matter-programme.html.

Sushi bar learning targets business people who do not have time to attend traditional training events, yet have to develop in order to achieve their goals. The short training sessions typically last for two hours.
http://www.matchettgroup.com/BusinessLearning/Methods_and_Approach/Sushi_Bar_Learning.aspx.

The **Edison Primary Curriculum** aims to develop core learning skills such as thinking skills; speaking and listening; personal and social competencies; and team learning.
http://www.edisonschools.co.uk/pdfs/Primary%20Curriculum%20Brochure.pdf.

The new curriculum developed by **Willow Run Community Schools** in Michigan, USA, is founded on teaching and learning which is intellectually rigorous, delivered within a real world context, and provides in-depth knowledge, guided by student voice and culturally relevant principles.
http://www.wrcs.k12.mi.us/District/Curriculum%20for%20Web/Part%201%20Email/ WRCS%20Curriculum%20Overview.pdf.

Integration of: Learner- teacher mix

Human Scale Education
Human Scale Education is a collection of small alternative schools with a range of approaches focusing on areas such as democratic learning, creativity and encouraging children to engage with the environment. These small schools tend towards democratic curricula in which learners are able to choose what and how they learn. Some schools also have a high teacher: learner ratio.
http://www.hse.org.uk/.

Maison Familiale Rurale (France, Portugal, Brazil, Mozambique)
The Maisons Familiale Rurale are education centres for learners (usually between 14-18 years old) in rural areas offering a curriculum based on real local needs. Learners spend usually one week (usually boarding) at the centre and two at home putting into practice in the family farms what they have learnt. This 'alternative pedagogies' method implies that in the 3-year programme of study only 10 months are at the centre. Teaching and evaluation are shared by parents, the centre's facilitators and other community leaders involved. Evaluation takes into account the real problems they have faced in the field and how they are solved. In order to form these 'new farmers' ("nouveaux agriculteurs"), other than practical courses such as maths, agriculture, biology, accounting, ICT and horticulture, learners also consider ethics and local social issues.
www.mfr.asso.fr.

Coalition of Essential Schools
The Coalition of Essential Schools has advanced its work as a set of commonly held principles rather than as a 'model' for schools to emulate. The Coalition is, in effect, a process, an unfolding among a widely diverse group of schools of structures, routines, and commitments appropriate to each which are consistent with its shared principles. Coalition schools do not work in isolation, they borrow from each other. The purpose of the collaboration is to spark a sustained conversation about what the commonly held ideas might mean and how a variety of communities might assist each other in finding their best practical expression
Coalition of Essential Schools National Office.

STARS Students as researchers
The students as researchers (STARS) project was launched at Deptford Green school in 2003 and began by targeting students in Year 9. The project was launched in an assembly and thereafter 56 Year 9 students volunteered. The project started small with 18 of these students selected from across the ability range. These students then attended a training day held off campus to practise their teamwork skills and aspects of research project design, including research ethics, research methods, data analysis and evaluation. The young researchers have:

*   Presented their research to peers during assemblies.
*   Investigated and reported on leisure facilities in the area. Their feedback to adults from the community including a representative from the local council was followed by a major financial investment by the council into developing leisure facilities in the local park.
*   Organised a recycling scheme in school.
*   Investigated problems with the toilets and heating problems in the sports hall and got these fixed.
*   Researched, designed and implemented change to three classrooms.

http://www.teachingexpertise.com/articles/students-as-researchers-making-a-difference-1872.

The philosophy of **Forest Schools** is to encourage and inspire individuals of any age through positive outdoor experiences.
http://www.forestschools.com/index.php.

Bonhoeffer College in the Netherlands has fostered personalised learning through developments such as the creation of a study house in which learners work independently.
http://www.bc-enschede.nl/.

Some early work has been done on engaging young people in learning through **literature circles** and **book clubs**.
http://www.stenhouse.com/assets/PDFs/0333ho.pdf.

Casterton Primary School in Lancashire has focused on developing learners' problem-solving and thinking skills through the development of outdoor provision.
http://www.lancsngfl.ac.uk/projects/gp_award/getfile.php?src=3/casterton.pdf.

References

Heathcote, D. & Bolton, G.(1995) *Drama for Learning: Dorothy Heathcote's Mantle of the Expert Approach to Education*. Portsmouth, NH: Heinmann USA)

OECD-CERI (2007) *Alternative Models Of* Learning. OECD

Section Four:

The Horizon Scanning Methodology

The search and analysis of next practice pedagogies used a simple framework intended to assist practitioners in gaining a quick overview of each model. The framework uses the 5 W's - Who, What, Where, When, Why.

Who, What, Where, When, Why?

Our starting point was to take a very simple definition of pedagogy, which translated literally from the Greek means 'to lead the child'. We then combined this definition with the 5 W's to give us the key questions which will focus our search of next practice pedagogies and our assessment of which of these are truly innovative. The questions address what is radical and innovative about:

- Who leads the learners in their learning?
- What the young people are engaged in, and directed towards, in their learning?
- Where and when are young people involved in learning processes?
- Why this approach was being adopted?

In addition, we attempted to address the question of 'How' all of this is achieved in terms of translating individual innovations into whole school implementations. An indication of the scale of the innovation was also included.

Search strategy

Sources were identified from a range of educational databases, including:
AEI (Australian Education Index)
BEI (British Education Index)
ERIC (Education Resources Information Center)
CERUK (current educational research in the UK).

In addition, the following potentially relevant websites were identified and searches of them have begun:

Google Scholar; DCSF; AAER; SCRE; NFER; BERA; LSC; CfBT; education-line; TTRB; Becta; QCA; TDA.

References to key initiatives, projects and research programmes related to pedagogy and curriculum innovation were also noted and investigated further and we have consulted key individuals in relevant agencies such as QCA, Becta and the National Strategies.

Search terms

The education database searches were designed to be as broad as possible in an attempt to capture as much innovative practice as possible. The following search terms were used:

- Pedagogy/pedagogy/curriculum WITH
- radical
- alternative
- new
- authentic
- co-construction
- peer + leadership; learning; enquiry

Further searches were made using the following terms: andragogy; innovation; teaching approaches; theme work; topic work; concept-based planning; project approach(es); real world learning; external expertise.

In addition, some examples in the appendix were also adapted from an unpublished OECD report on alternative learning models (OECD, 2007).