

Enterprise in The New Zealand Curriculum August 2011*

Overview

Enterprise can have three main meanings in the context of The New Zealand Curriculum. In a literal sense enterprise can be 'learning about business' where enterprise relates to business studies, economics and accountancy. Enterprise can also be about developing and applying skills to operate businesses as observed in those business courses that develop the entrepreneurial talents of students.

The third and increasingly important meaning is enterprise as authentic learning. This involves students solving real problems for an actual audience or client. Students work with a business or community partner to create a new solution, product or service. Authentic learning activities are emphasised in the effective teaching dimensions of The New Zealand Curriculum. Enterprise is discussed as part of the future focus principle. It is evident in The New Zealand Curriculum in the vision, values, key competencies as well as the specific learning objectives of individual curriculum areas.

This ERO report has been written to help schools develop enterprise learning. Seven case studies present the challenges and benefits of enterprise as authentic teaching and learning. Each of these studies show what students have achieved in different enterprise activities. They discuss what leaders and teachers have done; both those who have been supportive of an enterprise learning approach and those who have been hesitant in adapting the way they teach.

These case studies show that leadership is central to developing enterprise learning in secondary schools. Boards and principals should ensure that there are resources and support systems in place for what can be significant changes to teaching and learning. Leaders need to value enterprise and reflect this in the school's curriculum planning, assessment, classroom resources and professional development.

Schools leaders are responsible for ensuring that there are effective teacher-leaders for enterprise. Teacher-leaders can be a source of expertise for other staff and their own teaching should demonstrate how enterprise can work for students, teachers and business and community partners.

This report emphasises the potential for a broad range of learners to be engaged by enterprise. The examples in this report show how enterprise activities can build high levels of engagement for high performing, average or underachieving students. Enterprise learning can also have significant benefits for businesses and the community. Students in the case study schools have completed a wide range of enterprise projects including designing new food products for a New Zealand business; organising corporate dinners; planning and teaching community computer courses; and preparing scientific maps for the Department of Conservation.

In some of the enterprise projects senior students have received National Certificates of Educational Achievement (NCEA) credits for their work. Some junior students have been given information about the outcomes they have achieved through their work on enterprise activities. However the assessment of enterprise learning was generally a challenge and teachers have struggled to identify what students have learnt and, in the case of senior students, link student learning to the qualifications framework.

These issues suggest that some teachers have difficulties when assessing students in real learning situations. While most secondary teachers can easily assess the content knowledge of students through different forms of written testing, they may be less well equipped to identify student learning outcomes in authentic contexts. In this regard, the ongoing alignment of the achievement standards with The New Zealand Curriculum will provide schools with more opportunities to assess student performance in real contexts.

Other challenges besides assessment are connected with the implementation of enterprise learning activities. For example, timetabling is seen as a significant obstacle to schools having a flexible approach to learning. Schools embracing greater connections with enterprise partners have to ensure that students have suitable times to visit workplaces, sites of interest and community mentors. Resources can be a challenge too, as students require access to information and communication technologies (ICTs) to connect with others and prepare letters, websites, spreadsheets and, in the case of one school, an international recipe book.

Changing teachers' practice through professional learning and development (PLD) is a key driver for change, especially considering the shift in teaching practice that has to occur for some teachers adopting an enterprise approach. For these teachers enterprise learning signals a shift away from a content and teacher-centred view of teaching and learning, towards one that works with business and community partners to solve real problems, create relevant learning activities and engages the strengths, interests and passions of students.

Introduction

What is enterprise?

Enterprise learning can be interpreted in three main ways. In one sense, enterprise can be 'learning about business'. In many secondary schools this approach to enterprise would form part of business studies, accountancy and economics courses. Enterprise can also be about developing and applying enterprise skills. This could be identified with students creating a business and attempting to make a financial return as part of an in-class or co-curricular activity. Those students who establish businesses as part of business studies or who take part in the Young Enterprise Scheme are involved in this sort of enterprise learning.

More broadly, enterprise is an approach to learning that is based on students solving problems. This typically asks students to be innovative in preparing a response or solution to an actual business, social, community or environmental issue or opportunity. Examples of this sort of enterprising or authentic education can include a school building a partnership with a local library to have students design and develop signage; drawing on the experience of people in residential care to develop a local history website; having senior accounting students working with a local business to identify the costs per unit of different production items and preparing recommendations for improving production processes.

Enterprise and The New Zealand Curriculum

Enterprise as authentic learning is promoted through The New Zealand Curriculum. The vision of The New Zealand Curriculum is that students should be "creative, energetic and enterprising." Similarly the future focus principle "encourages students to look to the future by exploring such significant future-focused issues as sustainability, citizenship, enterprise, and globalisation." The New Zealand Curriculum elaborates on this by describing enterprise as "exploring what it means to be innovative and entrepreneurial" New Zealand Curriculum page 39.

The scope of The New Zealand Curriculum for enterprise teaching and learning is underlined in concepts of effective pedagogy. ^[1] Drawing on evidence about effective teaching, this section states the conditions under which "students learn best". These include the need for students to see the relevance of what they learn and to make connections to their prior learning. Enterprise activities are one of the ways in which this type of teaching can occur.

The key competencies have been a focus for some educators making links between The New Zealand Curriculum and an enterprise approach to learning. The enterprising attributes reflect one way in which the key competencies of The New Zealand Curriculum can be aligned to an approach that values authentic learning in a business or community context.

The table below shows the alignment between the key competencies of Managing Self and

Relating to Others and attributes that are especially required when students work in a team to solve a client's problem.

Table 1: Examples of key competencies and enterprising attributes ^[2]

A complete table is set out in Appendix 1 of this report. This table shows how each of the five key competencies can be translated into different enterprising attributes.

Managing Self	What they mean for students
6. Using initiative and drive.	Seeing what needs to be done and doing it, persevering when things get tough and showing determination to keep going.
7. Matching personal goals and capabilities to an undertaking.	Using your own skills and abilities to get things done and achieving your goals.
Relating to Others	What they mean for students
8. Working with others and in a team.	Listening to others, encouraging people to take part and sharing the responsibilities.
9. Negotiating and influencing.	Being persuasive, resolving issues, backing up ideas and reaching agreement with others.
10. Being fair and responsible.	Taking ownership of your own actions while considering what is right for others.

Many curriculum objectives in The New Zealand Curriculum also lend themselves to an enterprise learning approach. For example, in the table below a selection of level 6 curriculum objectives has been noted. One of the ways these objectives could be delivered is by engaging students in learning activities that involve students solving real problems for specific audiences.

Table 2: Examples level 6 achievement objectives from The New Zealand Curriculum

Sample curriculum area	Sample achievement objective

English	Show a developed understanding of how texts are shaped for different purposes and audiences.
The Arts	Prepare, rehearse, interpret, and present performances of music individually and collaboratively, using a range of performance skills and techniques.
Health and Physical Education	Advocate for the development of services and facilities to meet identified needs in the school and the community.
Mathematics and Statistics	Plan and conduct investigations using the statistical enquiry cycle
Science	Develop an understanding of socio-scientific issues by gathering relevant scientific information in order to draw evidence-based conclusions and to take action where appropriate.

ERO's 2011 report *Directions for Learning: The New Zealand Curriculum Principles and Teaching as Inquiry* found that New Zealand teachers needed to gain a more comprehensive understanding of the intent and nature of the principle of future focus. While schools often planned sustainability-based learning and could articulate a desire to be an ICT ^[3] rich 21st century school, most did not plan and enact a curriculum with reference to citizenship, enterprise and globalisation. There was limited evidence of schools helping students to imagine a positive future through practising decisionmaking, learning about their rights and responsibilities in the classroom and the community, and discussing and acting on social justice issues. In light of this, the findings of this report are a resource for schools to see how other secondary schools have explored the enterprise aspects of this future focus principle.

E4E: Education for Enterprise

In New Zealand, the E4E website provides schools with many different resources linked to an authentic approach to enterprise in education. The main focus of this website is on enterprise as authentic learning. For example:

Education for Enterprise enhances what, and how, young people learn, to enable them to participate and contribute locally and globally and meet the demands of a rapidly changing world environment.

Education for Enterprise is an approach as well as a context for teaching and learning. It involves acquiring knowledge across the eight curriculum learning areas and key

competencies of The New Zealand Curriculum, and promotes effective teaching practice.

The E4E website was developed as part of an overall E4E strategy that has included funding for professional learning clusters. The funding for the clusters has been provided through both the Ministry of Education and New Zealand Trade and Enterprise (NZTE). Some of the schools in this report received funding as part of this initiative.

In its evaluation of the four initial Regional E4E clusters, the New Zealand Council for Educational Research (NZCER) has identified that “one key feature of E4E is the emphasis it places on schools developing meaningful partnerships with individuals, businesses, and community groups outside schools to enable the development of rich and authentic contexts for student learning.” ^[4]

In New Zealand, enterprise education takes place in a range of contexts. This includes work with businesses as well as community groups. Enterprise education involves students developing and using skills to solve social, environmental and/or economic problems.

[1]

Ministry of Education The New Zealand Curriculum for English-medium teaching and learning in years 1-13. Wellington. Learning Media Limited. Pp 34-35

[1]

<http://education-for-enterprise.tki.org.nz/About-E4E/The-NZ-Curriculum-and-E4E/Enterprising->

[2]

Information and Communications Technologies.

[3]

Bolstad, R. Roberts, J. & McDowall S. (2009) Education and enterprise: learning at the interface. Final report from the regional E4E clusters evaluation.

Methodology

Approach to this study

This report examines the work of seven schools. These schools had approached enterprise in different ways. They have achieved different levels of success and faced different sorts of challenges. Their stories reflect many of the issues ERO has observed in its examination of how schools have implemented The New Zealand Curriculum and how they have developed enterprising approaches to learning.

As part of this evaluation, ERO visited each of these schools to report on how the schools have continued to develop their enterprising approaches to learning. We examined documentation and talked to school leaders, external PLD providers, teachers, students and business and community partners.

Case Studies

The following section presents seven case studies of schools that have taken differing approaches to enterprise education. These discuss the nature and benefits of an enterprise approach and the challenges and barriers faced by the staff and students at these schools. Following the case studies is a discussion of the themes found at these schools regarding the benefits and challenges of enterprise education.

Student-centred learning at a large high decile girls' school – School A

Enterprise at a large mid-decile secondary school – School B

Enterprise at a large high decile junior high school – School C

Enterprise at a large high decile urban school – School D

Enterprise at a small low decile area school – School E

Enterprise at a mid-sized, mid-decile school in a provincial centre – School F

Enterprise and food technology at a large, mid-decile school in a provincial town - School G

Discussion

Enterprise is an approach to learning that involves students in solving real problems for an actual audience or client. It asks students to be innovative in working with a business or community partner to create something new.

The seven case studies discussed in this report demonstrate how an authentic learning approach can work as well as the challenge schools may face in implementing enterprise learning.

Leadership is vital to enterprise learning

To build enterprise learning activity in a school requires leadership both from the board and principal as well as enterprise champions in the school. The board and principal have a key role in encouraging the process. They ensure that the structures and resources are organised in a way that provide professional learning, time and support for teachers to establish relationships with business and community partners.

Teacher-leaders in the school help set an example for other staff; they provide departmental leadership; mentor others; develop business relationships and help assist teachers and students to understand the nature of enterprise learning and its links to The New Zealand Curriculum, especially effective pedagogy, achievement objectives and the key competencies.

Enterprise approaches represent a change in pedagogical approach for many secondary teachers

Enterprise learning activities reflect the features of effective pedagogy as described in The New Zealand Curriculum. Enterprise learning typically requires teachers and students to change from their traditional classroom roles to a situation where students take more responsibility for learning. Unlike many traditional secondary school units, where teachers deliver a pre-defined body of knowledge, teachers may not know what the final outcome may be in an enterprise activity.

It requires practice to develop the new classroom protocols and routines. The support of other teachers is necessary especially from those who have previous experience. Teachers also need professional development to give them the skills and confidence to manage a class taking part in an enterprise activity. PLD gives teachers:

- an understanding of enterprising approaches as examples of effective pedagogy (as in The New Zealand Curriculum)
- specific ideas about how to include enterprise in particular curriculum areas.

Enterprise supports the engagement of a broad range of learners

Enterprise learning can engage the diverse range of students in secondary schools. Highly academic students can benefit from a project with a business partner that challenges their ability to cooperate, solve problems and present ideas to a variety of audiences. Similarly, less able students, including those who are disengaged, can be motivated by learning that has a clear purpose.

As the example from School F demonstrates, enterprise learning includes learning connected to te ao Māori. Māori businesses and community partners can provide authentic contexts for students. Students who have strengths in te reo me tikanga Māori can also lead projects that aim to build the knowledge and understanding of the school community in these areas.

While students are often receptive to learning through authentic tasks, it is important to note that some may need time and support to adapt to an environment where they have more control of their learning and where they have fewer clearcut answers. Just as some teachers and community members have traditional expectations of what 'real learning' is, so do some students. These views may need to be considered when teachers introduce enterprise learning to a class for the first time.

Enterprise may need more or different resources

Evidence from this report suggests that different sorts of classroom resources are required for enterprise learning. For example, textbooks are less important and ICT are more important.

Some of these issues may be linked to how resources are structured in a school. For example, are computers and telephones in classrooms or are they only in specialist areas? Are there processes in place to make sure students work off-site safely? How do students travel to visit business community partners? Are there meeting rooms for students to catch up with business and community partners? Is the library set up to help students find some of the specialist information they may need for an enterprise project? Schools need to consider these questions when they review their resources for enterprise learning.

Building enterprise into the timetable and the classroom

Secondary school timetables should not be barriers to students working with business and community partners. Many schools avoid timetable clashes for enterprise projects by scheduling times outside of the normal schedule to give students sustained chunks of time to work on authentic learning projects. For example, some schools have used 'project weeks' for junior students when senior students are on examination leave. There can be increased flexibility of staffing at this time and more scope for teachers to work together on integrated curriculum projects.

In another example, School C scheduled opportunities for enterprising learning activities into each day. This school also expected that students would be taking part in enterprising

learning during their mainstream subject slots. This example implies that timetable flexibility is less of an issue when enterprise is seen as a 'normal' aspect of the curriculum and one that should occur, to some extent at least, in every classroom through the year.

Enterprising activities can be incorporated into many senior courses, not as an add-on, unrelated to the achievement standard, but as a way of applying knowledge that has been taught.

Enterprise often involves links with business and community partners

Many enterprise activities are built on working with business or community partners to develop a solution, product or activity in response to an identified need or problem. Some teachers can be reluctant about the role of business in enterprise learning activities. Business can be seen by them as a 'vocational' approach to education or too commercial an approach when students are at school to develop academic skills. As part of the curriculum students are expected to learn about the world of work and learning activities with businesses are a natural way for students to do this. Moreover, links with community partners and problem solving of social issues are equally valid enterprising activities that reflect the principles of The New Zealand Curriculum. Enterprise activity can be the most challenging, effective and rewarding learning in a student's time at secondary school.

Assessment is a significant challenge

Some schools that have developed authentic learning projects as part of their enterprise approach have not had assessment processes that suitably captured students' learning. Often the significant gains made by students have been reported in terms of the key competencies of The New Zealand Curriculum or the analogous enterprising attributes. In many cases this has been carried out as self or peer assessment.

The most effective assessment included the reporting of specific learning outcomes achieved by students as part of their enterprise activity. This was possible when teachers understood how to describe students' achievement while they have been learning – and not in a separate 'test' after the fact. From this perspective, some of the difficulties in developing assessment for enterprise learning can be linked to how teachers assess in authentic teaching contexts. Unlike the assessment of content knowledge, where teachers can use a variety of testing to understand what students know, the assessment of enterprise learning needs teachers to capture evidence of student success 'on the job' and in light of the overall outcomes of an enterprise project. This represents a significant shift in assessment practice for some teachers.

The alignment of the achievement standards in senior secondary learning is likely to support the assessment of enterprise activities. Because the new achievement standards reflect more

of the intent of The New Zealand Curriculum and the process, rather than just content, of learning, there will be more opportunities for teachers in senior courses to use enterprising approaches to teach specific standards. Ideally, as teachers become better at identifying learning outcomes in senior courses then this practice can inform enterprise learning assessment in Years 9 and 10.

Conclusion

Enterprise can have different meanings in the context of The New Zealand Curriculum. The definition of enterprise as authentic learning is one that applies across the curriculum and can be seen in its mission, values, principles and objectives. Fundamentally, enterprise is an approach that reflects The New Zealand Curriculum's description of effective pedagogy. When done well, an enterprising approach gives students challenging, relevant, engaging and meaningful ways to solve problems, and work with others and manage themselves.

The case studies in this report demonstrate that leadership is a key aspect to developing enterprise learning in secondary schools. Principals and boards are vital because enterprise approaches benefit from a supportive professional culture. Teachers need to be able to take chances with enterprise approaches.

Teacher-leaders on the staff can provide this type of support, based on their own experience of using an enterprise approach and their success in engaging a variety of different learners.

Not all teachers have embraced an enterprise approach to learning. This is a fundamental professional development challenge for school leaders. All the schools in this evaluation used different ways to support teachers and to encourage them to make classrooms more relevant and engaging, more student-centred and enterprising.

There are some challenges in using an enterprise approach to teaching and learning. Teachers have to develop constructive relationships with business and community partners. They need to develop authentic assessment to reflect what students have actually learnt, and they need to make sure they have the right resources to complete their learning tasks. These challenges are significant but they should not mean that secondary teachers can 'opt out' of enterprise approaches to learning. The New Zealand Curriculum and the alignment of the achievement standards point to enterprising approaches being appropriate in all curriculum areas and at all levels of secondary schooling. Similarly, enterprise represents a significant way of delivering the key competencies.

Appendix 1: Key Competencies — Enterprising Attributes

Enterprising Attributes	What they mean for students
Thinking	
1. Generating, identifying and assessing opportunities.	Thinking up new things to do and deciding if they are good ideas.
2. Identifying, assessing and managing risks.	Thinking of the things that could go wrong with an opportunity and making plans and decisions to limit that risk.
3. Generating and using creative ideas and processes.	Thinking up new ideas and ways to do things that work well.
4. Identifying, solving and preventing problems.	Looking ahead for things that can go wrong, thinking of ways to solve problems and planning ahead to avoid them.
5. Monitoring and evaluating.	Checking all the time and making changes if they are needed.
Managing Self	
6. Using initiative and drive.	Seeing what needs to be done and doing it, persevering when things get tough and showing determination to keep going.
7. Matching personal goals and capabilities to an undertaking.	Using your own skills and abilities to get things done and achieving your goals.
Relating to Others	
8. Working with others and in a team.	Listening to others, encouraging people to take part and share the responsibilities.
9. Negotiating and influencing.	Being persuasive, resolving issues, backing up ideas and reaching agreement with others.
10. Being fair and responsible.	Taking ownership of your own actions while considering what is right for others.
Participating and Contributing	

11. Planning and organising.	Making a decision, making a plan and getting ready.
12. Identifying, recruiting and managing resources.	Sorting out what resources are needed, getting them and using them in the best way possible.
13. Being flexible and dealing with change.	Dealing with new situations, accepting new ideas, getting over change and moving on.
Using Language, Symbols and Texts	
14. Collecting, organising and analysing information.	Getting information and sorting it to make sense of it.
15. Communicating and receiving ideas and information.	Sharing and taking in ideas from a range of sources.