NZCER evaluation of the Regional Education for Enterprise (E4E) Clusters

Report on principal, teacher and lead teacher survey data from Term 4, 2008

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TE RŪNANGA O AOTEAROA MŌ TE RANGAHAU I TE MĀTAURANGA

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About the Regional Education for Enterprise Clusters Evaluation

NZCER's evaluation is tracking and supporting developments in four regional E4E clusters (Northland, West Coast, Nelson, and Manukau) through 2007 and 2008. Multiple forms of qualitative and quantitative data are being collected from each of the four regional clusters.

The evaluation will support the ongoing development of E4E within individual schools, regional clusters, and nationally. It will examine the processes by which the clusters establish and pursue E4E and the outcomes that are achieved (in relation to both local and national objectives), and provide evaluation feedback that is engaging and meets the needs of different audiences.

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Introduction

In term 4 2008, NZCER sent out survey packs to schools involved in the E4E regional clusters. Each pack included one E4E lead teacher survey, up to five surveys for other teachers who were either in the school's Education for Enterprise cell, or who had used approaches that align with Education for Enterprise ideas in their classes in 2008; and up to forty surveys for students who had been involved in a class or extra-curricular project or unit of work involving an Education for Enterprise type of approach. We also invited principals and community/business partners to complete a survey. This report provides a summary of the responses we received from principals, teachers and lead teachers.

Please note that a final report on the Regional E4E clusters initiative is currently being written. The final report will include findings from a broad range of qualitative and quantitative data collected in the clusters during 2007 and 2008. The summary of principal, teacher and lead teacher survey data from 2008 presented in this mini-report is intended to provide interim feedback for schools and clusters involved in E4E prior to the release of the final report later in 2009.

Survey returns

Table 1 below shows the number of principal, lead teacher, teacher, and student surveys received from schools in each of the four clusters. Twenty principals and 18 lead teachers returned a survey, as did 45 other teachers from 15 schools. 409 student surveys were received from across 18 schools (data from the student surveys is presented in a separate mini-report).

Table 1 Number of staff and student surveys returned at the end of 2008

	Principal	Lead teacher	Teacher	Student
Northland Cluster	5	5	11 (5 schools)	91 (5 schools)
Nelson Cluster	6	5	15 (4 schools)	124 (4 schools)
Manukau Cluster	3	3	8 (3 schools)	106 (3 schools)
West Coast Cluster	6	5	11 (3 schools)	88 (6 schools)
Total	20	18	45 (15 schools)	409 (18 schools)

Interpreting the graphs in this report

The information in this mini-report is based on two types of responses from staff. They were asked to give their opinions as ratings of sets of items on Likert-type scales (such as "strongly agree" to "strongly disagree") and they were also asked to write comments in response to some open questions. These comments have been coded (grouped into broad categories) and the

percentage of teachers giving each response is presented in tables. At times we present staff comments verbatim to illustrate the range of ideas expressed.

How this report is organised

This report is organised into the following sections:

The nature of the E4E learning activities: This section analyses the E4E activities described by the teachers who responded to the survey. We look at which year levels and curriculum areas were involved, and discuss the ways that students, teachers, and business and community partners (if involved) contributed to the activities, the kinds of learning opportunities available to students (from the teachers' points of view), and the ways in which learning was assessed.

The role of, and challenges for, the teacher in E4E: This section discusses how teachers viewed their roles in their E4E teaching, and the challenges associated with this.

Extent of, and support for, E4E practice in the schools: This section looks at the *extent* of E4E practice across whole schools, how well supported it is by staff, how many students are involved, and the degree to which it is embedded in school culture.

The Regional Cluster model: This section looks at staff views about the support received in association with the E4E regional clusters initiative.

What might E4E hold for the future? This section looks at staff views about what could happen with E4E in their school, and in New Zealand schools in general, over the next 2-10 years.

The nature of E4E learning activities

We asked teachers and lead teachers to think of one 2008 unit of work they had taught in which students had opportunities to become more enterprising. Questions about practices, impacts, and outcomes of E4E were answered in relation to this unit of work. Two lead teachers indicated that they did not teach an enterprising class themselves. In this section we combine responses from the remaining lead teachers (n=16) and other teachers (n=45), giving a total of 61 individual respondents.

Year levels of students involved

Table 2 shows the year levels of the students involved in the example described by the teachers and lead teachers. Eighty percent involved secondary students, and 16 percent involved primary students.

Table 2 Student year levels in E4E units described by teachers/lead teachers

	Number of units/examples
Not specified	2
Years 1-6	2
Years 7-8	8
Years 9-10	26
Years 11-13	23
Total	61

Curriculum areas involved

Two thirds (66 percent) of the examples described by teachers and lead teachers involved a single curriculum/subject area, and 25 percent involved two or more subject areas. As Table 3 shows, the most common curriculum were technology subjects, and commerce or enterprise subjects, followed by English and science.

Table 3 Curriculum areas involved in the E4E units described by staff

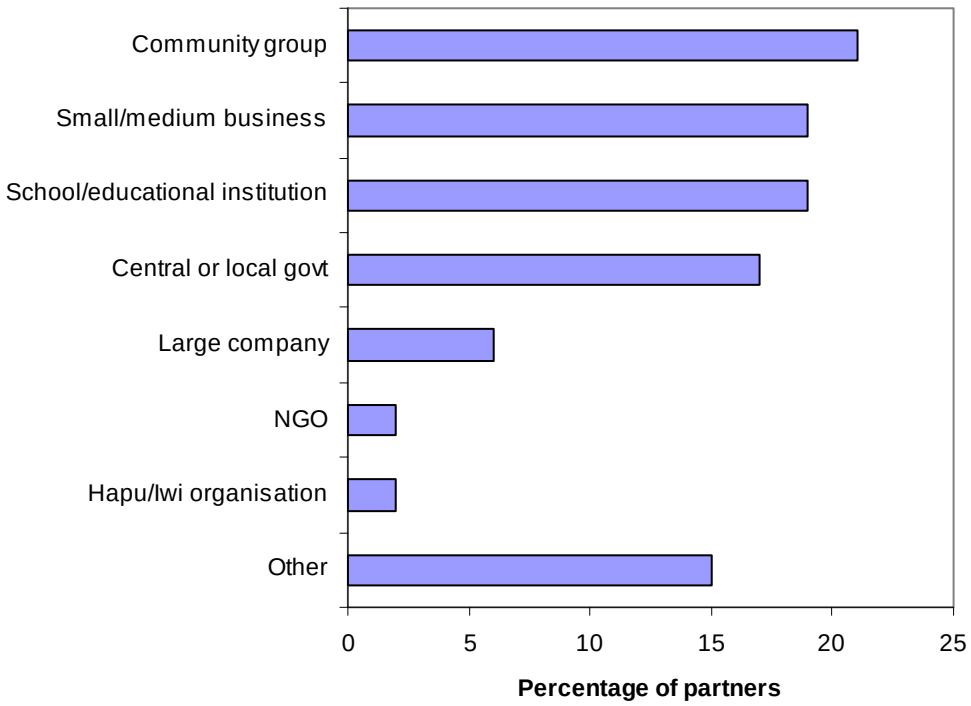
Subject area	**Percentage of units (n=61)**
Technology	34
Enterprise, Business, Economics, Accounting, PrEP	31
English (Including media studies, drama)	20
Science	15
Maths	13
Health or PE	11
Art	10
Social studies	10
Languages	2
Other	13
Note: Teachers could select more than one curriculum area, therefore percentages total more than 100	

Involvement of business or community partners

Eighty-five percent of the units described by teachers and lead teachers involved students working with people from businesses or the community/hāpori. The most common types of partners were community groups, small/medium businesses, and schools or education institutions. Some schools worked with central or local government agencies, large companies, charitable organisations, or other groups such as community and regional health boards, local theatre companies, and friends of the school.

Of those teachers whose project had involved a community or business partner, 70 percent planned to continue their working relationship with this partner.

Table 4 Types of business and community partners (n=51)



Making or doing something useful for someone else

Most (84 percent) of the teachers and lead teachers said that their students had produced or done something the benefitted people from business or community organisations, the community, or the school. Table 5 shows what students did or produced.

Table 5 What students did or produced that was of benefit to business, community, or school

	Percentage of units (n=61)
A product	44
An idea, concept, or design plan	26
Research information or data	30
A service	20
Other	8

Note: Teachers could select more than one response, therefore percentages total more than 100

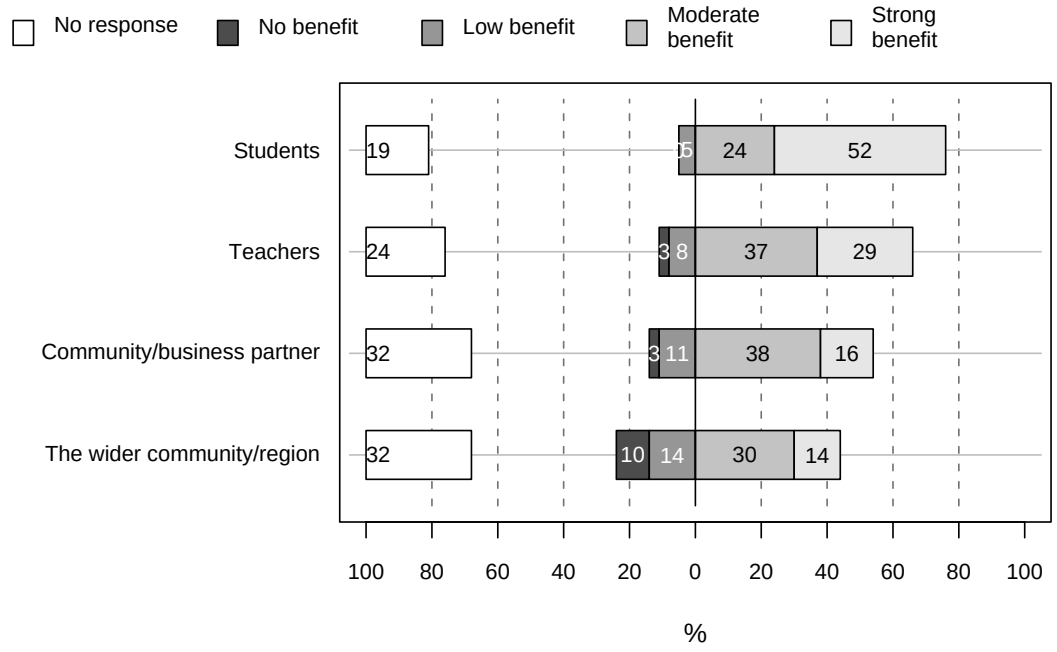
The selection of teachers' written descriptions below illustrate the broad range of products, services, or ideas generated by students through their E4E activities.

> Producing a picture book for students at a primary school. Primary students provided the storyline which was further developed by my students.
>
> Investigation of the hospital and commercial laundry - flow chart, costing and recommendations
>
> [An area in the town centre] has problems with rubbish, illegal parking, pollution, wear and tear, drinks from a night club. With [local council] employees a class visited the area and worked through the problems and solutions involved with the case to come up with the plans, ideas, concepts for the council to think about using in conjunction with this area.
>
> Year 13 drama class working in conjunction with community, iwi, playwrite, and others to create a performance (public) of Hone Kouka's play "Wairoa".
>
> The (Year 1 and 2) class decided to retell a myth, that was related to the science project on the sun, to give a presentation to the community members who had read to them each week in the library. This was to thank them for their time. The students used various media to make the presentation on the interactive whiteboard. The students introduced the presentation and answered questions afterwards about the skills they used. This also introduced this new technology to the community.
>
> Diving for seafood with locals - seafood was then given to local families
>
> A student did his project on bacterial growth in the mouths of boys & their dogs. Both 'licked' a plate (agar) and he cultured them. They found that teenage boys had more bacteria than their dogs & this has sparked further investigations
>
> Creating financial literacy learning tools for year 5/6 learners. Surveyed yr 5/6 children on what they know about money. Discussed with [bank staff] what they want children to know. Made games and books to teach concepts required. Trialled at local school.
>
> Building a computer for a year 8 class in a local primary school that was powerful enough to do music & film editing
>
> Restoration of [local creek]. Learning why it is necessary, the types of plants best suited to the area and why, identifying ongoing problems and finally planting in conjunction with primary school students. Senior students were mentors to the younger ones
>
> Cafe survey on breastfeeding guidelines. Design of breastfeeding friendly cafe logo for display in windows of [local] cafes

Who benefitted from partnerships with businesses and community?

Figure 1 shows teachers' and lead teachers' views about who benefitted from the partnerships with people from businesses or the community. Teachers were most likely to think students had benefitted significantly, followed by teachers, and the partner themselves. Forty-four percent felt there had been some benefit to the wider community or region, although almost a third did not respond to this item.

Figure 1 Who benefitted from the relationship with the partner organisation(s)? (teachers and lead teachers, n=61)



Decision-making and sources of support

Figures 2 and 3 show who (according to teachers) was involved in decision-making regarding the students' E4E learning activities, and who supported the students' learning with advice, feedback, and so on. As we might expect, teachers were the most likely people to be involved in deciding the parameters of the work and how it would be assessed. However, in some cases students and community/business partners were also involved in these decisions. It was more common for students to be involved in deciding *how* the work would be carried out, but less common for students to have generated the initial idea for the unit of work. In terms of learning support, teachers were again the most common source of advice and feedback, but students were also likely to present their ideas to and receive feedback, advice, and information from peers and/or business or community partners. People from businesses and the community were the most common end-users of the work produced by students.

Figure 2 Who was involved in decision-making?

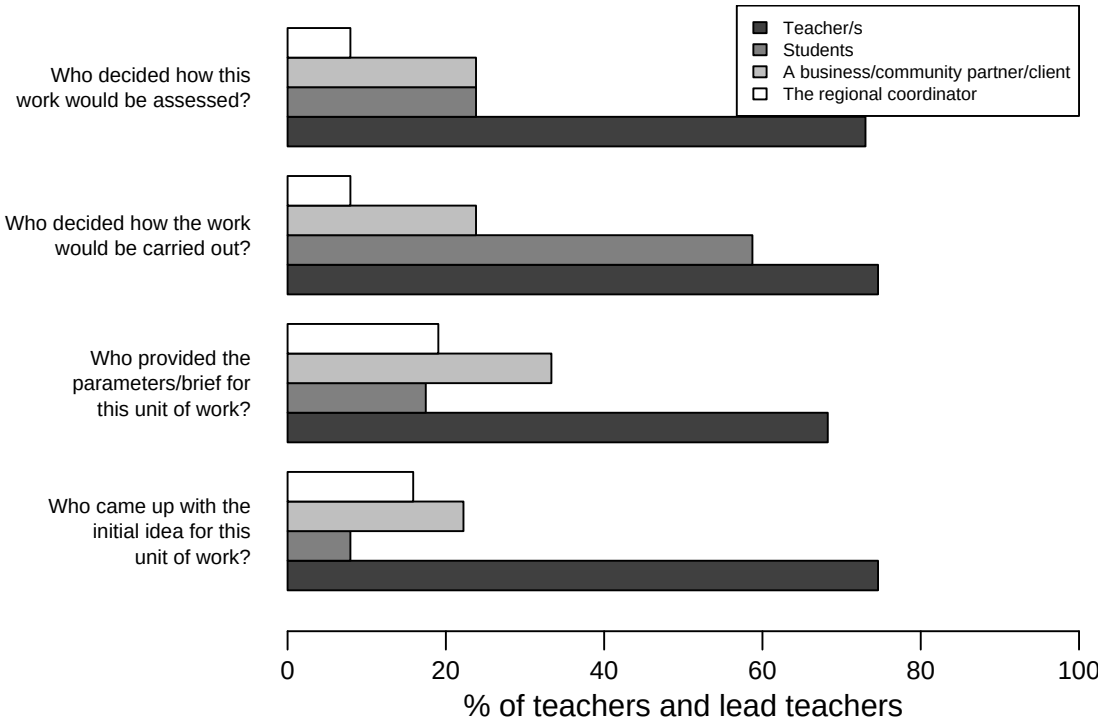
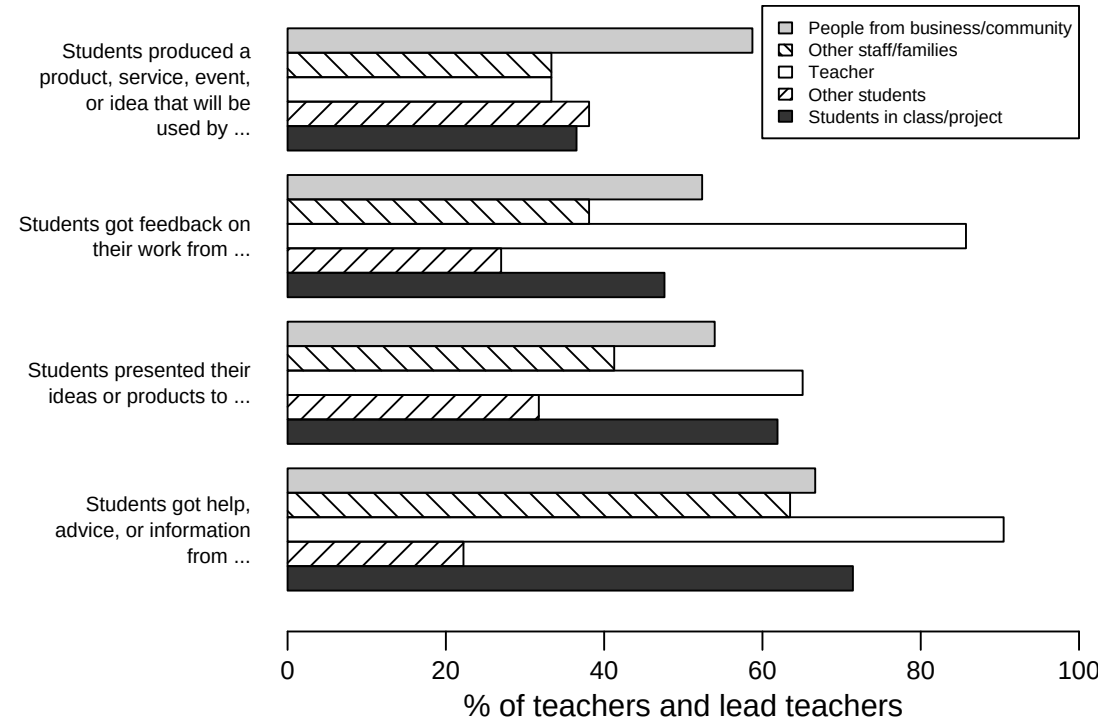


Figure 3 Who supported the students' learning?



Student learning opportunities and ways of working

We asked teachers to indicate how students worked on their E4E activities by ticking a checklist of statements shown in Table 6. To see whether E4E teaching and learning practices were similar or different to "normal" teaching and learning practices, we also asked teachers to indicate how often these things *usually* occur in their teaching of students in this subject and year level (column 2 in Table 6). Areas in which E4E activities appeared to differ most from "normal" teaching included: the use of skills/knowledge from more than one curriculum area, having an extended period of time to work on one project in depth, students doing something that is useful and important to someone other than themselves, and students having responsibility for deciding how they used their time each day.

Table 6 How students worked on their E4E activities, compared to what usually happens in teaching/classes (teachers and lead teachers, n=61)

	% Teachers and lead teachers	
	Happened during the E4E activity/ project	**Happens often or very often in my normal teaching**
Students used skills from more than one curriculum area	90	56
Students had an extended period of time to work on one project in depth	84	43
Students did something that is useful or important to someone other than themselves	84	38
Students worked in groups	80	72
Students were given responsibility for deciding how they used their time each day	72	36
Students took different roles/did different jobs within a group or team	69	56
Students took time to work on the project outside class time/after school hours	69	34
Students worked in different spaces in the school	62	20
Students worked outside the school	51	11
Students worked with students from other year levels	31	11

Assessment of E4E

As Table 8 shows, the two most common assessment methods teachers used during students' E4E learning activities were their own observation or anecdotal records, or student self-assessment. Some teachers used feedback from community or business partners, or student peer assessment. These methods were all more common than formalised assessment approaches, such as unit

standards or achievement standards. However, the latter would only be relevant for the examples involving students in years 11-13 whose E4E activities were curriculum-based (rather than extra-curricular).

Table 7 Forms of assessment used by teachers during the E4E activities

Assessment methods used	% teachers/lead teachers (n=61)
Teacher observation/anecdotal records	67
Student self or peer assessment	64
Feedback from business/community partners	57
Teacher developed rubrics/standards-based assessment	25
Achievement standards	16
Unit standards	16
Other	13

We asked teachers and lead teachers to explain what aspects of the learning they were assessing and for what purpose. The selection of comments below illustrate some of the ways teachers were approaching assessment in E4E. Some were using conventional assessments such as knowledge-based testing, or using unit or achievement standards, for example:

> Assessing maths/CV skills using a pre & post test system developed by PrEP[1]. Assessing money skills and accounting/recording systems. Used this to show what children know and the gaps needed to be filled in in maths lessons. Also shows the effect PrEP has on childrens learning/progression.

> I wasn't going to assess it, but students were proud of their work and asked for a formal assessment (excellence, merit etc). Focus was on skills - composing an image, painting technique.

Other approaches involved gathering a range of documentary evidence and/or looking at student performances to evaluate development of knowledge, skills, and in some cases, key competencies.

> [I assessed] their presentation to the class and staff. Ability to gather and effectively communicate. Established criteria with class, students assessed it and fed it back to the group presenting so they could improve before the staff presentation.

> Feedback/ assessment was given directly by the experts in this particular case and then teacher provided an assessment matrix that students used.

> One aspect of the project was the school planting where senior students buddied up with primary students and planted together - assessment was carried out by observation and based on the key competency of 'Relating to others'.

[1] Primary Enterprise Programme: see www.prep.co.nz

> [I was assessing] 1. Understanding of problem solving process, 2. Links to the major concepts change and transformation, order and class, 3. Managing self. [This was] assessed through the compilation of a project booklet. Assessed to show understanding of major integration concepts above and understanding of roles, responsibilities and rights of shareholders.

Some teachers' assessment approaches also involved students' gathering and reflecting on their own learning and performance. For example:

> I wanted students to give a day to day account of how they progressed with the project and reflect on what they did. Could they have done more? Were they happy with the work they had done. They had a notebook each for their log.

> One aspect of learning that was being assessed and developed in the students was the process of scientific investigation and why particular steps are taken, in particular, control variables and carrying out trials in order to improve a method. Students kept a log of their investigations and presented that together with their final report. Discussion with each group about what they had learned was also carried out by myself.

One teacher commented:

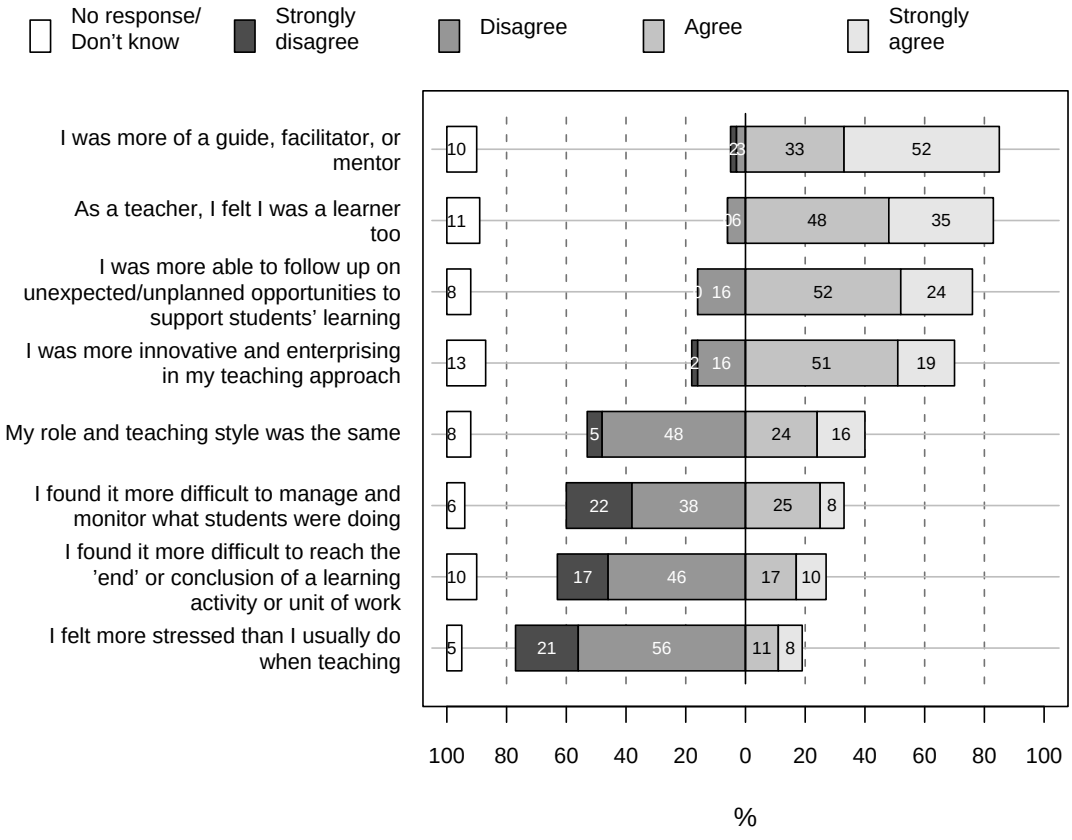
> I really like E4E as a way to investigate the potential of the new curriculum and as a place to 'challenge' assessment paradigms that lack flexibility.

The role and challenges of the teacher in E4E

Teaching role

We asked the teachers and lead teachers to comment on their role during the E4E learning activities, and whether this differed in any way from the way they usually worked with students. As Figure 4 shows, most teachers and lead teachers agreed that they were more of a guide, facilitator, or mentor (85 percent), and felt they were learners too (83 percent). Although a few teachers felt it was more difficult to reach an "endpoint" or that they were more stressed during the E4E activity or unit, more disagreed than agreed that this was the case.

Figure 4 Teaching role in E4E compared to usual practice (teachers and lead teachers, n=61)



Teaching challenges

We asked teachers and lead teachers to identify which of the challenges listed in Table 8 they encountered in their E4E teaching approach. The two biggest challenges were working within the

constraints of the school timetable, and ensuring students completed work to the expected timeframes of the partner. Managing and supporting students to carry out their activities was a slightly lesser challenge, although just under half found it a challenge to cater for students who struggled with working independently. Among the *least* challenging aspects of teachers' role were those relating to meeting curriculum and assessment needs, and working within the constraints of subject and discipline boundaries.

Table 8 Challenges of an enterprising teaching approach

Challenges	% teachers/lead teachers (n=61)
Working within the constraints of the school timetable	69
Ensuring students completed work within the expected timeframes of the partner	54
Catering for students who struggle with the motivation or skills needed to work independently	48
Finding times when students and business/community partners were both free to work together	44
Letting students find their own way and make their own mistakes	41
Catering for students who struggle with the skills needed to work successfully as part of a group	38
Maintaining/monitoring relationships with business/community partners	25
Setting up working relationships with business/community partners	21
Working within the constraints of subject/discipline boundaries	21
Satisfying curriculum needs	21
Ensuring business/community partners understood the work that students of this age are capable of	20
Ensuring students gained credits, achievement standards, or unit standards	15

Teachers' comments about E4E teaching give further insight into the kinds of rewards and challenges they experienced during their E4E activities. Comments about E4E being "rewarding" included:

> Most students were engaged with the topic - more so than if I had been lab based. The weather meant there had to flexibility in daily plans. The hardest thing was convincing students that teamwork and co-operation was the key rather than the presentation outcome.
>
> Being the facilitator and not the teacher who knows everything has helped me to learn more about the unit and how the students are able to become more motivated when they are taking more of an active role in their own learning.
>
> I love allowing students to be responsible for constructing their own learning.
>
> Challenges were mainly resolved thanks to our awesome [Regional E4E] co-ordinator!

Comments which illustrated some of the tensions and difficulties teachers experienced included:

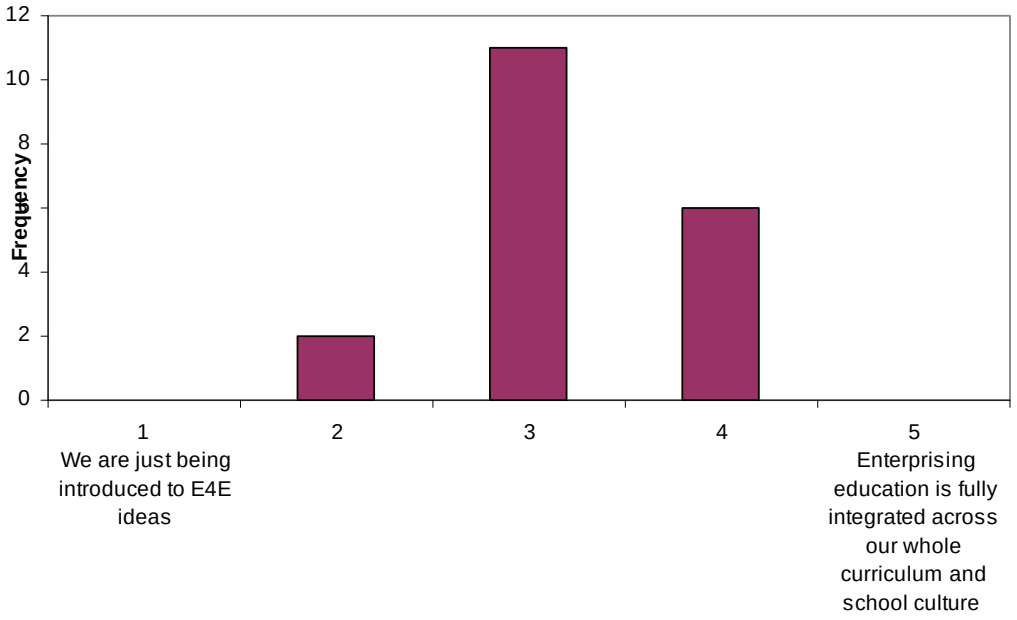
> [Challenges included] dealing with multiple (different) projects all happening at once because the students could choose their project. Assisting students with initial ideas and "how to start" their project.
>
> This project set me back about 2 weeks. In the end the students got fed up with collation of data and I stepped in. Only 1 or 2 were really interested in helping outside of set hours. We also ran out of time to feed the information back to the other classes. Paperwork was definitely not a plus.
>
> Time pressure - pressure to be in school teaching - so someone else (coordinator) gets to do the "fun" part outside school with students.
>
> Feel a slight loss of control, and is quite hard to manage, as there could be several groups in very different places, town, kitchen, art room, computer room, my room, on phone, etc.
>
> Definitely [a challenge] trying to cater for students who had little motivation or lacked skills to work creatively or independently.

Extent of, and support for, E4E practice in schools

The data in the previous sections give us an insight in to the variety of different ways that teachers and students across different classes are experiencing E4E. This section looks at the *extent* of E4E practice – and the degree to which it is embedded in school culture – across the surveyed schools. Some of the data in this section comes from questions which were only asked of principals (n=20) and lead teachers (n=18), as they were considered most likely to have an overall picture of E4E practice in their school. Twelve out of 18 lead teachers said there was a small group of staff (e.g. an enterprise cell or enterprise group) responsible for E4E development at their school.

We asked principals where they would rate their schools on a scale of 1 to 5 where 1 is "We are just being introduced to E4E ideas" and 5 is "Enterprising education is fully integrated across our whole curriculum and school culture". As shown in Figure 5, most principals tended to place their schools at the mid-point, although six rated their schools at a 4.

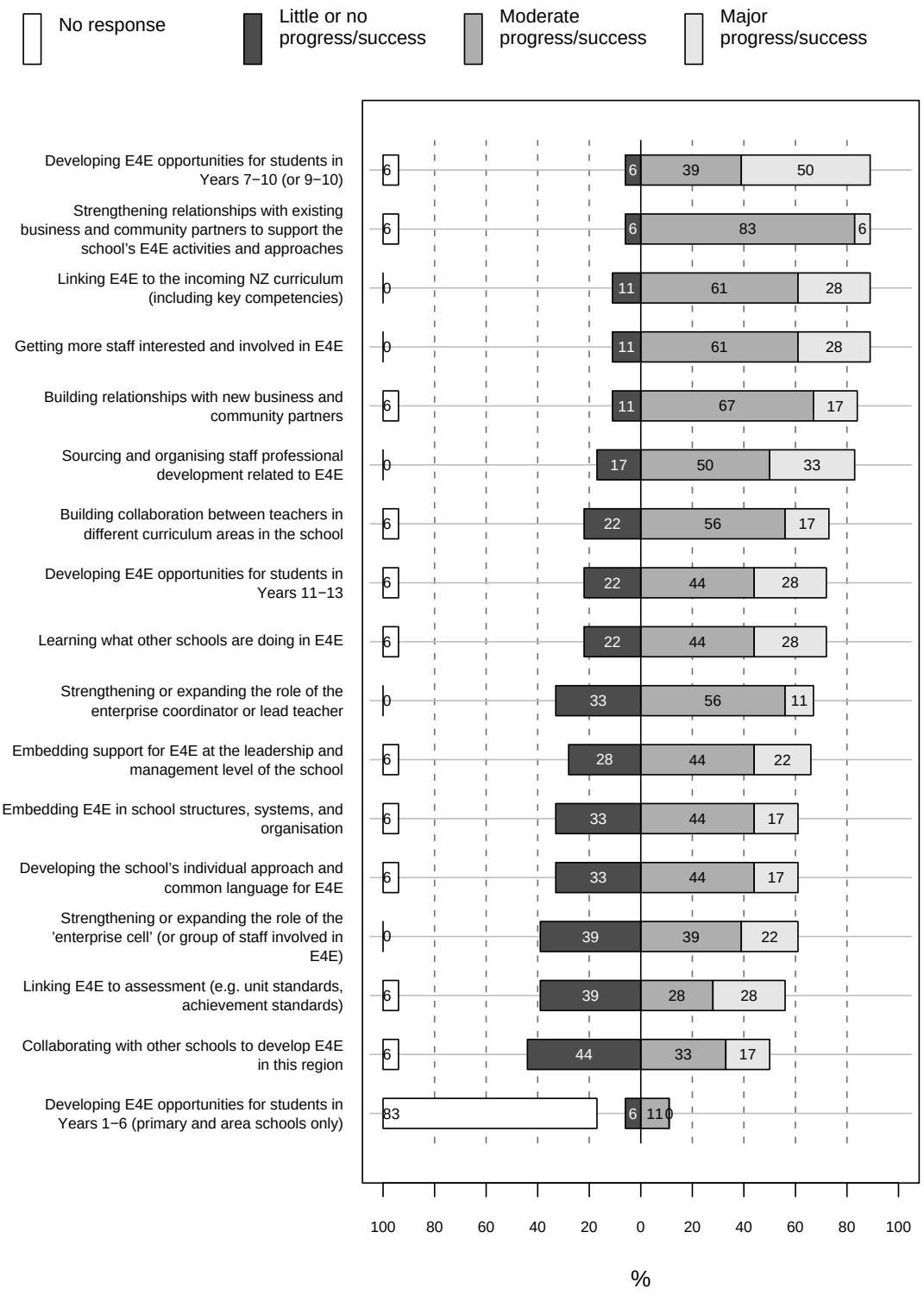
Figure 5 Principals' ratings of degree of integration of E4E across their school (n=20)



We also asked lead teachers to rate the degree of progress or success they felt they had made in their school during 2007/2008 in key priority areas. As Figure 6 shows, lead teachers were most likely to feel their school had made major progress in developing E4E opportunities for students in Years 9-10 (or 7-10). Moderate or major progress was felt to have been made in most other areas. However, areas where a third or more lead teachers identified little or no progress included:

- Collaborating with other schools to develop E4E in the region
- Strengthening or expanding the role of the enterprise cell
- Linking E4E to assessment
- Strengthening or expanding the role of the E4E lead teacher
- Embedding E4E in school structures and systems
- Developing the school's common language and approach to E4E.

Figure 6 Degree of school-wide progress with E4E during 2007/2008 (Lead teachers' views, n=18)



Structural and leadership support for E4E

We asked principals to indicate specific measures that were in place to support E4E in their school in 2007-2008, as well as any measures planned for 2009. These are shown in Table 9. Several areas appear to be expected areas of growth for some principals in 2009. For example, compared with 2007/08, more principals anticipated that in 2009 their school will be seeking new business/community partners, expanding the number of teachers involved in E4E, articulating a shared vision for E4E, allocating budget or resource to support E4E, making changes to school-wide curriculum, incorporating E4E into teacher appraisal or recruiting processes, and setting specific objectives or targets related to E4E. There were a few areas where supporting measures were lesser for 2009 than 2007/08, most notably in the provision of management units for the E4E lead teacher/coordinator. Two fewer principals indicated their school will have an E4E lead teacher or coordinator in 2009, compared with 2007/08.

Twelve principals commented on specific objectives/targets for E4E in their schools. Several principals indicated specific structural or curriculum plans in place for 2008 or 2009, such as:

> In 2008 [our target was] to have a year 10 whole year group involved in a cross-curricular E4E activity. Currently in final stages of planning and will occur in 4 weeks time. In 2008 all staff were required to set an E4E goal as part of their appraisal. Both the above will continue into 2009 (Principal)

> For every curriculum area to do something for E4E and to acknowledge the E4E in extra-curricular activities. A main goal for several departments [in 2008] was to develop more and strengthen existing business contacts (Principal)

> Each curriculum area/dept will have at least one E4E initiative underway in 2009 (Principal)

Other principals expressed more generalised progress goals such as:

> To widen teachers' knowledge and practiced applications of E4E programmes for students (Principal)

> Extend the opportunities for authentic learning through E4E to all departments (Principal)

Table 9 Supporting measures for E4E reported by principals (n=20)

	In place during 2007-2008	Planned for 2009
Having a coordinator/lead teacher of E4E (formally or informally)	18	15
Strengthening/deepening relationships with existing business/community partners	18	17
Establishing or strengthening a key group of enterprising teachers	14	15
Key staff within the school leading professional learning for their colleagues in relation to E4E (e.g. mentoring/supporting other teachers, running staff PD sessions)	15	14
Building relationships with new E4E business/community partners	14	19
Providing a management unit for the enterprise coordinator/E4E lead teacher	14	8
Gathering/seeking feedback from students to help evaluate approaches to E4E in this school	14	13
Expanding the number of teachers involved in developing enterprising approaches beyond the initial key group of enthusiasts	12	17
Articulating a shared vision for where the school wants to head with enterprising learning/E4E	13	17
Allocating resources or budget from operational funding to support E4E	13	14
Providing non-contact time for teachers' professional learning in E4E	11	11
Incorporating E4E or enterprising ethos into high level documents (e.g. strategic plan)	10	15
Making changes to school-wide curriculum planning to support enterprising learning	9	15
Incorporating E4E or enterprising ethos into teacher appraisal or recruiting processes	5	12
Setting specific objectives/targets related to E4E	6	10
Making changes to the school timetable to support enterprising learning	5	5

Staff attitudes towards E4E

Figure 7 shows lead teachers' and teachers' attitudes towards E4E in their schools. Almost all agreed or strongly agreed they were enthusiastic about making E4E happen in their school, but over half still felt their schools had some way to go in developing an enterprising culture. More than half also disagreed that they frequently heard other staff discussing E4E.

Figure 7 Teachers' views about E4E

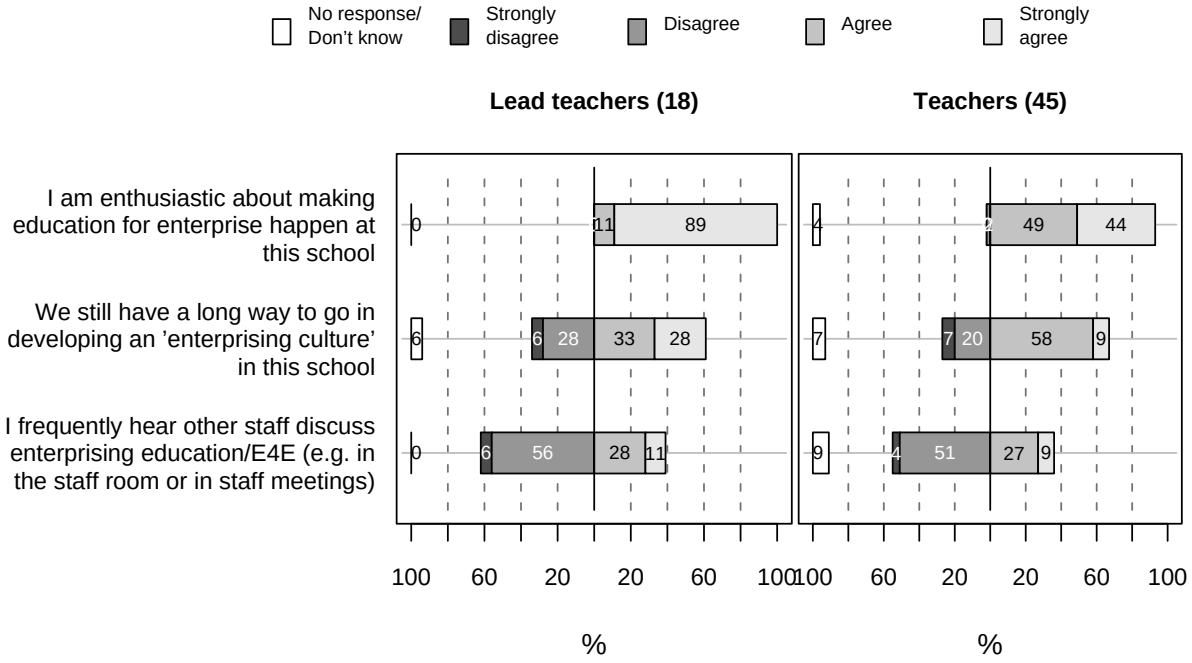
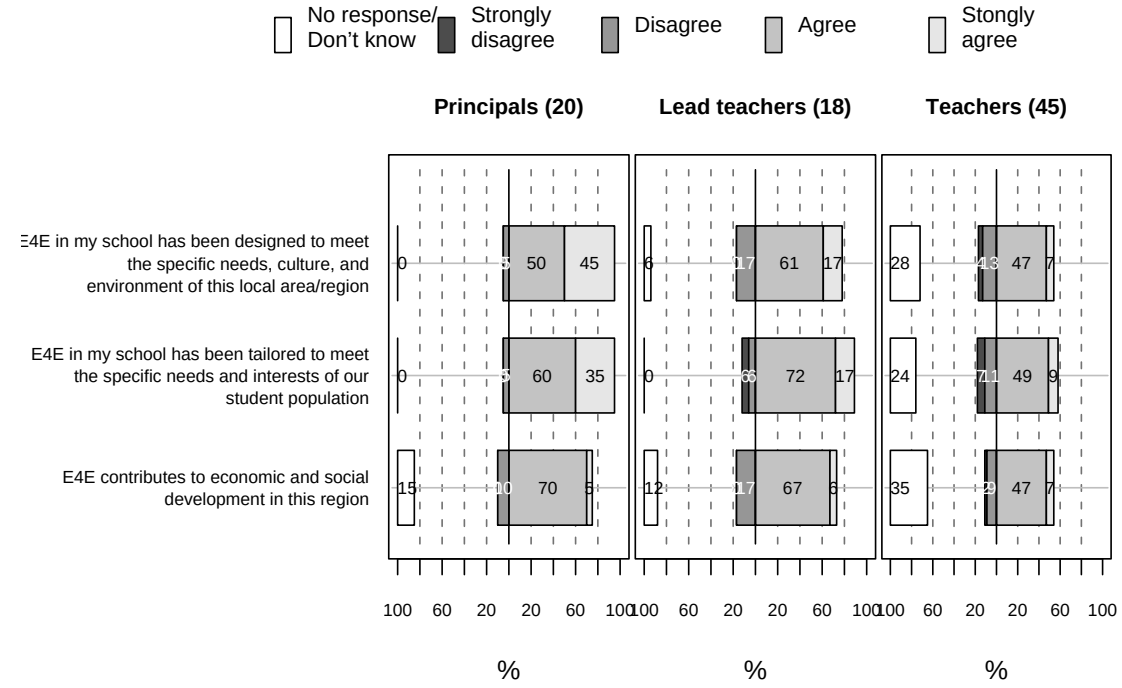


Figure 8 Tailoring E4E to school and regional needs



Adaptability of E4E to each school's and region's needs

Figure 8 shows how principals, lead teachers and teachers viewed E4E in relation to the particular needs of their students, school, and region. Most staff were inclined to agree (although not strongly) that E4E is tailored to meet the specific needs, culture, and environment of their region, and the specific needs and interests of their students. Likewise, most staff agreed that E4E contributes to economic and social development in their region.

Some comments associated with the statements in Figures 7 and 8 are given below.

> With respect to social development: closer community/school links, closer school/school links. Economic development - not sure. [It] certainly has enthused students about some local jobs that they might not have considered before (& these are highly qualified positions)
>
> It has not been a focus to contribute directly to economic development, rather to focus on authentic learning and engagement community partnerships - economic growth may come as a side product.
>
> Barriers to E4E - workload. It is not honest to say it won't be any more work for teachers. 2. When a teacher went from [provisionally registered] to fully registered and picks up extra teaching hours, this extra work load meant she had to give up involvement in E4E. 3. Schools are not a blank canvas. There is a lot of enterprising activity happening already in all spheres of school life. E4E needs to take stock of what is already happening in schools. The "project" model is not the only way to promote enterprise within schools. (E4E is one of many competing ways to deliver enterprise education). Need to assist teachers to recognise enterprise in other ways too.
>
> I use E4E as a way to engage my students as my previous business experience means I know the value it adds. The school culture is entrenched with NCEA based credit outcomes and this is what students expect. Current school teaching is not preparing students well for real life.
>
> I feel I am doing this in isolation in my subject area. There has been discussion that E4E activities for the school will take place but at this stage, this is yet to happen.
>
> I believe the community issue [my students researched] is all about social equity and has no involvement with economic or financial equity.

Relationships to the *New Zealand Curriculum* and other programmes and initiatives

We asked principals to indicate which of the documents or initiatives listed in Table 10 have been discussed or explored within the school, and which (if any) were directly relevant to their school's E4E development. All principals said their school had done a little or a lot of discussion and exploration of the *New Zealand Curriculum*, and 14 of the 20 principals identified the *New Zealand Curriculum* as being directly relevant to their school's E4E development. Careers programmes were the next most commonly identified as being relevant to E4E. Other

programmes and initiatives like Education for Sustainability, and Literacy and Numeracy programmes had been explored and discussed in depth in most of the schools, but were seen by fewer principals as directly relevant to E4E. Some principals reported that their schools had undertaken a little or a lot of discussion and exploration with respect to *Ka Hikitia* (11 out of 20) and Te Kotahitanga (6 out of 20), however only 3 principals saw these as directly relevant to E4E in their schools.

Table 10 Relevance of various documents and initiatives to school's E4E according to Principals (n=20)

	Number of principals
The *New Zealand Curriculum* (2007)	14
Careers programmes (e.g. STAR, Gateway, CPaBL)	10
Environmental education/Educaton for sustainability	7
Schools Plus	5
Literacy or numeracy programmes or professional development	4
Te Kotahitanga	3
Ka Hikitia	3

A selection of principals' written comments about E4E in relation to the documents and initiatives listed in Table 10 is given below.

New Zealand Curriculum

> We have used E4E as a way of developing professional learning for our staff as to the role of effective pedagogy in the *New Zealand Curriculum*. E4E approaches are a way of showing what shifts need to happen in teacher practice. This has been the focus for us in E4E, we have based a significant part of in school professional learning on E4E. (Principal)
>
> New curriculum has a focus on enterprise and entrepreneurity (sic) - both fit with E4E. (Principal)
>
> *New Zealand Curriculum* - key competencies, pedagogy, principles - all link to E4E as a vehicle for delivery. E4E becomes an integral part of unit planning across the curriculum. (Principal)
>
> The *New Zealand Curriculum* and Datasmart projects are directly connected to our E4E focus. The datasmart project is informing us about how our students learn best, their interests, what teaching and learning styles they prefer. The project for our school has a focus on improving student engagement to raise student achievement. The intent of the *NZC* has a focus on authentic learning and developing enterprising attributes in our students. We are using E4E as a strategy that uses the information gathered in the datasmart project to examine and change the way the *NZC* is delivered here. (Principal)

Education for Sustainability

> Relevant because we the support we get allows us to provide the students with hands on opportunities to make things happen e.g. recycling, worm farm. (Principal)
>
> With our acceptance onto the Enviroschool's Contract we will see that sustainability and the environment directly impacts on our school and community. Through this, students are looking at ways to enhance our school through projects such as E4E offers. To provide depth of learning and understanding, it must link the curriculum and our strategic goals.We will appreciate guidance to develop the links and planning. (Principal)

Careers programmes

> A lot more departments are wanting to use STAR as a result of E4E activities raising their awareness of the possibilities. Gateway is invaluable in placements in work experience for an increasing number of classes (e.g. hospitality and childcare) rather than the individual students it used to cater for. We long ago identified people working in this area. They are establishing a platform through career plans for a while lot more business partnerships and tertiary links. They have just cemented a good partnership with a local engineering firm as I write.
>
> Careers [education] etc links with community/school relationships. School plans would develop these links. (Principal)

Te Kotahitanga and Ka Hikitia

> Te Kotahitanga provides pedagogical practices that align with E4E. (Principal)
>
> *Ka Hikitia* is providing the framework which we are building everything else on. We like the: presence, engagement and retention emphasis and the way it really involves a shift in thinking. We have it all the way through our new draft annual plan. (Principal)

The Regional Cluster model

This section examines what principals, teachers, and lead teachers had to say about the support they and their schools received through the E4E Regional Clusters Initiative.

The role of National and Regional Coordinators and PD providers

Table 11 shows the percentage of staff who had interacted with either the regional or national E4E coordinators, and/or professional development providers associated with the Regional Clusters Initiative.

Table 11 Interactions with National and Regional Coordinators and PD providers

	% Principals (n=20)	% Lead teachers (n=19)	% Teachers (n=45)
Have interacted with National or Regional Coordinators	95	100	67
Have interacted with PD providers associated with the Regional Cluster model	70	67	44

Table 12 shows which forms of support associated with the Regional Clusters Initiative principals and lead teachers rated as "very important" in helping the development of E4E in their school. For most schools, it seems the most important forms of support have been encouragement for the school to get involved in E4E, initial liaison with business and community partners, and keeping schools up-to-date with what is happening regionally and nationally in E4E.

Table 12 Forms of Regional Cluster support that have been very important for my school (principals and lead teachers)

	% Principals and lead teachers (n=39)
Encouragement for my school to get "on board" with E4E (e.g. promoting why it is worthwhile to do E4E)	69
Keeping schools up-to-date with what's happening regionally and nationally with E4E	67
Help making initial contact with business and community partners	64
Professional development for groups of teachers/whole staff	62
One-on-one support/professional development for individual teachers	62
Feedback from NZCER's evaluation	56
Help managing ongoing relationships with business and community partners	49
Strengthening links and relationships between schools in this region who are doing E4E	49
One-on-one support/mentoring for the principal	21

Several principals, teachers, and lead teachers specifically commented positively about the coordinators and professional development providers and the regional clusters initiative. For example:

> The positive attitude and support has been great from both regional and National [coordinators]. Both a breath of fresh air (Teacher)
>
> A real strength for us has been the involvement of [regional PD coordinator] and [National coordinator] in our shaping of E4E programmes (Principal)
>
> We are fortunate that we have an enthusiastic, passionate, professional & competent Regional Co-ordinator (Principal)
>
> It was great! Great support (PD/Coordinator/lead teacher) made it easier, minimised challenges (teacher)
>
> It is totally necessary to have the support of regional and national co-ordinators and development people. [Our regional coordinator] made our E4E studies possible. [The coordinator] has been invaluable, has made the contracts, organised outside interests etc. The opportunities for students to participate. The works [the coordinator] does would not be done by teachers. I feel that E4E would founder if this support was not there (teacher)
>
> The regional cluster initiative has a lot to do with the success of E4E in this school (Principal)

None of the staff wrote critical or negative comments about regional coordinators or professional development providers; however some comments expressed questions or concerns regarding ongoing funding to support E4E in the regional clusters. For example:

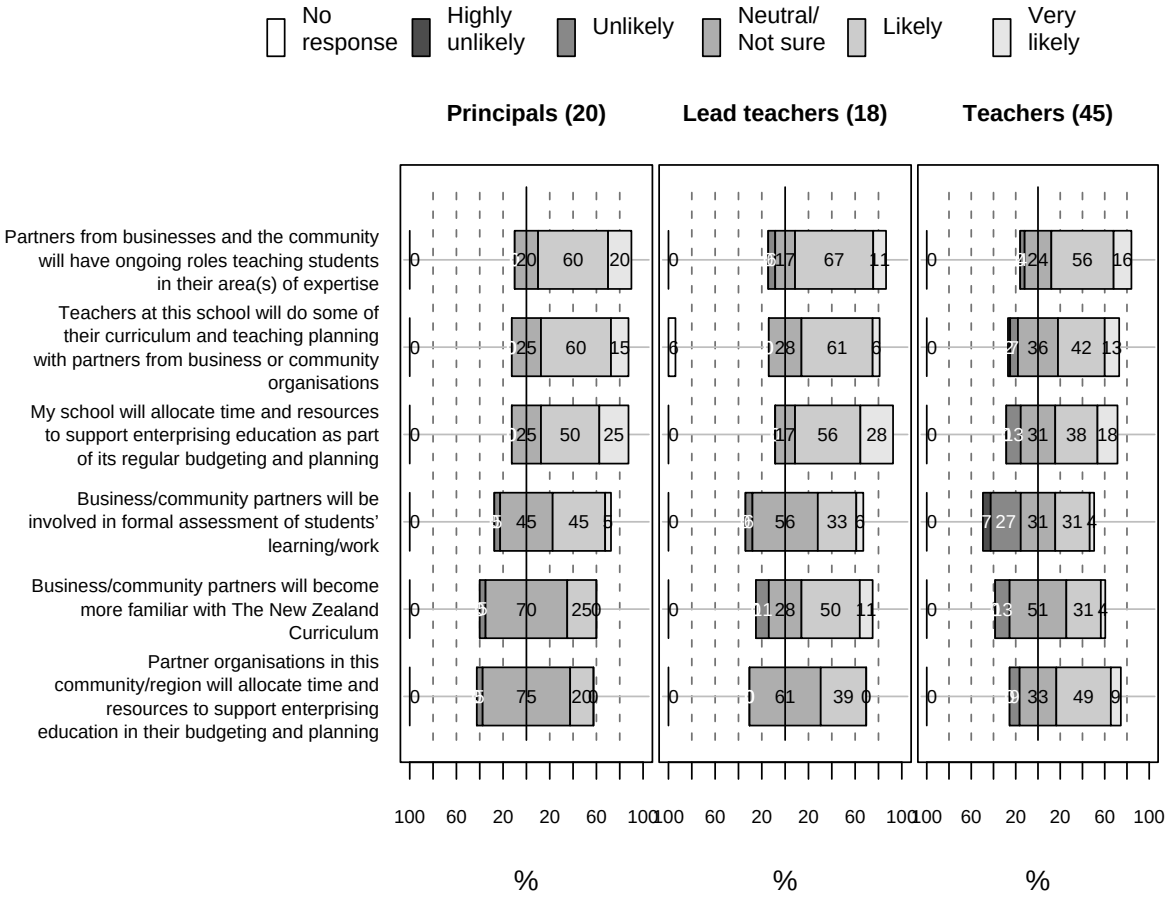
> This is well resourced outside schools (MOE, Economic Development Agencies) but this doesn't seem to filter down to schools to support E4E ONCE THE PILOT PROJECT ENDS. It needs to be more than a PR exercise. It would be helpful if achievement or unit standards were identified or developed to support assessment for a generic group enterprise project at level 2 or level 3 of the curriculum. (lead teacher)

> It takes a very long time and a bit of hard work to embed it into the culture. The first bits are easy and fun - now we are into the 'hard slog' where we want it to be visible and a the forefront of all planning. It would be nice to have some tangible assistance from MOE to know that they will keep the Regional Co-ordinators in place so we can play long term (principal)

What might the future hold for E4E?

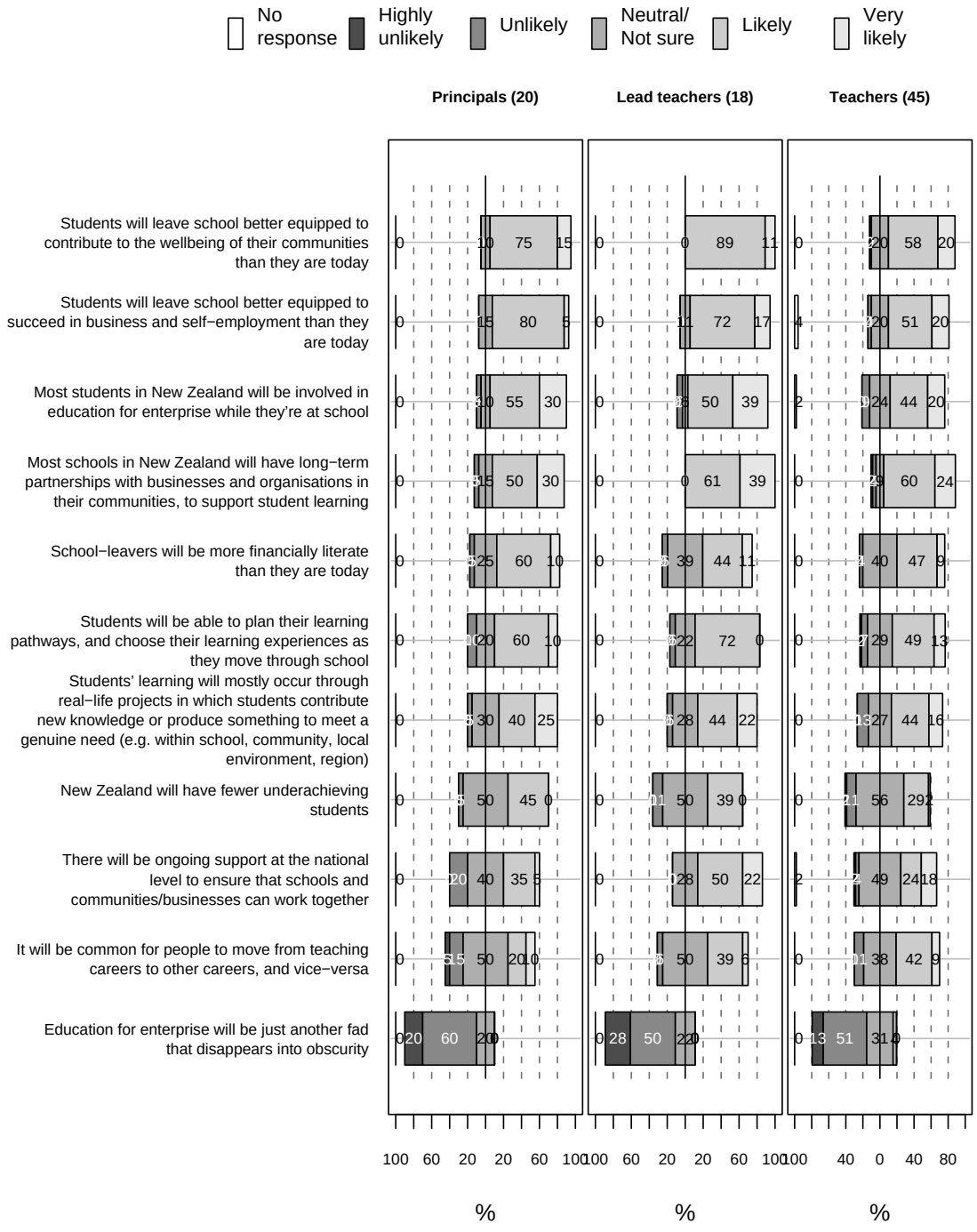
This final section looks at staff views about what is probable or possible regarding the future of E4E in their schools, and in New Zealand, in the short and medium term. Figure 9 shows what staff believed was likely regarding developments within their own schools within the next two years. Most staff believed it was likely that relationships with business and community partners would continue, for examples, these partners would have ongoing roles teaching students in their areas of expertise, or that teachers would do some of their planning with them. Staff were less likely to think this involvement would extend to being part of the formal assessments of student work, that partners would have more familiarity with the *New Zealand Curriculum*, or that local business and community partners would actually support E4E formally in terms of budget and/or resourcing (although more than half the teachers seemed to think this was reasonably likely).

Figure 9 What is likely for E4E in this school/community in the next two years



Looking further and more broadly to the future, we asked staff to say how likely they thought various scenarios for schooling in New Zealand would be in the next ten years. Figure 10 shows their responses. It is encouraging that few believed that E4E would be just another fad that disappears into obscurity.

Figure 10 Likelihood of scenarios for schooling in NZ in the next ten years



Final comments

Some staff wrote a final comment to summarise their views of E4E. A representative selection of comments is given below.

> I have enjoyed implementing E4E in my personal teaching practices and hope with the introduction of the new curriculum, more teachers will have the opportunity to explore and break free of the current systems. (lead teacher)
>
> E4E is here to stay. It has given us great deal to think about how to implement new ideas in the 21st Century teaching and learning (lead teacher)
>
> I find it interests that E4E has a "new idea/profile/feed" to it. A lot of teachers have been working with the community + businesses for years & will continue to do so regardless of investment in 'E4E'. (teacher)
>
> The BEST initiative we've had in terms of outcomes for students and a change of teacher practice. Students' enjoyment of learning is very evident. (Principal)