This chapter shows how Emily’s and the other students’ views about subjects changed and developed over the course of the study and discusses the explanations they gave for changes in their points of view.

**Best and Least Liked Subjects**

Students were encouraged at each stage of the study to nominate the subjects they liked learning about best. The question simply required students to volunteer their best-liked subjects off the ‘top of their head’, rather than give a relative rating to each in a list of subjects presented to them. From Phase 2 onwards, students were also asked which subjects they least liked learning about.

**Best Liked Subjects**

The data in Table 5 — and also Table 6 (least liked subjects) — indicate that, irrespective of whether a student has an intrinsic, overall interest in a subject, attitudes towards subjects quite probably will not remain constant. For example, while she had not nominated mathematics as a favourite subject in Year 8, it had become one for Emily in her first year at secondary school. This was because…

> “…I really like the teacher and he makes it really fun.”

However, Emily’s choice of English in Phase 2 as a best liked subject is consistent with her response in Phase 1, when she nominated writing stories as a favourite activity. Emily stated:

> “I’ve always enjoyed writing and being creative. And we’re learning new things in English this year and they [teachers] make sure you understand.”

By contrast, in Phase 3, while Emily again said mathematics was a best liked subject, she now nominated social studies and not English (her explanation regarding English is discussed under ‘least liked subjects). Metalwork was also a current favourite subject — “We made a train” — and, as was the case when she was in her final year at primary school, Emily was especially enjoying performing arts.

Emily’s main reason for continuing to nominate maths as a best-liked subject was once more due to the teacher:

> “Look forward to having a class with the teacher.”

Similarly, the teacher was a very important factor in Emily’s enjoyment of social studies, both because she liked her and because she felt the teacher demonstrated good teaching practice:

> “She’s a cool teacher. She explains so we understand. And she jokes with us so is not boring.”

Emily also named several favourite subjects in Phase 4 (Table 5), stating that she enjoyed them…

> “…mainly because of the teachers and because I love the subject in particular. [For example], social studies, that’s cool. [And] I enjoy English right now because we are doing ‘careers’ but I didn’t enjoy the book we had to read.”

Emily’s attitudes towards subjects did not remain constant.

Liking a subject was heavily influenced by feelings about the teacher of that subject.
Table 5: The subjects Emily liked learning about best

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reading</td>
<td>N/A&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Writing</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>English</td>
<td>N/A</td>
<td>✓</td>
<td>✓&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Science</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social studies</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PE and health</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tikanga Māori</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Te reo Māori</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other language</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Art</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing arts/ drama</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td>✓</td>
<td>(metalwork)</td>
</tr>
<tr>
<td>Computers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other subject(s)</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

<sup>a</sup> ‘Reading’ and ‘writing’ as subjects in their own right did not apply once students were at secondary school. Likewise, students did not study ‘English’ per se at primary/intermediate school.

<sup>b</sup> Emily qualified her nomination of English as a favourite subject in Year 10 by saying: “[I enjoy it right now — but] it depends on the topic.”
All Students

Their 'best liked' subjects

Asked 'What subjects at school do you like best', almost all students specified at least one 'best liked' subject at each phase of the study. However, 'best liked subjects' nominated by individual students often varied over the course of the study, frequently influenced by how they were feeling about specific topics currently being studied within particular subjects, for example.

When we asked the students to say why they enjoyed particular subjects more than others, their explanations characteristically included the words 'fun', 'exciting', 'interesting' and 'new'.

More specifically, they tended to most like a subject when:

• the subject material was made fun and interesting:
  - "They [social studies, PE, and performing arts] are fun: we do interesting things and we are not just sitting down doing nothing."
  - "PE, it's fun and keeps me fit for the rugby league season."
  - "Social studies, I like that because it is interesting, about history and people. We are learning about South African history and about the Dutch."

• they were learning new things:
  - "I learn new things in English and performing arts, it's about excitement."
  - "I get to learn new things and they are fun subjects."
  - "I liked Māori because it was a new language that I never learned before."
  - "I like maths because we're learning different things. At primary, it was often a lot of the same things that we'd do."

• they could see the relevance of what they were learning to themselves/real life:
  - "Science, it's interesting: all the equipment in the lab. I enjoy experiments and I like being told about the practical applications of science."
  - "Social studies, it's cool what we've learnt about, real projects like endangered species. Graphics: it has the best homework ever! You get to draw something, like design a microwave oven. The teacher was an engineer, he tells us a lot about all the things he drew."
  - "In technology, I like learning new things about computers and just generally learning useful stuff."
  - "Social studies is interesting, and it tells us what's gonna happen in the future — for example, how the ozone layer is getting big, how it's gonna affect us if we don't stop it."
  - "[In social studies] we get to know how things were created in the world and what's happening in the world."

• lessons included practical, hands-on approaches:
  - "I like hands-on, practical work (in English, music, PE, performing arts)."
  - "You get to make stuff, like electronic circuit boards."
  - "Metalwork is fun, it's to do with metal work, working with my hands. More practical, which is what I like."

• they felt they were good at it and/or they could see they were making progress (helped by receiving effective feedback):
  - "I like art because my teacher says I'm good at it."
  - "For performing arts, they help you get rid of your shyness and stuff and get more confidence."
• they liked the physical activity involved and/or being able to move around while they learned;
  - "[I like] PE, art, technology: they're more active, rather than sitting all day at a desk."

• the subject was challenging;
  - "English, but not just when it’s reading comprehension, more things like studying an author
    or a book or poetry (reading and writing poems): the more in-depth stuff. And I like science,
    it’s different from last year."
  - "Science makes me think about why things happen: cause and effect."

• they found the content straightforward/easy;
  - "Maths, because it is easy for me."
  - "Maths — because I get it!!!"

• they liked feeling they were actively contributing to their own learning; for example, by carrying
  out their own research, especially for assignments where they’d had a choice of topics.
  - "In social studies we do fun project work and get to go on the Internet and do searches.
    I actually learn something: at the end of the day I feel that I have learned."

Students often mentioned relationship factors too: liking and respecting their teacher — getting on well
with the teacher and/or finding that the teacher explained well and generally helped or facilitated their
learning; and, getting on well with the other students in the class which impacted on how well they
worked and learned together.
  - "Teachers are fun to learn from. They sometimes play games. And in art the teacher doesn’t rush you."
  - "The teachers, the way they teach. Maths, I like it because it’s my form class so we all know each
    other and get on well together. And in performing arts I see other friends and in French I get to
    make new friends."
  - "The teachers make me feel good about myself, like I know what I’m doing."
  - "In performing arts, I get to do something and I don’t get left out. And [I like] social studies
    because the teacher makes me feel comfortable."
  - "In performing arts, the teacher is cool: she never growls unless we are really naughty."
  - "Maths, because sometimes I don’t understand so the maths teacher makes it very clear and now
    I’m good at maths. For English, the teacher makes me learn more English stuff so I can improve."
  - "Performing arts, because I can get along with my teacher. She understands that if I cannot do
    something she accepts that I just can’t do it."
  - "Cause of the students in my class, and the teacher, they’re great!"
  - "I like those [subjects] the most because of the teachers: they’re nice, helpful, fun [other teachers
    need to be more fun]."
  - "PE, I love it. The teacher is fun, she’s cool."

A number of students also simply stated that they liked a subject because the content area or activities
involved appealed to them.
  - "Maths because I just enjoy trying to figure out the solution or answers — problem solving."
  - "They [English, technology, te reo, performing arts] are fun — they are just what I like!"
  - "Maths — I like thinking about numbers; social studies — I like thinking and talking about
    somebody else’s stories."
  - "Music and drama, because they’re my hobbies too."

And a small number of students — usually those who said they liked all or almost all of their subjects
‘best’ — stated that: "I just like learning."
Least Liked Subjects

Table 6 shows that after several weeks at secondary school, science was one of two 'least liked' subjects named by Emily.

This is in contrast to her statement in Year 8 that science was one of her favourite subjects. Emily had this to say about her change of viewpoint:

"I used to like it [science] — but there are no interesting experiments now. [Science is] not as interesting as [it was in Years 7 and 8] or as interesting as I thought it would be. [Last year, for example], we did the NiWA science fair. Now it's just about writing stuff down all the time. It doesn't seem like an important subject anymore."

Other information shows that whereas social studies was one of Emily's best liked subjects at the end of Year 9, earlier in the year it had been one she'd least enjoyed:

"I like the teacher but not the subject — 'cause [the topic we're learning about], it's about land."

And contrary to the views she expressed about writing in Phase 1 and English in Phase 2, Emily named English as a least liked subject at the end of Year 9. On the basis of earlier comments about her teachers, it seems that Emily's altered view about English in Term 4 was due in large part to a change of teacher part way through the year, which had been unsettling for the whole class.

Her reasons for nominating art as another least liked subject in Phase 3 were that:

"It's not fun, it drags and drags, it's much harder than you think, [and the teacher] doesn't want us to talk."

Emily regarded English and science as two of her least favourite subjects early in Year 10, but qualified this once again by saying it depended on the topic. For example, she was currently enjoying English because of the interesting careers unit they were undertaking. This involved each student being randomly assigned a vocation — in Emily's case, a 'jeweller' — which they then had to research. Her task was to investigate the qualifications a jeweller would require, find out what a jeweller would typically do in a working week, what they would earn, and the sort of lifestyle that would be possible on the basis of that income. Emily particularly enjoyed the 'real life' aspect of this assignment.

Table 6: The subjects Emily least liked learning about*

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reading</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Writing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>English</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Science</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Social studies</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>PE and health</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Tikanga Māori</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Te reo Māori</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other language</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Art</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Music</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Performing arts/drama</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Technology</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Computers</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Other subjects</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* In Phase 1, students were not asked about subjects they least enjoyed learning.

b Emily explained that while she mostly regarded English as one of her best liked subjects (see footnote b in Table 5), at other times it was one of her least favourite subjects because of "some of the topics — when it's something boring."
By contrast, Emily had recently not enjoyed English at all because of the novel they were studying. In part, this was because she did not find the book personally relevant or engaging and partly because it was “really boring” having to listen to classmates take turns to read a portion of the book aloud during lessons.

It was evident from Emily’s observations, that particular teachers, particular topics or activities within subjects, and also particular ways of teaching, are likely to have a considerable effect on a student’s attitudes towards a subject at any given time.

Emily particularly enjoyed topics that she could easily see related to real life.

All Students

Reasons for not liking subjects

We asked students in Phases 2, 3 and 4 to name the subjects they least liked learning about, together with their reasons.

Each time they were asked, irrespective of the subjects the students identified, there were common themes in why they did not like particular subjects (or topics within subjects). The reasons most often given were:

- relationship difficulties with teachers;
  - “I don’t really like the teacher and that makes a difference. She is too strict. Can’t really learn, she is always telling us off.”
  - “Teacher is not very helpful.”
  - “The teachers don’t like me. I just don’t like the teachers or the classes.”
  - “The teacher in maths sometimes mistakes me for doing something wrong — he blames me for talking.”
  - “We got a different teacher and she doesn’t really like any of us and it’s more difficult to learn.”
  - “Maths, it’s boring, and the teacher in maths tries to make us hurry and after s/he explains it we don’t understand some of the words s/he uses to explain it. And we ask about what s/he was showing us (formulae) and s/he just told us to stay after school for detention.”
- finding the material was not at an appropriate level for them: too difficult, too easy, or too much the same as material they’d previously covered;
  - “Don’t like the content and the way it is taught. Easier than what I thought, same as last year.”
  - “Maths: we’re just repeating stuff we did last year.”
  - “Science, lots of hard language. hard to understand. Just done chromatography, don’t know what it means.”
  - “Maths — it gets too difficult because we are doing Year 10 work [in our first term in Year 9].”
  - “It’s hard to learn Māori even though I am Māori.”
  - “I’m not the best mathematician, and ‘cause the teacher doesn’t explain it well.”
  - “Learning English, it’s too hard. All the reading.”
  - “Maths: I don’t like number topics. I know all the formulas but can’t do it practically. We can use the scientific calculator this year which is quite good. But can’t do basic facts!!”
  - “I don’t really understand.”
  - “In art, we do the most boring-est stuff. Māori patterns, I hate Māori patterns now because we’ve done too much of them. We did them last year.”
  - “Science, it’s hard, all the signs (chemistry) and stuff. And we do a lot of copy work.”
  - “Music is too hard.”
  - “Maths, just because it’s too much work and homework. I was away a lot last year with ’flu so I didn’t get to learn a lot of maths.”
- finding aspects of it outside their personal comfort levels (eg, due to shyness, being self-conscious);
  - “I don’t like PE because I don’t like playing in front of people when we have to play games like cricket and tennis.”
### All Students

#### Reasons for not liking subjects – continued

- "Māori, music, drama, they are really hard for me. I hate standing up in front of people and doing things."
- "I took drama because I know I had to do one performing arts, but I don’t like getting up on the stage and performing."

- finding the subject matter to be boring or not feeling it was relevant:
  - "In English we have to do so much boring stuff, like poetry."
  - "I don’t like metalwork because it’s just not interesting to me."
  - "In English, I don’t like Shakespeare, it’s too classic. It’s hard to understand. They try to teach you about movies, storyboard, how to make a movie, the angles. We discuss the movies: how you feel about the movie. ‘Do you think it was funny, scary?’ But I just like to watch the movies."
  - "Don’t really think that [it] would be useful in the long run. Nothing really ‘clicked’. Just didn’t like it."
  - "Can’t see maths being relevant to my job in the future."

- finding the teaching approaches to be boring, unchallenging, and generally not helpful for learning or motivation (eg, having to do too much copying work):
  - "Too much writing in science, no experiments, too boring; and ‘In science we do more writing than we do experiments."
  - "Maths is boring, would like to do more exciting things. It is mostly book work."
  - "Teacher is boring, talks too much and writes a lot of stuff on the board and we have to copy it down and then he rubs off the first part before we have had a chance to copy it down. I don’t like that."
  - "Music is boring because all we ever do is keyboards. I like to play other instruments."
  - "Maths is boring: I like the subject but not how it’s taught. But hopefully we will get a better teacher next year. And in social studies, we have to do a lot of copying from books or from OHPs."
  - "Technology (electronics) was extremely boring. It was just doing theory. About all we do is write (although we did make a useful device after awhile). It’s much better when it’s theory and practice together. I don’t like subjects when they’re boring."
  - "It’s quite confusing in science, learning about all the elements. It’s boring the way it is taught. We don’t get to do experiments. It would be cool if we got to do more experiments. We also have to do lots of writing. Out of all our subjects, we have to do the most writing in science."
  - "In English you do the same kind of thing every time: worksheets and writing, it’s boring, it just drags on. We work in groups and have to write group stories. The teacher tries to help but it just doesn’t work."

- that the classroom environment was not conducive to learning:
  - "Disruptive class: would like it [art] if we actually did stuff, doesn’t really go anywhere."
  - "Because every time you go to graphics it is too noisy and you can’t hear anything and the teacher just goes on and on."
  - "I want to learn science but, you know, students talk too much and you can’t work."
  - "English, most of it is good, but sometimes our teacher, she gets a bit cross. Our science teacher is sometimes grumpy too. And the class plays up more. So sometimes the students are the problem!"
  - "Probably because the teacher is not, you know, she’s not really strict and so people can like step all over her — we don’t get a really good learning system because of that. She’s not telling the other kids to quiet down, and people can just step all over her. All of them [other students in class] are really distracting, you can’t really learn in English."
Teacher Views on Emily’s Most and Least Preferred Subjects

In Phase 1 we asked each participating student’s (main) class teacher to specify the subjects they felt the students most and least liked and also subjects the student did best and least well in. In Phase 3 the students’ form class teachers provided similar information. Table 7 has the results for Emily.

For more focused information on subject preferences, we also asked each student’s English and mathematics teachers in Phase 3 to give their opinion on how the student viewed the particular subject area that they were teaching them.

The English teacher’s feedback (equivalent information from the mathematics teacher was not provided) that Emily ‘mainly liked’ English at this stage of her schooling is at odds with Emily’s nomination of English as one of her least liked subjects in Phase 3. Emily attributed much of her reduced interest in English to feelings about her teacher but from the teacher’s perspective, it appears that Emily’s intrinsic liking — and, probably, her aptitude — for this subject remained evident. It may also be that the teacher’s view was influenced by Emily being, on the whole, well behaved in class.

Most Interesting and Useful Things to Learn about at School

Responding to a question in Phase 1 on whether the things they learned at school were ‘interesting things to learn about’, Emily’s reply was ‘yes, some of the time’ — “majority of the subjects”.

A related question for students in Phases 3 and 4 was ‘Of the things that you’ve been learning at school, this year, which do you think are the most interesting, useful or important things to learn about? To help students, we added the prompts: ‘does learning about these things help you in your life; ‘how might they help you in the future?’; or, ‘why have you found them interesting?’

Emily’s response in Phase 3 was:

“In maths it was algebra — I really enjoy that. In social studies, Māori history, ’cause it’s my history. And I got 8 out of 10 on an assignment about famous people; I did it on Nelson Mandela. In performing arts, my confidence has really grown. I performed in the school concert; I did a solo. I love drama and dance.”

And in Phase 4, of particular interest and importance to Emily so far that year were:

‘Drama techniques: improvisation, conventions (‘flash back’ and ‘flash forward’, ‘slow motion’); choruses.’

Emily’s responses here again highlight the point discussed earlier, that attitudes towards a subject can fluctuate over time, and that this is often influenced by how a student feels about the particular topic currently being studied.

Table 7: Teacher views on the subjects that Emily most and least liked

<table>
<thead>
<tr>
<th>The subject the student…</th>
<th>Phase 1: Year 8 (main) class teacher</th>
<th>Phase 3: Year 9 form teacher*</th>
</tr>
</thead>
<tbody>
<tr>
<td>…likes best</td>
<td>Written language; group work; research</td>
<td>Social studies</td>
</tr>
<tr>
<td>…likes least</td>
<td>Reading; fitness</td>
<td>[not answered]</td>
</tr>
</tbody>
</table>

* Form teachers were first asked if they were ‘aware of how things are for this student in his/her subjects generally — eg, the subjects s/he likes best and least and/or how the student performs in different subjects?’ Only teachers who answered ‘yes’ were then asked to state the subjects they thought the student most and least liked.

Emily was less positive about English than her teacher realised.

Emily valued learning things she could personally identify with.

Emily was less positive about English than her teacher realised.

Emily valued learning things she could personally identify with.
Luke on the Most Interesting and Useful Things to Learn about at School

In Year 8 Luke thought that almost all of the things he learned about at school were ‘important or useful’ things to learn about…

“…because you’re going to use it in later life.”

In relation to whether his learning at school was ‘interesting’, Luke felt that it was ‘some of the time’. He specified maths, PE and sports as the most interesting things he was learning.

One year later, towards the end of Year 9, when asked what he had found to be the ‘most interesting, useful or important things to learn about’ that year, Luke replied:

“Nothing stands out, not yet.”

But in Year 10, to this same question, Luke was much more positive and forthcoming, nominating several things that he had found interesting, useful or important:

“Computers, typing is useful, the Treaty of Waitangi and the Battle of Taranaki and just all of it [ie, social studies] is interesting and important, and home economics is interesting, so many things I didn’t know. And in cooking we have been making things like muffins: that’s useful, and fun. I enjoy cooking.”

Choice of Option Subjects

Having option subjects was something that many of our Year 8 students looked forward to when they thought about going on to secondary school. Option subjects can give students a sense of having some control over what they study. However, making choices about the option subjects that would be best or most enjoyable for them can also be difficult for some students, because of lack of knowledge or experience. And in some cases, ‘choice’ may be imposed upon them by someone else.

It seems reasonable to assume that a good match between students and their option subjects will contribute to students having positive feelings about their secondary schooling experience. With this in mind, we wanted to know something about how students chose their options and how they were enjoying the options they were undertaking.

Emily advised in Phase 2 that she had chosen performing arts and art as her two Year 9 option subjects. Her reasons for choosing them were that…

“I love dancing and acting and am confident to perform. [And I chose] art ‘cause I thought it would not be much work and a nice break but I was wrong! (But I find it a big help in understanding literature and social studies.)”

Although at this stage Emily was clearly trying to see the positive aspects of having chosen art as one of her options, discussion earlier in this chapter shows that by Phase 3, Emily viewed art as one of her least liked subjects, with the suggestion that it had not lived up to her expectations of being a relatively easy, fun option. It is also of interest to note that Emily’s Year 8 teacher felt that art was one of the subjects in which Emily had performed least well in her final year at primary school (refer Table 9).

In Year 10, three option subjects, rather than the two of the previous year, were available to students. In Phase 4, Emily was again taking performing arts as one of her option subjects; her other two options were ‘information management technology’ and ‘business studies’. She explained that she had chosen…

“…performing arts ‘cause I love it, computers because it will help in all careers in the future, and ‘business studies’ ‘cause I’ve got the confidence — I like to inform people and I’m able to persuade people — and because it looks fun and will help with future ideas.”

But when reflecting in Phase 4 on her option choices it was evident that once again Emily was not happy with all of her choices. She stated:

“I do enjoy ‘business studies’ [and, of course, performing arts] but I don’t enjoy computers [‘information management technology’] because the computers are really slow and it’s a boring subject and the teacher doesn’t make it interesting.”
To the Phase 1 question ‘Do you think the things you learn at school (in class) are important or useful things to learn about?’, the large majority of students answered ‘yes, mostly’ (85%). Most of the rest (13%) thought this was the case ‘some of the time’. Only one student responded ‘no’, explaining that this was because it was often hard to see the personal relevance of what they were learning: “Lot of stuff you won’t use when you’re older. [For example], some reading stuff is useless — have to read something and answer the questions: the questions are dumb.”

Students who felt that what they were learning was mostly important and/or useful usually made reference to the core curriculum subjects (maths, reading), or to when they learned about practical things — such as cooking or knowing how to do your banking. The common theme in responses, therefore, was to do with learning that would prepare them well for the future: “If you can’t read, you can’t get a job.”

A further question in Phase 1 — ‘Do you think the things you learn at school are interesting things to learn about?’ — resulted in a rather different pattern of responses, with just over half (56%) of students answering ‘yes, mostly (usually)’. A further 39 percent answered ‘yes, some of the time’ and four percent, ‘no, not really’. On the basis of these data, it seems that students were considerably less likely to find their schoolwork interesting than they were to feel that it was important or useful.

As might be expected, what appealed to individual students varied greatly. But aspects of their learning that students found interesting in Phase 1 most often included:

- special topics, especially when they were able to choose their own topic and carry out the relevant research themselves;
  - “Don’t find core subjects interesting but I like researching topics. I like having the choice. I researched a country in the world — I chose America and used the Internet to find out things about it.”
  - “I like topic work. We’re learning about religions at the moment. We find out stuff that you wouldn’t otherwise know about. I would like more choice of more topics.”
  - “I like one of our science topics — evolution of man. It’s really interesting. We get to learn stuff we didn’t know.”
  - “I’d like to do more ‘enquiry’ work. I found religions interesting and also water elements was pretty interesting. And out of ‘enquiry’ work we get to go places. Like when we made advertisements, we went to an advertising company [as part of our research].”

- learning about other cultures or other languages;
  - “I like learning about other people’s culture, how they live and the sort of things they do and wear. We are learning about this island called Tonga.”
  - “Learning how to speak other languages. My teacher knows other languages.”
  - “Cultures and stuff. When I grow up I want to go round the world.”

- mathematics;
  - “I like learning maths — learning a lot more skills this year.”
  - “Learning maths — we learn different things every day instead of doing the same maths.”
  - “Maths: I like sequences, rules.”

continued…
### All Students

**What they found most important, interesting or useful to learn about at school – continued**

- **reading:**
  - “I enjoy reading comprehension.”
  - “Reading — I like it and get more knowledge by reading.”
  - “Reciprocal reading. Rainbow reading. That’s what I like.”
  - “Reading, because I get a wider range of bigger and longer words, more vocabulary.”
  - “Reading: I like to read about animals and I like going to the library [during class-time].”

- **science:**
  - “We did ‘forces of gravity’ in science. Just learned new things I didn’t know before.”
  - “Science makes you think.”
  - “I like working on science projects: the creativity of doing that.”

- **history/social studies:**
  - “We’re always learning about the future and the now, history is about the past. It’s important you know what went wrong in the past and don’t repeat them [the mistakes].”
  - “History because you can learn more about the past, famous people, and it can be about other countries’ past wars.”
  - “We did the ’80’s. Found that interesting ‘cause things have changed since then.”
  - “Learning about how it used to be in earlier years, what it was like in the 1900’s. It’s way different now.”
  - “We’re learning about ancient history — lapis lazuli pottery [and things like that]. I like it because you get to know more about it.”

- **learning practical/life skills:**
  - “In social studies, [learning] how to walk away from a fight and how to handle your anger and not take it out on someone else.”
  - “[Interesting] learning about puberty.”
  - “Food technology, because you can learn easy recipes.”

- **learning about cultural matters of personal relevance to themselves.**
  - “Māori — it’s my favourite because that’s my background, that’s who I am.”

Other ‘interesting’ things mentioned related to the arts and sports/fitness activities.

As well as specifying particular subjects or topics within subjects that they found interesting, students quite frequently commented on what contributed to their finding learning interesting: mostly — reinforcing themes referred to throughout this report in relation to ‘student engagement’ — these comments were to do with having interesting activities in class, doing things in different/innovative ways, being able to see the relevance of what they were learning, learning new things, and having some choice:

- “Maths is often boring — we just do, like normal stuff, get stuck on the same subject. Lots of numbers. But when we do things like doing graph assignments — average head size, eye colour [etc] — when we choose our subject and put it into a line or dot graph, it brings it to life and is much more interesting. And in technology we have been building 3-D structures, something a bit different from what we normally do.”

continued…
Chapter 10

All Students

What they found most important, interesting or useful to learn about at school – continued

- "Doing practical things to help us learn; in maths we are making an algebra game on the computer."
- "Hands-on things, like when we have to make things."
- "When we go on trips — like we went to the museum as part of our topic study. It’s interesting doing stuff outside of school. If you’re only at school it gets a bit boring, so doing something different is a bit cool."
- "I like learning new stuff, like about space (something I’ve never known about)."
- "Hands-on stuff, like in technology, and in science when we dissected a cow’s eyeball."
- "It’s kind of fun when we do things in groups."
- "PE, when we have free time and can choose what we do. I enjoy shooting goals."
- "We did evolution and, like, we didn’t learn anything! It’s like early man and like it’s so boring. We had hardly any information [to work with]. We had to get it ourselves and put it on a boring poster. It was OK but I wouldn’t do it if I had a choice. I would like to learn about being a lawyer or learn about teaching or something — something that’s good, that I could use."

Views following transition

In Phases 3 and 4, students were asked an equivalent question to the one asked in Phase 1, albeit worded slightly differently. The question was: ‘Of the things you have been learning at school [so far] this year, which do you think are the most interesting, useful or important things to learn about?’

Once more, as illustrated in the comments that follow, students were particularly positive about subjects and topics when they could relate what they were learning to themselves in some meaningful way.

It seemed that some students were particularly good at making links between what they were learning in and across subjects with everyday life, either on a personal level and/or more generally, and at relating present learning with what they might do in the future. This ability perhaps made them more likely than other students to be ‘open’ and see value in a wider range of learning content and opportunities.

As well, it appeared that some teachers were particularly good at ensuring that students were able to see and understand links between classroom learning and the wider world, making the subjects more interesting and worthwhile for students.

Phase 3 comments

- "Health is quite interesting, it’s less boring than other subjects. She teaches us good, useful things about life: stuff about smoking and how it’s bad for you. Social studies is good for the future. Even though it’s kind of boring, it’s useful: political stuff and leadership. I’ve never been good at that before."
- "Like, stuff in social studies: conservation, pollution, and stuff like that. It’s been the easiest subject to learn about throughout the year. And French: it’s a bit hard for me but it’s a good thing to learn. It’s good to learn another language, for when you go travelling. So you will know the basics of it if you go to another country."
- "Shakespeare in English, that’s pretty cool. I like the way they used words back then and how they’ve changed back now. I liked when we did a study of parliament in social studies. I understand more now about how the system is. And in performing arts I like learning about different music and listening to different music."

continued…
All Students

What they found most important, interesting or useful to learn about at school – continued

- “Social studies: I found learning about all the cultures in New Zealand interesting. I really like Shakespeare in English — 'Midsummer Night's Dream'. Those are the two things that stand out.”
- “Option classes: enjoy my options because we pick them.”
- “Graphics: I need it for my career. Science is quite interesting, learning about light and sound, and about ears and eyes (what's inside them). And maths is interesting. And 'Food for Life' — bits of the body, what we’re supposed to eat.”
- “Social studies: I love social studies. I think because it's mostly the teacher I like — that probably helps, 'cause the teacher is really cool. But there are interesting topics and it's good for general knowledge. Performing arts and English are good too — having real cool teachers in each helps a lot too (although it's been hard to have all the relievers in English). I've always loved English, it's always been a favourite.”
- “Music classes — learned heaps of stuff, playing guitar and reading notes.”
- “Social studies: we watched a video called 'The Power of One' about how people lived in Africa (apartheid). They started to help each other to have a better life — history — I hadn't heard about that before.”
- “Learning about things in health — good and bad things, about certain thoughts, consequences and effects of certain things.”
- “Maths, social studies, English, 'cause in everyday life, they're everywhere. Social studies tells you about the world and maths is complicated to learn, but if you really get into it, it's fun.”
- “English, because I want to do professional writing, like 'Lord of the Rings'.”
- “Commerce, health, science and English. Commerce because it tells you how to handle your money, science because it teaches you about your body and the way of life.”
- “Drama, and kapa haka: it's important to know who you are, so you learn to be confident in yourself.”
- “English, 'cause it just teaches you what you need to know (grammar, vocab, speaking in front of people and stuff). Unlike science — you may learn it but you may not need it. Maths 'cause when you grow up you need to know about money and stuff so you don't get ripped off.”

Phase 4 comments

- “Maths is the most useful. It helps me in what I do. I enjoy it when the work is different, for example, experiments in science. I like science better now ‘cause of the experiments. We did an experiment on gravity: we blew up balloons.”
- “The drama skills that we learn are good. We learn the skills to put into drama, and working with different people is so much fun. I’m getting more confident at it too. Home economics is good. We've been doing a theme of vegetables (we made stir fry). We’ve also made banana muffins, 'Subway' sandwiches and smoothies. The careers stuff in English has been good: budgeting, etc. We made business cards for homework, it was quite fun.”
- “Science, it's real fun. Have a good teacher this year. She's real cool and makes it fun. She takes us outside for class trips — we look for dead animals [insects] on algae plants, for example. And we dissected squid.”
- “In English I like learning about movies, about all the shots, angles, special effects and the language they use.”

continued...
### All Students

**What they found most important, interesting or useful to learn about at school – continued**

- “We learn interesting, useful things in metalwork. For example, if we buy chairs, we will know what the best structure is, what would last the longest.”
- “Music — I don’t like learning theory but it is helping me.”
- “Performing arts, I really enjoy it, it’s fun. Drama is real cool. We get into groups and act out skits; we make up dances in pairs. It builds your confidence: we have to do it in front of others. (We have the same teacher as last year.)”
- “Science is kind of important for me, ‘cause I want to be a doctor and need to know what to prepare for, for later. I like science and am doing well in it.”
- “We have a new teacher in science: she teaches us what we’re interested in.”
- “Volleyball — might get me a sports scholarship. Health — helps me to watch out for bad drugs and not to get involved. Maths — will help me for any kind of work. English — helps me to spell words, how to speak properly, and helps with my reading every night (the Bible).”
- “French, because it’s a new language to me, something quite different to what you’re used to.”
- “Electronics, because it helps me. It would be a good job, being an electrician. I also like computers, it would help me if I join [ie, study both] electronics and computers, they’re related. In the future, if I wanted to be an electrician [learning about these things] would help.”

### Subject Performance: Student and Teacher Perspectives

As an important focus of the study we wanted to look at what relationships, if any, there might be between a student’s attitudes towards a subject, how good they felt they were at the subject, and their measured, and/or reported, achievement in that subject. At each phase of the study, therefore, as well as asking students about their subject likes and dislikes, we asked students about the subjects they felt they were ‘best at or good at’.

#### Nominating Subjects in which she Performed Best

When asked about the subjects she felt she was best at or good at, in Phase 1 Emily specified writing, science, “drama”, and music (“singing”). But in Phase 2, Emily’s much less confident verdict was:

> “I can’t really say — I don’t put myself in that position [of saying what I’m best at].”

While she did mention performing arts as something she felt she was good at, Emily’s initial comment in Phase 3 was similar in kind to the one she’d made in Phase 2:

> “Don’t like talking about myself. It’s been a real topsy-turvy year — just getting used to everything.”

In Phase 4, however, Emily was much more at ease about saying what she felt she was good at:

> “Performing arts, because I’ve got the confidence, I’m not ashamed [to perform]. ‘Business studies’ [because] I like to get a point across. Believe I would be very persuasive. Social [studies] — because I like to learn about different cultures and history.”

Emily was much less confident in Year 9 about identifying subjects she was ‘best at’.

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72 ‘Ability, achievement, and progress’ is the subject of Chapter Thirteen. But for a more in-depth analysis and discussion of student achievement within the context of the present study, with a particular focus on student achievement in reading, writing, and mathematics as measured by Assessment Tools for Teaching and Learning (asTTle), please refer to our other report Students’ Achievement as they Transition from Primary to Secondary Schooling (see p.6 for further details).
All Students

*Explaining why they were ‘best at’ certain subjects*

When students were asked at the various phases of the study why they felt they were ‘good at’ or ‘did best’ in certain subjects, their comments largely focused on: the feedback they received about their progress in a subject; the quality of teaching and/or their relationship with the teacher; the extent to which they were building on past learning; how much they liked the subject; whether they had an aptitude for the area of study; the effort they put in; the nature of the activities they undertook in class; the quality of the learning environment; and receiving support or encouragement from home. Each of these broad categories is now illustrated with students’ comments.

- **Helpful/encouraging feedback which builds confidence, and/or ‘doing well’ in the subject/getting good grades.**
  - “‘Cause I did well in my tests and my teacher spoke to me in private and told me that I’m doing well.”
  - “I enjoy them and my teacher told me ‘You’re doing good in these subjects’.”
  - “Because my test results tell me I am good. I am confident when I am doing these subjects. They are not a problem for me.”
  - “Because I get a lot of good feedback from the [English and performing arts] teachers.”
  - “Drama: because Miss tells me I can do it next year because I’m good in a group.”
  - “In art, other people (the teachers and other students) tell me I’m good at it.”
  - “Because if someone’s doing well, teacher will say ‘you have the potential’.”
  - “Technology, because I enjoy it and the teacher tells me — or wants me — to take it again next year.”
  - “Don’t like science but I’m good at it: get good marks.”
  - “In maths I get high marks in tests and teachers always say I have done well. Graphics: some of my work is on the wall in the classroom.”
  - “Have been involved in musicals. Had the lead in the school production. Very good feedback.”
  - “Social studies (even though I don’t like it), probably because I got a ‘good letter’ sent home for my assignment about aboriginals. We had a movie to watch and we had an assessment on that. I was told I wrote the report well.”

- **Good teaching/relating well to the teacher.**
  - “Drama because the teachers all make me feel comfortable. They make me feel like I can do it even when it’s hard for me — they support me.”
  - “Because the teacher explains more stuff to me and makes sure that I understand. Not like the other teachers.”
  - “Maths, because the teachers are supportive. They help you and so you understand what you are doing and they revise with you.”
  - “Cause my [maths] teacher always helps me. I listen a lot more in maths.”
  - “Because they’re fun and the teachers actually help you out.”
  - “I can communicate with those teachers more.”
  - “Have a new teacher, he’s a funny guy.”
  - “Science, it’s all right this year ‘cause we have a new teacher and she’s cool. And I feel I’m good at maths this year (I wasn’t last year) because of the teacher. She’s a good teacher. She makes it interesting and explains it well.”
  - “I like the teacher, she is kind.”
  - “Teachers make subjects exciting.”
  - “Get positive response from teachers in these subjects. Never negative.”

*continued…*
Explaining why they were ‘best at’ certain subjects – continued

• Able to build on past learning (students often expressed liking a sense of building on what they already knew/had previously learnt at school or at home).
  - “In maths I have a long memory of what I learnt at primary school since Year 6.”
  - “Because I learned them well back in primary school and find they are easy.”
  - “I’m good at tikanga and te reo Māori because I speak Māori at home and I am Māori.”
  - “English because it has most of the stuff I’ve learnt about already. Economics, the same thing: I’m building on past stuff I know.”
  - “In maths and science I have lots of knowledge in them. They’re my favourite subjects and I do well at them.”
  - “More experience at school of these subjects, whereas I have only had a couple of years of technology and graphics. New subjects take time to get used to.”

• Enjoying the subject: for example, finding it interesting/new/challenging/relevant.
  - “Because I try harder at them than I do for other subjects because I enjoy them more.”
  - “I do best in science because I’m interested in science. There are lots of career options in science, for example, microbiology. Lots of career opportunities.”
  - “Social studies because I really enjoy it. It’s really interesting to find out about the past.”
  - “I am best at them because I like them and they interest me. When I’m interested, it’s always a lot easier to pick up.”
  - “In maths and science I’ve never failed any test and I like the things we learn about — [for example], global warming (things that can happen in the years to come), and what’s happening now. I like learning about these things — this makes me good at it.”
  - “English, the writing part. I love stories. I have heaps of stories on my Dad’s computer.”
  - “When I like something, I get good at it.”
  - “Automotives — I’m really into cars and that stuff so when I grow up I’ll probably work in a garage, like sell car parts and that stuff. And for drama, I really like acting and stuff.”

• Having an aptitude for the subject.
  - “Because my Mum says I have a talent for it [art] and I got a high merit for it.”
  - “Good at social studies because I’m good at geography and general knowledge.”
  - “Because I know I can do them. I have ability in them and enjoy them.”
  - “Maths: I’m good with numbers, good with figures.”
  - “I’m good at art ’cause it runs in the family: my aunty and my Mum’s mum and my Dad’s sister and my brother, they’re good at painting, and they do mosaic stuff and things like that.”
  - “Graphics: I’m good at designing.”
  - “I’m good at maths even if I don’t like it.”
  - “Maths and computers because I’ve always been able to pick them up easily.”
  - “PE, because I can play many sports easily.”

• Having the ability/motivation to work hard.
  - “I do all my homework. I work hard at it.”
  - “My report came home saying I did well [in English]. I read every night before I go to bed, and I have made up a ‘chapter book’, a bit like a diary.”

continued…
All Students

*Explaining why they were 'best at' certain subjects – continued*

- “I just try hard.”
- “I try my hardest in these subjects more than I do in others because they are the classes I want to get into next year.”
- “I enjoy them so I practise.”
- “Because I study hard and I always read history at home and on the Internet.”

• Preferring the sorts of activities, learning approaches in those subjects.
  - “Performing arts because I’m better at ‘doing’ things than ‘writing’ things.”
  - “They are sort of fun things to do so I enjoy them more and so I do better at them.”
  - “PE, it’s fun, the games we do are cool.”
  - “They are more practical, hands-on.”
  - “Do fun things, [for example, to do with] job opportunities, things that will help us in the future.”

• A quality learning environment that suits their needs.
  - “Because my friends are not in those classes.”
  - “When I get a chance [ie, without lots of distractions], I do learn.”
  - “Drama — we’re all one and no-one judges me. We sit in a circle, give each other ideas.”
  - “In dance, I’m really getting along with the people.”
  - “Because if I don’t understand [in class] I can ask for help.”

• Parental/family support and encouragement.
  - “My sister teaches me how to use computers. She taught me how to type”
  - “My Dad teaches me at home (in maths). Shows me how to do the working out.”
  - “My Dad teaches me if I don’t understand.”

Teacher Views on the Subjects in which Emily Performed Best and Least Well

Teachers provided feedback in Phases 1 and 3 about the subjects they felt individual students in the study did best and least well in. Table 8 contains the data specifically relating to Emily.

There are some interesting parallels and gaps between these data and teacher feedback about the subjects they felt Emily most and least liked (shown in Table 7).

The Year 9 form teacher’s nomination of social studies as a subject Emily did best in, although at a different phase, reinforces Emily’s assertion in Phase 4 that social studies was one of her strongest subjects in terms of achievement.

Table 8: The subjects that Emily did best and least well in according to her teachers

<table>
<thead>
<tr>
<th>The subject the student...</th>
<th>Phase 1: Year 8 teacher</th>
<th>Phase 3: Year 9 form teacher*</th>
</tr>
</thead>
<tbody>
<tr>
<td>...did best in</td>
<td>Māori; written language; mathematics</td>
<td>Social studies</td>
</tr>
<tr>
<td>...did least well in</td>
<td>Fitness; art</td>
<td>[not answered]</td>
</tr>
</tbody>
</table>

* Only form teachers who answered ‘yes’ to the question ‘Are you aware of how things are for this student in his/her subjects generally — eg, the subjects s/he likes best and least and/or how the student performs in different subjects?’ were asked to comment further.
It is also of note that the Year 8 teacher reported that mathematics was one of three subjects Emily did best in. This view is reinforced by the data in Table 14 (Chapter 13) which show that Emily achieved a high score on the asTTle mathematics test in Phase 1. However, this level of achievement in maths did not appear to continue, as Emily’s asTTle scores for this subject declined quite markedly in subsequent phases of the study. This was despite Emily saying she enjoyed maths more as time went on (Table 5), attributing the enjoyment in large part to feeling very positively about her maths teacher. It is notable however that at no point did Emily specify maths as a subject she was ‘best at or good at’.

**Preference for Subjects as Measured by the AsTTle Attitude Scale**

Students were assessed at each phase of the study in reading, writing and mathematics by means of the package, Assessment Tools for Teaching and Learning (asTTle).

As part of asTTle assessments, students are required to complete six attitudinal questions about the particular subject in which they’re being assessed. Three of the attitudinal questions in the mathematics and reading assessments and two questions in the writing assessment ask how much the student likes the particular subject. A further three questions in mathematics and reading and four questions in writing ask students how good they feel they are at these subjects, and whether they feel their teachers and parents or caregivers think they are good at the subject, the aim being to determine how confident students are of their ability, as well as how they think others view their ability.

As shown in Exhibit F, students indicate how they feel about a subject by choosing one of four faces, ranging from a very unhappy face through to a very happy face, for each of the six questions. Students’ answers are then averaged to indicate their overall preference for a particular subject.

<table>
<thead>
<tr>
<th>Exhibit F: Questions answered by students in asTTle testing sessions to gauge overall preference for a subject area (in this case, reading)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. How much do you like reading at school?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2. How good do you think you are at reading?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3. How good does your teacher think you are at reading?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A4. How good does your Mum or Dad think you are at reading?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>A5. How much do you like reading in your own time (not at school)?</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>A6. How do you feel about going to a library to get something to read?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The first five attitude questions were essentially the same in each of the assessment areas of reading, writing and mathematics. But question A6 above, for reading, was replaced with ‘How do you feel about doing things in maths you haven’t tried before?’ for mathematics, while for writing, question A6 became ‘How good do you think you are at spelling?’
Emily’s attitudes towards mathematics, reading, and writing, as measured by the asTTle scale, are shown in Table 9.

Interestingly, her results do not generally follow the downward trend in attitudes towards subjects over time, characteristic of students overall, both in this study (see ‘All Students’ data opposite) and, for maths in particular, the national asTTle data set. However, they do reflect quite closely what Emily conveyed about subjects in her interviews. For example, as discussed in Chapter Five, while Emily did not speak favourably about reading in Phase 1, by the end of the study she was feeling much more positive towards it. The data in Table 9 reveal that Emily’s attitude score for reading was only 2.2 in Phase 1 (and below the group mean), but had risen to 2.5 by the end of the study, which while still not high was at least in the desired direction.

In contrast, Emily regarded writing as a pleasurable spare time activity in Phase 1 and her asTTle attitude score at that time was considerably above the group mean, at 3.3. While she remained generally quite positive about writing over the course of the study, her asTTle attitude score never resumed the pre-transition level, suggesting that her priorities were changing, especially in relation to writing as a leisure-time activity.

Her attitude scores for mathematics are interesting in that they increased slightly between Phase 1 and Phase 4, even though her achievement in maths showed a considerable decline over the same period. However, again, her asTTle scores are consistent with comments made in her interviews: that she was enjoying maths more at secondary school than she had at primary school.

Table 9: Emily’s attitudes towards mathematics, reading and writing as measured by asTTle at each phase of the study

<table>
<thead>
<tr>
<th></th>
<th>Mathematics</th>
<th>Reading</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 — November 2003</td>
<td>2.7</td>
<td>2.2</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Group mean</td>
<td>Group mean</td>
<td>Group mean</td>
</tr>
<tr>
<td>Phase 2 — March 2004</td>
<td>3.0</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Phase 3 — October 2004</td>
<td>2.7</td>
<td>1.7</td>
<td>2.7</td>
</tr>
<tr>
<td>Phase 4 — April 2005</td>
<td>2.8</td>
<td>2.5</td>
<td>2.6</td>
</tr>
</tbody>
</table>

*Note: The higher the rating score (the maximum being 4), the more favourable the attitude towards the curriculum area in question.*
Chapter 10

Luke’s attitudes towards mathematics, reading and writing according to asTTle

Confirming comments made in his interviews, Luke’s asTTle attitude scores, shown in the following table, indicate that he was considerably more positive about reading than he was about writing. His attitude towards mathematics fell somewhere in between.

<table>
<thead>
<tr>
<th></th>
<th>Mathematics</th>
<th>Reading</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rating</td>
<td>Group mean</td>
<td>Rating</td>
</tr>
<tr>
<td>Phase 1 — November 2003</td>
<td>2.5</td>
<td>2.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Phase 2 — March 2004</td>
<td>2.5</td>
<td>2.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Phase 3 — October 2004</td>
<td>2.7</td>
<td>2.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Phase 4 — April 2005</td>
<td>2.3</td>
<td>2.6</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Note: The higher the rating score (the maximum being 4), the more favourable the attitude towards the curriculum area in question.

It may be noted that group means for mathematics in the table for Luke differ from the group means for this subject reported in Table 9 (Emily’s results). This is because, from Phase 2 onwards, students who had achieved high scores in the maths asTTle test in Phase 1 (of whom Emily was one) took a slightly different test (incorporating a few items at a higher curriculum level). Thus there were two ‘test groups’ of students for mathematics. (Reasons for the test variation are explained in our report Students’ Achievement as they Transition from Primary to Secondary Schooling.)

All Students

Their asTTle attitude scores

As can be seen from the graph, students’ attitudes towards each of mathematics, reading and writing declined quite markedly between Phases 1 and 4 of the study. These data are discussed in more depth in our report Students’ Achievement as they Transition from Primary to Secondary Schooling.
Summary Statements on Emily’s Attitudes towards her Subject Areas

The extent to which Emily could gain a sense of the relevance of particular subjects to her present or future life was a very important ingredient in how positive her attitudes were towards that subject, or to specific topics within the subject area.

For Emily, other important influences on the development of positive attitudes to or about a subject included: ‘liking’ it, often simply because it appealed to her, irrespective of whether it would be of particular value for her future; ‘having fun learning it’; a good relationship with the teacher taking the subject; learning something new; being challenged by the work; and receiving recognition for good work or effort.

The discussion in this chapter further indicated that a preference or liking for a particular subject is not necessarily constant, but can fluctuate for much the same reasons as those given in the preceding paragraph: that is, feelings about the person teaching the subject at a particular time, how the subject is being taught, the current topic of study, and recent feedback about progress in that subject.

And, sometimes, dislike of a subject seems to develop when there is a mismatch between what a student was expecting, and the reality. Where Emily had expected art to be a relaxed, fun subject, she found instead that it often involved hard, serious study, and a formal classroom environment which discouraged students from talking. Similarly, on her arrival at secondary school, Emily anticipated that science would involve a lot of interesting, fun experiments, but the reality was quite different, for reasons she did not understand.

Also, for Emily, liking or enjoying a subject did not always necessarily mean doing well in it (that is, compared to her performance in other subjects). For example, while her enjoyment of mathematics increased at secondary school, her achievement in this subject did not. But unlike some other students in the study, for Emily, feeling she was good at a subject did seem to correspond closely to her liking for the subject, for example, performing arts and writing.