2.

Supporting students' learning

We focus in this chapter on two key aspects of secondary student learning: how schools support students to make a good transition to secondary school, and the broad shape that the early years of secondary school take. Then we look at how secondary schools are weaving the *NZC* key competencies through student learning.

Are teachers doing this in a way that supports students' ability to learn independently and gain the "soft skills" that are as essential to adult success as content knowledge? Teachers' reports of student opportunities for developing and using these aspects of competency are followed by parents' and whānau views of how well their child's school is helping them develop in these areas.

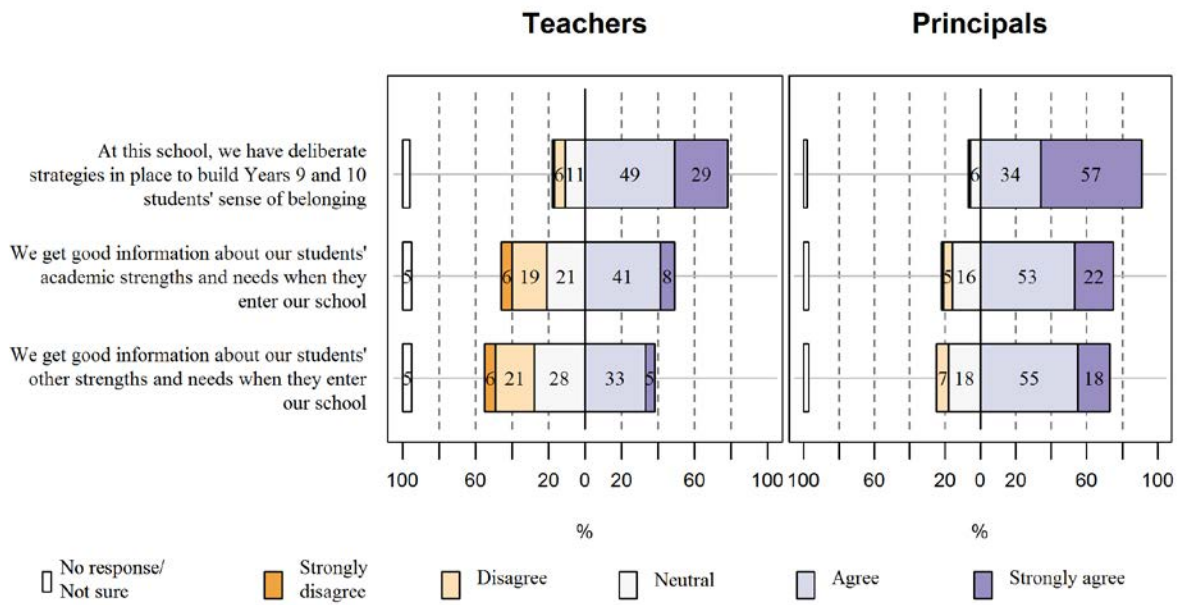
The two main variables associated with differences in supporting students' learning were teachers' subject group and school decile, with a smaller number of differences associated with school size.

Laying the foundations in Years 9 and 10

Most secondary schools had deliberate strategies in place for building Years 9 and 10 students' sense of belonging.[2] Figure 1 shows mixed views about the quality of information secondary schools got about their entering students, with teachers less sanguine about this than principals. Around three-quarters of principals thought that their school received good information about students' strengths and needs, compared with less than half the teachers.

2 For more about approaches schools were taking to support students' sense of belonging, see *Chapter 5: Supporting students' wellbeing.*

FIGURE 1 **Transition at Years 9 and 10; teachers' (*n* = 1,777) and principals' (*n* = 182) views**



Teachers' views about the information they received changed with school decile. Teachers in decile 1–2 schools were the least likely to agree with these items. For example, 36% of teachers in decile 1–2 schools agreed that *We get good information about our students' academic strengths and needs when they enter our school*, increasing to 58% for teachers from decile 7 and 8 schools, then dropping back to 50% for teachers from decile 9–10 schools. A similar association was evident between school decile and principals' views.

School size was also associated with teachers' responses to the items in Figure 1, with more teachers agreeing/strongly agreeing, as school size increased.

Teachers in the subject group Technology, Health and PE, Transition, Careers and Special education were more likely than those teaching other subjects to agree the school has deliberate strategies for building these students' sense of belonging (84%). Teachers of English and Languages and teachers of Mathematics and Science were slightly less likely than those teaching other subjects to agree that they got good information about students' academic strengths (46% and 47% respectively, compared with 52% for other subjects).

We cannot tell from the responses to the items about student information whether secondary teachers were not receiving information, or if they did not consider what they receive to be "good information". Either way, it is difficult to see how students' learning can follow on from their previous learning—the "connected and continuous" curriculum described in ERO's (2012a) national report on transitions from primary to secondary school[3]—when less than half of secondary teachers reported receiving good information related to students' previous learning. Not much seems to have changed since then.

In their (2012b) report,[4] ERO identified that some leaders in secondary schools felt the information that came from contributing schools "was not reliable, current, or did not cover the domains that they wished

3 Education Review Office. (2012a). *Evaluation at a glance: Transitions from primary to secondary school*. Retrieved 11 December 2015, from http://www.ero.govt.nz/National-Reports/Evaluation-at-a-Glance-Transitions-from-Primary-to-Secondary-School-December-2012

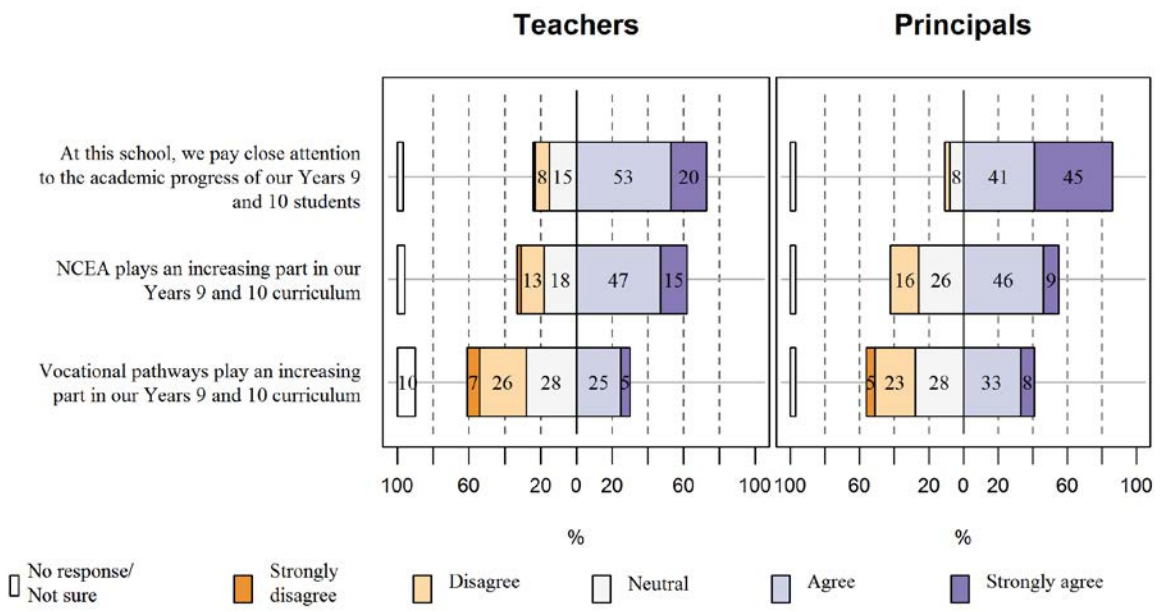
4 Education Review Office. (2012b). *Literacy and mathematics in years 9 and 10: Using achievement information to promote success*. Retrieved 11 December 2015, from http://www.ero.govt.nz/National-Reports/Literacy-and-Mathematics-in-Years-9-and-10-Using-Achievement-Information-to-Promote-Success-July-2012

to know about" (p. 13). A similar perspective might account for teachers' responses here. A possible effect of teachers and school leaders not trusting the data they receive (or not considering it "good information") is that potential learning time is spent re-assessing students, and doing this delays starting instruction at an appropriate level, and may mean repetition of material already covered, or conversely, pitching material at too high a level. This is one of the hopes of the CoLs (see *Chapter 12: Communities of Schools*), that joint work between primary, intermediate and secondary schools will lead to shared understandings about progress in relation to *NZC*, and what underpins expectations for information about students' progress and achievement. The building of a shared understanding has the potential to strengthen the sharing of pertinent information that can make teaching more effective.

Students' progress and curriculum at Years 9 and 10

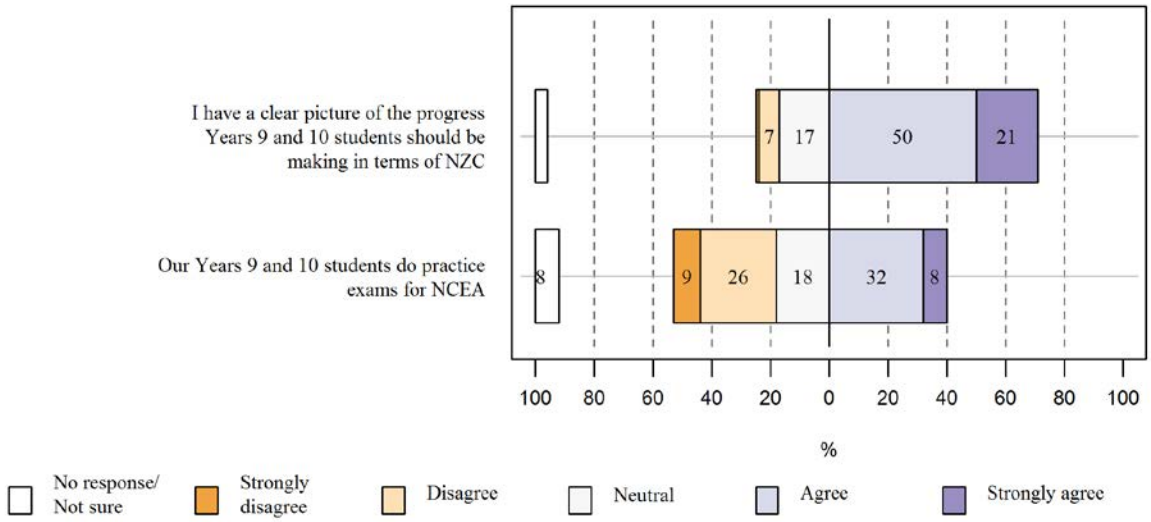
The majority of teachers and principals said they paid close attention to the progress of Years 9 and 10 students (see Figures 2 and 3).[5] Views of student progress were likely to reflect both *NZC* and NCEA, which was playing an increasing part in the Years 9 and 10 curriculum. A significant minority of teachers said that students undertake NCEA practice exams. Many—but not all—teachers thought they had a clear picture of the progress students in the first 2 years of secondary school should be making in terms of *NZC*. Vocational pathways[6] were also playing an increasing role in the Years 9 and 10 curriculum for around a third.

FIGURE 2 **Years 9 and 10 students' learning pathways; teachers' (*n* = 1,777) and principals' (*n* = 182) views**



5 We asked these questions for the first time in 2015.
6 For more on vocational pathways, see *Chapter 3: Working with NCEA*.

FIGURE 3 ***NZC* and NCEA at Years 9 and 10; teachers' views (*n* = 1,777)**



Somewhat fewer teachers at small schools paid close attention to the academic progress of their Years 9 and 10 students (65%, compared with 73% of those at large schools). As well, 61% of teachers at small schools said they had a clear picture of the progress Years 9 and 10 students should be making in terms of *NZC*, increasing to 73% of teachers at large schools.

Teachers in decile 1–2 schools were more likely than those at decile 9–10 schools to say that vocational pathways played an increasing part in their Years 9 and 10 curriculum (33% for decile 1–2, compared with 21% for decile 9–10).

Also associated with teachers' response patterns were their subject groups: 75% of teachers of English and Languages, and Mathematics and Science said they knew what progress students should be making in terms of *NZC*, compared with 68% of teachers of other subjects. Teachers' responses to this item were associated with *neither* school decile *nor* the teachers' role in the school (e.g., AP/DP,[7] HoD,[8] form teacher, class/subject teacher).

Key competency learning experiences for students

The New Zealand Curriculum[9] identifies five key competencies that schools should deliberately cultivate in their students:

- *thinking*
- *relating to others*
- *using language, symbols, and texts*
- *managing self*
- *participating and contributing.*

Teachers are expected to support the development of students' key competencies as an *integral* part of the learning they plan. Certain types of learning experiences are more likely to fulfil such expectations than others. With this in mind, over several survey rounds we have used succinct descriptors of possible

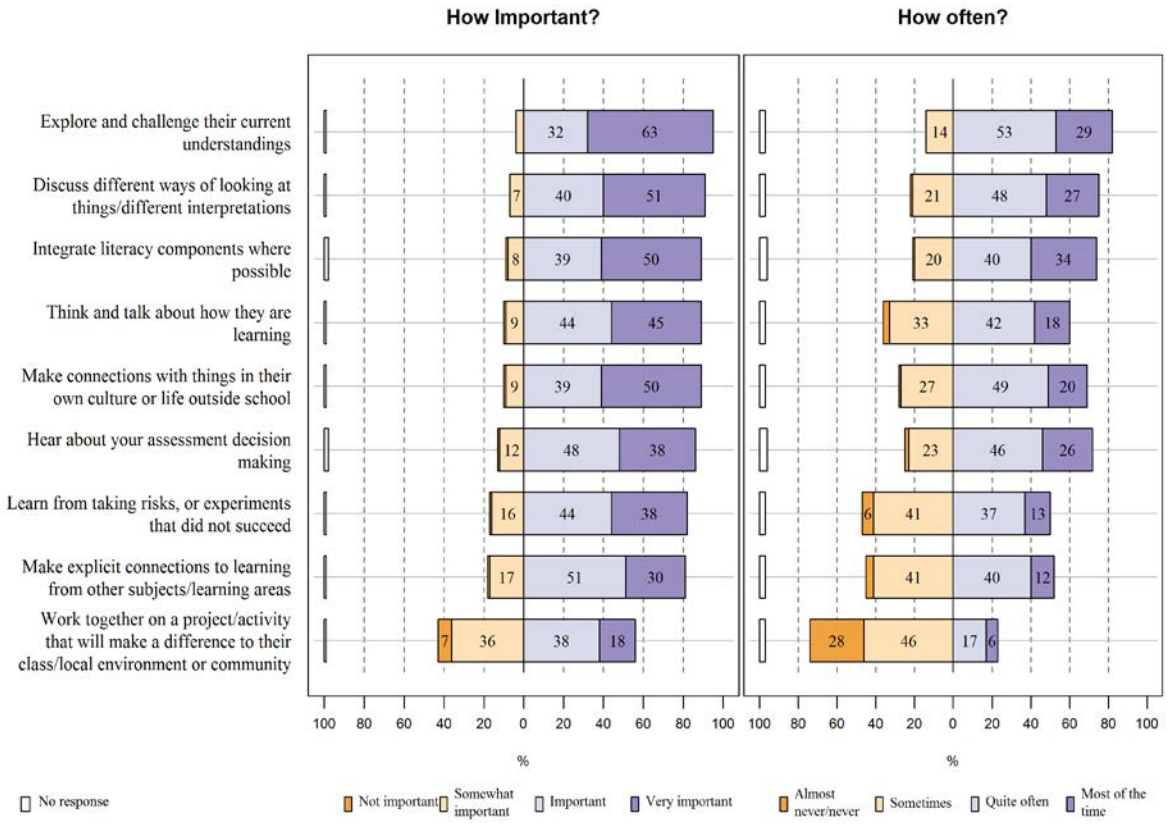
7 Assistant principal/deputy principal.
8 Head of department.
9 See http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum

rich learning experiences as a proxy for the intention to weave key competencies into the learning programme. The figure on the next page shows these descriptions.

We sought teachers' views about the importance of each type of learning experience, and how often they thought students could take part in such experiences in their classes. Figure 4 shows that, generally, teachers thought the experiences we asked about were important, with half or more reporting that they occurred quite often or most of the time in their classes.

The learning experience that received the lowest ratings for both importance and frequency was "work together on a project/activity that will make a difference to their class/local environment or community". In *Chapter 5: Supporting students' wellbeing*, we highlight the importance of building students' sense of belonging as a protective factor for their wellbeing. This type of learning experience has the potential to contribute to students' wellbeing, but 28% of the teachers reported they were almost never/never provided this experience for their classes.

FIGURE 4 **Importance and frequency of learning experiences, reported by teachers (*n* = 1,777)**



School decile-related differences were evident in teachers' perceptions of the importance of some of these learning experiences. Higher proportions of teachers in decile 1–2 schools rated as very important their students having learning experiences that provided opportunities to:

- make connections with things in their own culture or life outside school (65%, decreasing to 45% for teachers at decile 9–10 schools)
- integrate literacy components where possible (61%, decreasing to 47%)
- think and talk about how they are learning (54%, decreasing to 42%).

When it came to how frequently teachers' classes do these things, there was only one school decile-related difference. Teachers in decile 1–2 schools were less likely to indicate their students almost never/never worked together on a project/activity that would make a difference to their class or community (14%, increasing to 31% for teachers in decile 9–10 schools).

Subjects taught were not related to teachers' views of the importance nor how often they included such experiences in their classes.

The role of metatalk

The provision of opportunities for all students to develop key competencies has been of ongoing interest in the national survey. In an analysis of teachers' responses to the 2012 secondary survey, Hipkins (2015)[10] identified a particular set of items related to learning experiences that can support development of key competencies, which formed a factor. This factor raised a question about what the group of items might have in common. Looking across these items, what stood out was the potential need for a certain type of "metatalk". Metatalk is "talk a teacher uses in order to direct students' attention to specific aspects of the learning action as it is unfolding, and as the teacher wishes it to proceed" (p. viii). However, certain types of metatalk target the act of learning per se, pointing out the meaning-making challenges and/or the bigger picture and longer-term outcomes the teacher is hoping to foster.

The seven items included in Table 1 are the learning experiences that comprised the metatalk factor Hipkins identified in teachers' 2012 responses. Small increases in views of the importance of these learning experiences were evident from 2012 to 2015 for four of the items, with small decreases in the other three items; overall indicating little change in teachers seeing these items as very important (and presumably hoping to include them in their teaching).

TABLE 1 **Learning experiences teachers rated as *Very important;* 2012 and 2015**[11]

Learning experiences (*Very important*)	2012 (*n* = 1,266) %	2015 (*n* = 1,777) %
Explore and challenge their current understandings	59	63
Discuss different ways of looking at things/different interpretations	47	52
Make connections with things in their own culture or life outside school	56	50
Integrate literacy components where possible	45	50
Think and talk about how they are learning	48	45
Hear about your assessment decision-making	35	38
Make explicit connections to learning from other subjects/learning areas	32	30

The frequency with which teachers provided these learning experiences also showed little change from 2012 (see Table 2), with the exception of an increase in opportunities to integrate literacy components where possible, most of the time (up to 34% from 26% in 2012). For the other learning experiences, there was little change since 2012 in the proportion of teachers who provided these for their classes most of the time.

10 Hipkins, R. (2015). Learning to learn in secondary classrooms. Wellington: New Zealand Council for Educational Research.

11 Although similar items were included in the teacher survey in 2009, a different scale was used for the importance teachers placed on these learning experiences, so direct comparison is not possible. Items about how frequently teachers provided these learning experiences used the same scale, allowing comparisons to be made.

TABLE 2 **Learning experiences teachers reported their classes doing *Most of the time*; 2009, 2012 and 2015**

Learning experiences (*Most of the time*)	**2009 (*n* = 871) %**	**2012 (*n* = 1,266) %**	**2015 (*n* = 1,777) %**
Integrate literacy components where possible	24	26	34
Explore and challenge their current understandings	19	29	29
Discuss different ways of looking at things/different interpretations	14	28	27
Hear about your assessment decision-making	*	27	26
Make connections with things in their own culture or life outside school	23	23	20
Think and talk about how they are learning	14	18	18
Make explicit connections to learning from other subjects/learning areas	*	13	12

*Not asked

In the 2012 teacher responses there were some differences associated with teachers' subject group for four of these items. These differences remained in 2015, as we can see in Table 3.

English and Languages teachers were more likely to see these learning experiences as very important, with Mathematics and Science teachers least likely to see them as very important. Mathematics and Science teachers also showed the largest decrease between 2012 and 2015 in thinking it very important for students to make connections with things in their own culture or life in their classes.

TABLE 3 **Differences in learning experiences teachers rated as *Very important*, according to subject groupings, 2015 (and 2012 in parentheses)**

Learning experiences (*Very important*)	**English/ Languages (*n* = 455) %**	**Mathematics/ Science (*n* = 514) %**	**Social Sciences/ Arts (*n* = 387) %**	**Tech/Health & PE/ Transition/ Careers/ Special Ed. (n = 369) %**
Integrate literacy components where possible	**70** (71)	41 (42)	48 (43)	*39* (38)
Make connections with things in their own culture or life outside school	**66** (76)	*38* (53)	54 (65)	44 (50)
Discuss different ways of looking at things/ different interpretations	**63** (61)	*40* (41)	58 (59)	46 (44)
Hear about your assessment decision-making	**43** (48)	*31* (34)	39 (37)	39 (36)

Note: The highest proportion in 2015 in each row appears in bold, and the smallest proportion is in italics.

Consistent with these differences in teachers' views of how important these opportunities were, we see the same patterns when it comes to whether students have these opportunities most of the time (see Table 4). One noteworthy decrease between 2012 and 2015 was in the proportion of teachers in the Social Sciences/the Arts/commerce group who most of the time provided their classes with opportunities to make connections with things in their own culture or life outside school (32% in 2012, down to 21% in 2015).

TABLE 4 **Learning experiences teachers reported occurring *Most of the time*, according to type of subject taught, 2015 (and 2012 in parentheses)**

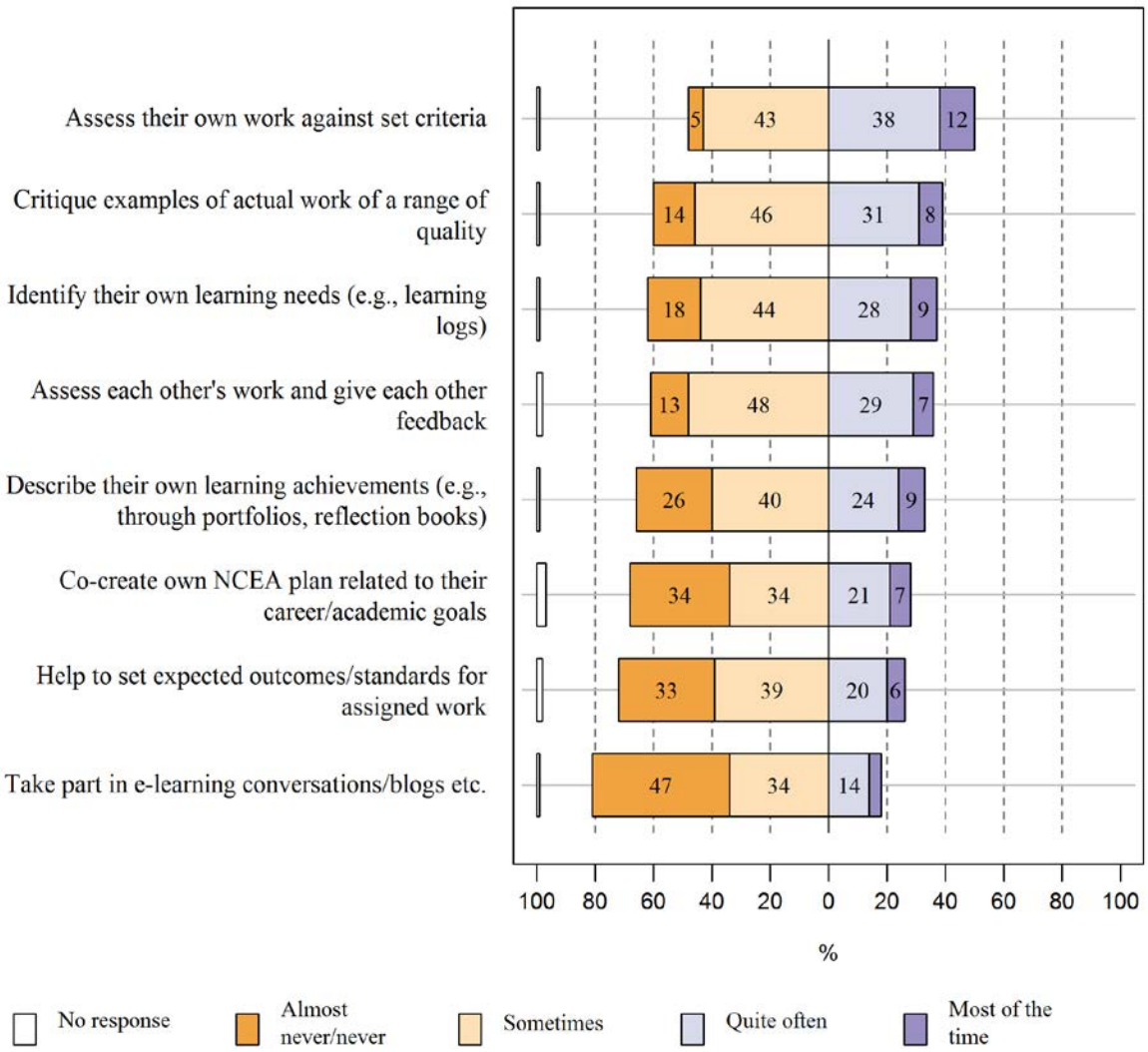
Learning experiences (*Most of the time*)	English/ Languages (*n* = 455) %	Mathematics/ Science (*n* = 514) %	Social Sciences/Arts (*n* = 387) %	Tech/Health & PE/ Transition/ Careers/ Special Ed. (*n* = 369) %
Integrate literacy components where possible	**57** (53)	*22* (19)	32 (24)	24 (21)
Discuss different ways of looking at things/ different interpretations	**37** (37)	*18* (15)	30 (38)	24 (24)
Make connections with things in their own culture or life outside school	**31** (40)	*11* (13)	21 (32)	18 (25)
Hear about your assessment decision-making	**30** (36)	*20* (22)	27 (25)	26 (26)

Note: The highest proportion in 2015 in each row appears in bold, and the smallest proportion is in italics.

The contribution of assessment practices to learning to learn

Learning to learn is a foundation principle in *NZC*, and students taking responsibility for their own learning is integral to the key competencies. Doing so can be supported by providing students with opportunities to be involved in assessment processes and goal setting. Figure 5 shows that most teachers reported their students having various experiences to help them learn to take responsibility for their learning, sometimes or more frequently. The most frequent experience—students assessing their own work against set criteria—was reported happening quite often or most of the time by 50% of teachers, slightly down from 54% in 2012.

FIGURE 5 **Frequency of experiences that help students learn to take responsibility for their learning, reported by teachers (*n* = 1,777)**



The report of the 2012 survey results[12] suggested that involving students in decisions about their learning was "still on the horizon for many teachers" (p. 25). In 2015, there was evidence of teachers making some small shifts towards that horizon, with changes for two items. Fewer teachers reported that their students never/almost never helped to set expected outcomes/standards for assigned work (47% in 2012, compared with 33% in 2015). Those reporting that students never/almost never co-created their own NCEA plan related to their career/academic goals decreased from 46% in 2012 to 34% in 2015.

Students in low-decile schools had more frequent opportunities in two aspects of taking responsibility for their own learning. Forty-seven percent of teachers in decile 1–2 schools reported students quite often or most of the time help to co-create their own NCEA plan related to their career/academic goals (compared with 27% of teachers in decile 9–10 schools). Thirty-eight percent of teachers in decile 1–2 schools reported students quite often or most of the time helped set expected outcomes/standards for assigned work (compared with 24% for decile 9–10 schools).

12 Wylie, C. (2013). *Secondary schools in 2012: Main findings from the NZCER national survey*. Wellington: New Zealand Council for Educational Research.

Looking at subject-related differences, Mathematics and Science teachers were consistently the least likely group to report their students quite often or most of the time had opportunities to take responsibility for their learning, particularly to:

- help to set expected outcomes/standards for assigned work (18%, compared with 26% for all teachers)
- describe their own learning achievements (20%, compared with 33%)
- critique examples of actual work of a range of quality (23%, compared with 39%)
- assess each other's work and give each other feedback (25%, compared with 37%).

What are the barriers to teachers making changes?

Having too heavy a workload headed the set of barriers identified by teachers to their making changes to or maintaining the quality of the curriculum they teach. Seventy-seven percent of teachers identified at least one barrier. Of these teachers, more than 25% identified the following barriers:

- workload too heavy (58% of teachers who selected barriers)
- lack of time for collaborative curriculum planning (50%)
- time taken for NCEA assessments (47%)
- NCEA requirements (43%)
- classes are too big (37%)
- lack of money (37%)
- student behaviour (35%)
- classes are too diverse (29%)
- practical difficulties taking students into the community (29%).

In 2015, teacher responses to this list of barriers fell between those of 2009 and 2012, once again pointing to the impact for teachers of the realignment of NCEA with *NZC*, discussed in the next chapter. For example, in 2009, 38% of teachers indicated NCEA requirements were a barrier to making changes. This rose to 57% in 2012, then dropped back to 43% in 2015. Time taken for NCEA assessments was a barrier for 30% of teachers in 2009, 52% in 2012 and 47% in the latest survey.

In their open responses at the end of the survey, 11% of teachers' comments related to assessment concerns:

> Teaching is NCEA driven, giving teachers no input into what we do. Assessments (NCEA externals) define what we do and limit pedagogical development. NCEA internals massively increase our workload.
>
> Workloads are increasing, I feel less confident that internal assessments (NCEA) are a true reflection of competency. Assessment and gathering of credits is leading education.
>
> NCEA is assessment driven—this sometimes takes the joy out of learning. The level of internal assessment has increased dramatically—this has affected wellbeing of students. Workload has increased due to internal assessments increasing.

The barriers teachers identified varied according to school decile and size, and the subjects teachers taught. For greater proportions of teachers in decile 1–2 schools, barriers to making changes to, or maintaining, the quality of the curriculum they teach were related to students and resources:

- student behaviour (56%, decreasing to 13% for teachers in decile 9–10 schools)
- lack of money (48%, decreasing to 22% for teachers in decile 9–10 schools)
- practical difficulties in taking students into the community (38%, compared with 26% for teachers in decile 9–10 schools)
- classes being too diverse (36%, decreasing to 17% for teachers in decile 9–10 schools).

For greater proportions of teachers in decile 9–10 schools, barriers tended to relate to NCEA and, for a few, the community's expectations:

- time taken for NCEA assessments (55%, decreasing to 39% for teachers in decile 1–2 schools)
- NCEA requirements (47%, compared with 34% for teachers in decile 1–2 schools)
- parents' expectations (12%, decreasing to 5% for teachers in decile 1–2 schools).

School size made a difference in some cases. Teachers at large schools were more likely to indicate barriers to maintaining a quality curriculum were:

- workload too heavy (61%, decreasing to 44% of teachers in small schools)
- NCEA requirements (48%, compared with 25% of teachers in small schools)
- classes are too big (45%, decreasing to 9% for teachers in small and small–medium schools).

Differences associated with subject group were evident in the role of NCEA as a barrier to making changes to, or maintaining, the quality of the curriculum being taught. Mathematics and Science teachers were more likely to identify NCEA requirements (51%) and time taken for NCEA assessments (53%) as barriers. In contrast, 37% of teachers of Technology, Health and PE, Transition, Careers and Special Education reported these as barriers.

Summary and discussion

In Years 9 and 10, the presence of *NZC* and NCEA were both evident, with a significant minority of teachers reporting students doing practice exams for NCEA. Most, but not all, teachers indicated they have a clear picture of expected progress in terms of *NZC* for students at these year levels. Three-quarters of teachers identified barriers to making changes or maintaining the quality of the curriculum they teach, with their workload being too heavy topping the list.

There has been little change since 2012 in how teachers are incorporating the key competencies in students' learning experiences, how they viewed the importance of metatalk opportunities and how often they provided these for their classes. The 2015 data largely replicate the subject group differences that emerged in 2012: teachers of English and Languages were most likely to provide their classes with metatalk opportunities, and teachers of Mathematics and Science were the least likely.

The flow of useful student information between primary and intermediate schools and secondary schools was working well for a minority of teachers; less than half the teachers agreed they get good information from contributing schools about their new students' strengths and needs. The reasons that underpin these responses warrant further investigation.

School decile-related differences were also evident. Teachers in decile 1–2 schools were least likely to report receiving good information about new students from the previous schools. In decile 1–2 schools, teachers found maintaining curriculum quality was hampered by inadequate funding and needing to focus on students' behaviour. The barriers for teachers in decile 9–10 schools were different; for them, NCEA demands proved to be a barrier to making change. Teachers in decile 1–2 schools were more likely than those in decile 9–10 schools to provide their classes with opportunities to work together on projects that affect their community and to make connections with things in their culture. They were also more likely to involve students in decisions about learning pathways.

Why has NCEA come to so dominate when *NZC* has such clear messages of its own about what students should be learning and why? We turn now to the NCEA itself to address that and other issues to do with the qualification system in the senior secondary school.

http://dx.doi.org/10.18296/rep.0001