IYT in New Zealand: Participants' reports of learning and change

Incredible Years—Teacher NZCER Evaluation Report 2

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Executive summary

This report examines participants' reports of their learning and changes in teaching practice as a result of their participation in the Incredible Years Teacher (IYT) programmes which ran over the first 8 months of 2014. These programmes are funded by the Ministry of Education, providing early childhood education (ECE) and primary teachers with relief-time to take part in six full-day workshops held once a month over 6 months, with two IYT group leaders working with groups of around 16–20 teachers. Group leaders also do some work one-to-one with teachers in between the workshops.

Our findings show a generally very positive picture of gains for teachers and their students from their IYT learning. Almost all the teachers would recommend the IYT programme to another teacher (96 percent of ECE teachers and 89 percent of primary teachers).

Shifts towards the desired IYT objectives

Substantial shifts were made towards the IYT objectives of enhancing teacher behaviour management in ways that are based on positive modelling and intentional teaching of strategies that develop student self-regulation, rather than on teacher efforts to control or reactive attention. For example, the proportion of teachers reporting that they very often used positive coaching, problem solving and anger management strategies, and provided clarity for students around positive behaviour and recognition of that behaviour doubled or more for many of the strategies included in IYT among ECE teachers and increased markedly for primary teachers. Paying attention to misbehaviour (which is counterproductive) occurred less by the end of the programme. Teachers also found the IYT strategies they used to be more effective more often at the end of the programme.

Ninety percent or more of the ECE teachers and 85 percent or more of the primary teachers thought they had gained from IYT:

- more awareness of the value of being pro-active in relation to children's behaviour
- a much deeper understanding of how to teach social and emotional skills
- useful strategies to work with children in ways that encouraged their class engagement.

The comments made by three-quarters of the ECE and primary teachers about their IYT learning underline the quantitative picture of often substantial shift in practice, including ongoing reflection and review. A marked theme was that IYT had renewed teachers' sense of agency, and given them the understanding and tools they needed to reframe how their classes operated, with testimonies of new calm for both students and teachers.

Improvement in the behaviour of their 'target' student was reported by 85 percent of ECE and 78 percent of primary teachers. Such changes came about as a result of learning strategies of analysing behavioural occurrence to develop a plan and work on that with the student, and checking progress and altering strategies where needed, usually with the advice and discussion of progress with their IYT group leader. Teachers were doubtless drawing on this practice when they targeted other students' behaviour as something worth changing: 81 percent of ECE and 80 percent of primary teachers reported that these behaviours had also improved. By the end of their IYT programme, around half the ECE teachers reported reviewing progress towards goals on individual student behaviour plans and discipline hierarchy at least weekly.

Students generally gained from their teachers' IYT learning: 90 percent of the ECE teachers and 75 percent of the primary teachers said there was less disruptive behaviour in their classes as a result of their IYT learning. Students were more focused on their learning work (85 percent ECE, 70 percent primary teachers). Most also said their students had better self-regulation (82 percent ECE, 75 percent primary), showed more problem-solving skills (78 percent ECE, 69 percent primary) and could ignore negative behaviour more (74 percent ECE, 74 percent primary).

Increases in teachers' confidence levels in relation to improving behaviour and engaging students in learning

At the start of their IYT programme, only 46 percent of ECE teachers and 55 percent of primary teachers were confident or very confident that they could manage their current students' behaviour problems. By the end of their IYT programme, 88 of ECE teachers and 74 percent of primary teachers were confident or very confident of managing behaviour problems. These included teachers who had lacked any confidence when they started IYT.

Double the proportion of ECE teachers managed their own stress levels through positive cognitive strategies daily or weekly by the end of the IYT programme: an increase from 37 percent at the start of IYT to 79 percent. Primary teachers also gained substantially, from 26 percent able to manage their own stress levels through positive cognitive strategies daily or weekly to 64 percent at the programme's end.

Some challenges in practising their IYT learning were reported by 33 percent of the ECE and 29 percent of the primary teachers. These challenges were mostly about their ECE service or school context, time and workload, and changing personal habits, not the IYT learning.

Factors enabling or hindering shifts in teaching practice in relation to the desired IYT outcomes

Our analysis points to factors both within IYT delivery and factors within the ECE or school context as having a bearing on what shifts in teaching practice occur over the course of the IYT programme.

Within IYT delivery, the quality of the IYT group leaders matters: their teaching, preparation and interest in teachers (modelling what teachers can do in their own classrooms). It also matters that they work well with individual teachers between workshops, particularly that they *usually* discuss target student progress and the behaviour plan (modelling ongoing review and inquiry as well as sharing knowledge about strategy use) and discuss the teacher's self-reflective inventory with them (also modelling ongoing review and providing feedback, feedforward).

Within the ECE or school context, what helps shifts in teaching practice are active discussion of IYT work, sharing with others, providing mutual support to make change and feeling supported to make those changes (including having consistency between IYT and school policy or school leaders' actions). Simply having done IYT with others in the school was not enough on its own. Teacher aide and Resource Teacher: Learning and Behaviour (RTLB) support for IYT approaches is also useful to make and sustain change in practice.

Also important are views about the coherence of IYT with curriculum. Changes in teacher practice occurred more where such coherence was found. Some views about lack of compatibility arose from conceptions that a behavioural focus lay outside curriculum, with curriculum seen as holistic or about 'academic' knowledge, or that a focus on behaviour essentially meant an exercise in adult power at the expense of child-centred support. But most of the comments made about incompatibility point to the way curriculum is enacted in particular ECE centres and schools. Thus where IYT strategies were understood as key competencies (or vice versa), and key competencies were fully included in a school's approach to curriculum and its timetabling, they were seen as compatible. Where they were not included, and teachers felt pressed to focus on curriculum areas measured by National Standards, or faced a timetable with no room to teach social and emotional competencies, difficulty was expressed.

How teachers change their practice

The design of the IYT programme is consistent with research about effective teacher professional learning and development. The IYT group leaders modelled positive interaction, reflection and inquiry. The workshops engaged teachers and underlined their sense of agency about student behaviour by not only providing variation in activity, but also ensuring that teachers shared their experiences with one another, so that the strategies were 'live', and not able to be seen as something outside their own scope. This interaction with other teachers was highly valued. It also

gave teachers useful experience in discussing change and the IYT strategies that they could use in their own ECE or school contexts—one of the factors that support individual change.

The video vignettes seem to be a mixed source of support for change. On the one hand, they were valued as demonstrations and spurs for discussion; on the other, they also raised scepticism given the differences in group size and adult resources between the American and New Zealand contexts.

The focus on a target child seems particularly valuable in supporting change, and showing its efficacy, thereby encouraging the use of gathering evidence about when undesirable behaviour occurs and which strategies change this behaviour. This focus gives teachers and their IYT group leader an ongoing touchstone in their work together.

IYT itself seems to give many of its participants a valued platform to make further changes. The IYT book was mentioned frequently in final comments, as well as the experience of seeing IYT-based changes in their own setting lead to improvements for their class, for individual students and their sense of agency as a teacher.

Is IYT being delivered as intended in New Zealand?

On the whole, yes. Within the IYT delivery itself there was some variability around what IYT group leaders were doing in their work with individual teachers between workshops. A substantial minority of teachers were not 'usually' discussing their target child's progress, or the self-report inventory or getting feedback on their practice from observations with their group leader. Most did not get feedback on their video of their own practice—probably because most teachers were not videoing their own practice (this takes time as well as equipment, and most teachers were strapped for time; this may not be a feasible practice to increase).

Given that gains for teachers and students were associated particularly with *usually* discussing the target child's progress and the self-report inventory, it seems worthwhile to find out more from group leaders about what could be done to increase the incidence of this work, and of teachers using the self-report inventory.

Comments made by teachers indicated that sometimes target children moved, or they had difficulty identifying a child with sufficient behaviour challenge; and some said it was hard for group leaders to fix a time with them that they did not have to change. Others mentioned the use of email as a means to work with their group leader. It would be useful to understand more about what helps and hinders this productive work with individual teachers, and what can be done to counter factors that lie in ECE services and schools as well as within the IYT workforce and contracting arrangements.

A second observation arises here. One of the reasons IYT was chosen as a programme for New Zealand teachers was because it seemed compatible with New Zealand curricula. Most teachers

thought the two were compatible. The fact that it does fit makes it easier for teachers to change practice: they are not being asked to recast their work entirely. Teachers who thought that IYT and *Te Whāriki* or *The New Zealand Curriculum (NZC)* were *very* compatible reported more gains in practice and for students. This underlines the importance of the coherence of IYT and New Zealand curricula—as they are enacted in ECE services and schools—does matter. Māori teachers' comments also indicated that they sought more linkage between IYT and Mātauranga. Linked to this is the marked ambivalence expressed about the video vignettes.

This would be another very productive avenue for inquiry: How can IYT in New Zealand provide clear New Zealand illustrations of the compatibility, for example, of IYT strategies and the key competencies, teaching as inquiry, student voice, and feedback, feedforward and show how they can be included within timetables and curriculum provision? It would be very useful for there to be linkages between the IYT practice leaders' group and the Ministry of Education and others working on *Te Whāriki* and *NZC*, particularly around the key competencies and inquiry.

A third observation relates to access to IYT. National priority has been to low socioeconomic decile schools. Information in this report shows that in fact IYT is being accessed by teachers in schools across the socioeconomic decile spectrum—and that it is as effective in high-decile as in low-decile schools.

A fourth observation is also related to access to IYT. IYT is also intended for teachers of students who are aged 3 to 8 years old. In fact, teachers of both younger and older students are accessing IYT. IYT appears to be effective for teachers who work with older primary school students as well as those who work with students aged 3 to 8, and it makes sense given the importance of consistency in practice within ECE services and schools for IYT not to be restricted to only part of a service or school.

Our final evaluation report in June 2015 will look at what teachers report of their use of IYT six to seven months after the end of their IYT programme, and how that relates to their reports of change in practice at the end of the programme. It will also analyse progress for the target students, and bring material together to provide answers to all eight evaluation questions.

1. Introduction

Background

Incredible Years Teacher (IYT) is a research-based group training programme that is part of the suite of linked Incredible Years (IY) programmes for teachers, parents and children developed by Carolyn Webster-Stratton and her team in the United States. The goal of these interlinked programmes is "to prevent and treat young children's behaviour problems and promote their social, emotional, and academic competence. The programs are used worldwide in schools and mental health centres, and have been shown to work across cultures and socioeconomic groups."¹ Research internationally has shown gains for teachers' classroom management, use of positive instructional practices and children's behaviour.² In New Zealand, evaluation of some of the first year of the IYT programmes, using teacher responses to the IYT assessments that are part of the programme, found that teachers' reports of their practice shifted over the programme. This indicated that teachers were making more use of positive behaviour management strategies, and had grown in confidence in their overall management of classroom behaviour problems.³

The IYT programme is described as "a set of principle-driven, dynamic interventions ... The big ideas or principles, and the video-based vignettes and participant books give structure to the programs, but flexible implementation gives voice to the participants and helps ensure that the content fits the context of their lives ... the reciprocal interaction between group leaders and participant experiences/backgrounds ... allows IY TCM [the IY official title for the programme] to be tailored to the specific needs of group members with high fidelity."⁴

IYT is delivered by a pair of IYT-trained group leaders through full-day workshops for groups of around 16–20 teachers, once a month over 6 months, with coaching from the group leaders through discussion and classroom observation for individual teachers in between. Each workshop's content is detailed in the IYT manual. This manual also provides 'process' guidelines for facilitators, and checklists for planning and review.

¹ www.incredibleyears.com

² Reinke, W. M., Stormont, M., Webster-Stratton, C., Newcomer, L. L., & Herman, K. C. (2012). The Incredible Years Teacher Classroom Management program: Using coaching to support generalization to real-world settings. *Psychology in the Schools*, 49(5), 416–428, and

Webster-Stratton, C., Reinke, W. M., Herman, K. C., & Newcomer, L. L. (2011). The Incredible Years Teacher Classroom Management training: The methods and principles that support fidelity of training delivery. *School Psychology Review*, 40(4), 509–529.

³ Fergusson, D. M., Horwood, L. J., & Stanley, L. (2013). A preliminary evaluation of the Incredible Years Teaching programme. *New Zealand Journal of Psychology*, 42(1), 77–82.

⁴ Webster-Stratton et al., 2011, pp. 512–513.

To ensure fidelity to the principles and processes of working with teachers, IYT has a very strong and systematic emphasis on ensuring that group leaders are capable of running the programme consistently. This includes thorough documentation and checklists to be used for planning and reflection, videoing workshops and reviewing their own facilitation practice, use of teacher evaluation survey and reports of their practice between sessions to meet teacher need and reflect on how well their facilitation has gone, and an accreditation pathway that is aimed at ensuring group leaders have ongoing support and supervision and keep developing expertise that can be used to support others further back on the pathway. It also links IYT in different countries back to the Incredible Years programme in Seattle.

IYT delivery in New Zealand

IYT and the linked Incredible Years Parent (IYP) programmes are funded by the Ministry of Education as part of the Positive Behaviour for Learning (PB4L) strategy. IYP was the first IY programme to be tried and evaluated in New Zealand⁵ before being offered more widely. The first IYT group leaders to be trained were selected from the IYP group leaders. Delivery of the IYT programme in New Zealand began in 2011.

More than 7,000 teachers have since completed IYT programmes. In 2012, 2,415 teachers did so, through 151 programmes, and in 2013, 2,568, through 158 programmes. A programme for Māori immersion teachers was provided in each of 2012 and 2013, and two of the 2013 programmes were for RTLB. The current priority groups are teachers in low-decile schools, and ECE centres serving Māori and Pasifika students.

IYT providers include RTLB clusters, non-governmental organisations (NGOs) such as kindergarten associations, and Ministry of Education staff (including special education psychologists, advisers and early intervention teachers). Ministry of Education regional offices allocate courses to providers, and providers choose who will lead groups.

The Ministry of Education provides funding that contributes towards the cost of relief teachers to allow school and ECE teachers to attend the programme. It funds NGOs providing IYT for group leaders' time, course venue and refreshments. It gives some discretionary funding to RTLB and Ministry of Education staff-provided IYT programmes to cover course venue, refreshment and incentive costs. The national PB4L team has been responsible for the development and support of the IYT programme's group leaders. This work was led by one person who was a certified IYT mentor, until late 2013, working with a national practice leaders group. This national practice group is now re-established, with national PB4L support.

⁵ Fergusson, D. M., Stanley, L., & Horwood, L. J. (2009). Preliminary data on the efficacy of the Incredible Years Basic Parent programme in New Zealand. *Australian and New Zealand Journal of Psychiatry*, 43, 76–79.

The NZCER evaluation of IYT in New Zealand

NZCER is evaluating the IYT programme in New Zealand, focusing on the programmes that ran over the first 8 months of 2014. This evaluation is based on a theory of change (Appendix 1), which was developed after a scoping phase which included a workshop involving the Ministry of Education, education sector representatives and the NZCER team discussing a draft theory of change.

The theory of change led to the following set of evaluation questions. Questions in bold are addressed in this report.

Short-term outcome questions:

- **1.** What shifts towards the desired IYT objectives are occurring in the teaching practice of course participants from start to end of course (6-month period)?
- 2. What are the confidence levels of teachers at the end of the course in relation to improving behaviour and engaging students in learning?
- 3. Are the shifts in teachers' practice towards the desired IYT objectives sustained 8–9 months after the end of their course?
- 4. What shifts occur in the behaviour, attendance and engagement of IYT participants' target students over the course period?
- 5. Are the shifts made for target students maintained 4 months after the end of the IYT course?

Process questions:

- 6. Is IYT being delivered as intended in New Zealand?
- 7. What factors enable or hinder these shifts (outcome questions 1–5) in relation to the desired IYT outcomes?
- 8. How do teachers change their practice, and what platform does IYT give them to make further changes?

Our first report, 2014 IYT Group Leaders' Views and Experiences, focused on process question 6, whether IYT was being delivered as intended in New Zealand. It used responses to an online survey of the group leaders who delivered IYT courses over the first 8 months of 2014. The report found that IYT was largely being delivered as intended, with some challenges identified around ensuring more group leaders had ongoing peer coach supervision.

This second report from the evaluation focuses on outcome questions 1 and 2, and process questions 7 and 8, with some information relating to process question 6. It uses IY's own pre- and post-programme surveys and material from the Ministry of Education's registration file, and NZCER preand post-surveys done by the teachers who participated in the IYT courses run over the first 8 months of 2014. We matched information from each of these sources to individuals, so that we could analyse changes for individual teachers across the different sources.

The third and final report from the evaluation will be completed in June 2015, after a further round of surveys with participating teachers in April–May 2015. The final report will build on the findings of the first two reports, with a particular focus on outcome questions 3, 4 and 5, and process questions 6, 7 and 8.

Sources of information for this report

Data collected within IYT programme

Participants in the IYT programmes are given three surveys by their group leaders:

- Teacher Classroom Management Strategies Questionnaire (TSQ) at the start of the course
- Teacher Classroom Management Strategies Questionnaire at the end of the course
- Teacher Workshop Satisfaction Questionnaire (TWSQ) at the end of the course.

The TSQ asks about teachers' confidence in managing behaviour; and the frequency with which teachers use 38 specific teaching techniques, and how useful they find these techniques. It also asks about the frequency of 10 ways of working with parents, and in the end-of-course questionnaire, how often they use eight IY planning and support strategies.

The TWSQ asks participants for their views of the efficacy of the strategies they have learnt, their confidence levels in managing behaviour, how they rate the usefulness of eight aspects of the IYT course and of 11 strategies emphasised in the IYT approach. It also asks them to rate their group leader on five different aspects.

Administrative data from Ministry of Education

We also use information from Ministry of Education administrative register data on participants' personal characteristics, whether they taught in early childhood education (ECE) services or primary schools and the number of sessions they took part in. Around 25 percent of those who started IYT appear not to have completed the programme with reasons recorded by IYT group leaders giving changes in personal or ECE service or school circumstances.

The personal characteristics we use in our analysis are: ethnicity; teacher registration status; highest qualification; and service or school role. For primary teachers, we also use the socioeconomic decile of their school.

NZCER evaluation surveys

The two brief NZCER pre- and end-of programme surveys were designed to supplement the IYT surveys so we could get additional understanding of how the programme was experienced by teachers, and get information on some of the aspects included in the IYT evaluation's theory of

change. This information allows us to analyse shifts across the programme in relation to the aspects that are assumed to have a bearing on the effectiveness of IYT and why that might differ across teachers. So the final NZCER survey asked teachers about in-school support for their use of IYT, their work with their IYT group leader and changes in their class and their teaching practice that they attribute to their IYT participation. The end-of-programme survey also gives us some information about the individual interaction between teachers and group leaders between the workshops.

Teachers also filled out a brief survey at the start of their IYT programme describing the child they had chosen to design and follow a behaviour plan with, and we report some of that material here in relation to their views about the efficacy of their behaviour plan from the TWSQ.

The NZCER surveys were designed with the first New Zealand IYT national practice leader, with input on drafts from some of the national practice group, drawing on the theory of change, group leaders' observations and queries. They were customised for ECE and primary teachers, so we report ECE and primary teachers' experiences and views separately. Any differences found between the two groups are commented on in the conclusion.

Not all the teachers who took part in IYT in this period completed their programme, or filled in all the IYT surveys or the NZCER evaluation surveys. The numbers used in different sections of the report therefore differ to some extent. Of those who did complete the programme, we have information from both start and end of the programme for 801 teachers for the IYT strategies questionnaires, 1,140 for the IYT satisfaction questionnaire and 1,103 for the NZCER start and end surveys. These cover most of the participants.

Putting the data together

We have analysed shifts using changes in the TSQ, and through linking TSQ and TWSQ responses to data from the NZCER end-of-programme surveys.

Table 1 gives the numbers we have for each source of information. We have included only those teachers for whom we have both the start and end TSQ. The number who did so is notably lower than for the other end-of-course surveys. This may be because teachers' TSQ data were not recorded on the national Ministry of Education register, or it may be that teachers did not fill out the TSQ in their final workshop. Either way, there are implications for ongoing monitoring of the effectiveness of the IYT programme in New Zealand, using these surveys.

	ECE	Primary	Total
Register (characteristics)	505	864	1,373
TSQ—both start and end	317	484	801
TWSQ	423	717	1,140
NZCER start survey	418	823	1,241
NZCER end survey	366	737	1,103
NZCER target child initial survey	414	822	1,236

Table 1 Totals for each source of information from IYT participants used in this report

Outline of this report

Section 2 focuses on the ECE teacher participants in IYT programmes run over the first 8 months of 2014 and their changes in teaching practice and views of IYT. Section 3 looks at the impact of IYT for teaching practice and students, and the role of the ECE service context in supporting IYT learning and its use and sustainability. Sections 4 and 5 provide the picture for primary teacher participants.

The conclusion brings together the patterns coming from the findings for ECE and primary teachers to provide answers to evaluation questions 1, 2, 7 and 8, with some material relevant to evaluation question 6.

2. ECE teachers' learning and change

In this section we describe the ECE participants, their views of the IYT programme and its approach and the changes in their teaching practice.

Characteristics of the ECE teachers

Who were the ECE teachers who took part, and what were their ECE contexts like? The 505 ECE teachers who are on the Ministry of Education register for the IYT programme that took place over the first 8 months of 2014 mainly came from ECE services offering full day programmes (78 percent); 3 percent were reported as working in Kōhanga Reo.

- 65 percent of the teachers were identified as New Zealand European in ethnicity, 14 percent as Māori, 11 percent as Asian, 8 percent as Pasifika and 11 percent as another ethnicity
- 54 percent were fully registered teachers and 32 percent were provisionally registered
- 54 percent had a university degree as their highest teaching qualification and 30 percent a diploma
- 8 years' teaching experience was the median for the ECE teachers who filled out the NZCER start-of-programme survey, with a range from less than a year to 38 years. Fifteen percent had taught for 2 or fewer years, 19 percent for 3 to 5 years, 29 percent for 6 to 10 years, 10 percent for 11 to 15 years and 21 percent for over 15 years
- 6 percent of the ECE participants in IYT programmes were service managers and 19 percent were head teachers. Seventy-four percent reported that they were qualified teachers.

Their ECE contexts

ECE teachers worked with groups of children that ranged from three to 100, with a median of 30 in the group. Of these children, about half were boys and half were girls. These groups had a median proportion of:

- 15 percent Māori children
- 6 percent Pasifika children
- 10 percent who had a language other than English as their first language
- 3 percent who had special education needs for which they got specialist support
- 5 percent who had challenging behaviour with no specialist support.

Very few teachers reported children with special education needs with no specialist support or children with challenging behaviour for which they got specialist support.

The teachers worked with a median number of three other teachers (the range was from working alone to working with 16 other teachers).

Thirty-one percent of the ECE teachers worked with an education support worker or regular parent helper, usually one (65 percent of this group), or two (27 percent). At the start of their IYT programme, half of this group thought that their education support worker or regular parent helper understood their current approach to behaviour management a lot, and 41 percent a little. Two-thirds (68 percent) of the ECE teachers reported that their support worker or parent helper supported their current approach to behaviour management a lot in the way they interacted with the children a lot.

IYT participation

Seventy-six percent of the teachers attended all six workshops in their IYT programme. Eight percent attended up to four workshops and 16 percent attended all but the sixth and last workshop. Reasons for not completing the course were recorded for a few of the 24 percent who did not attend all workshops and are largely to do with leaving employment at their ECE service, or the ECE service closing, illness or lack of time.

All the ECE teachers were taking the IYT programme with a colleague, in line with the conditions for ECE services to access the programme. Most were doing it with just one other colleague; but the maximum was 14, suggesting a whole-service approach to IYT learning.

Just over half the ECE teachers were the first from their service to take the IYT programme (53 percent). Thirty-one percent were from ECE services where one or more of their colleagues had completed the programme and 13 percent from ECE services where three or more had completed the programme.

Just over a quarter of ECE teachers (26 percent) reported that parents of children at their service were taking part in or had taken part in the IYP programme. One percent of the teachers reported that many of the parents at their ECE service had done or were doing so and 25 percent reported a few parents doing the IYP programme. Thirty-seven percent of the ECE teachers did not know if parents of children at their service had attended IYP. From our data, we could see if IYP attendance at an ECE centre was related to an ECE service's emphasis on IYT gauged by how many of an ECE teacher's colleagues had attended IYT, but there was no relationship with that indicator.

Views of the usefulness of the IYT programme strategies

ECE teachers were generally positive about the strategies used to work with them in the IYT programme. As shown in Figure 1, participants were most positive about:

- group discussion and sharing of ideas (68 percent found this extremely useful)
- support from other teachers (63 percent found this extremely useful)

- group leaders' lectures (62 percent found these extremely useful)
- the IYT resource book (55 percent found this extremely useful).

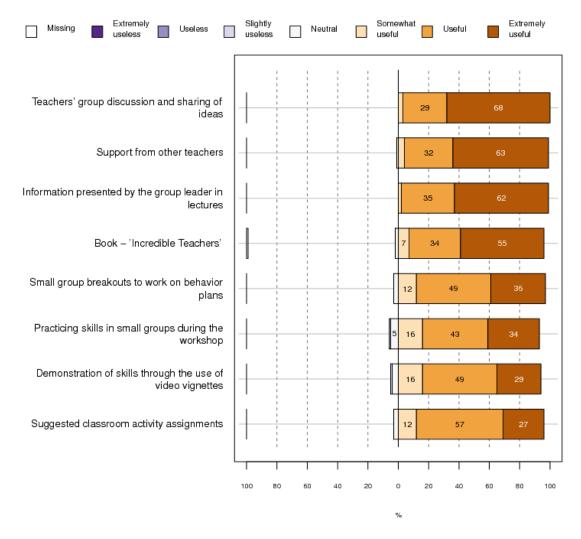


Figure 1 Usefulness of the IYT programme teaching strategies⁶

Managers had the most positive views of classroom activity assignments (47 percent rated these extremely useful, compared with 27 percent overall), and the IYT book (76 percent, compared with 55 percent overall).

IYT group leader work with ECE teachers

The IYT evaluation theory of change identified the importance of group leaders' work with individual teachers between the workshops. Figure 2 shows that discussion of target child progress and observations in the teacher's setting were most common. Use of the IYT self-reflective inventory

⁶ The legend for Figure 1 shows all the ratings teachers could choose from, so that readers can see the full span of potential answers, and assess the positive ratings against this. The row descriptions are as used on the Incredible Years Teacher Workshop Satisfaction Questionnaire and as such have American spelling and grammar.

was less common. Video viewing was rare, suggesting that few teachers were making videos of their own practice to share with group leaders (or others).⁷

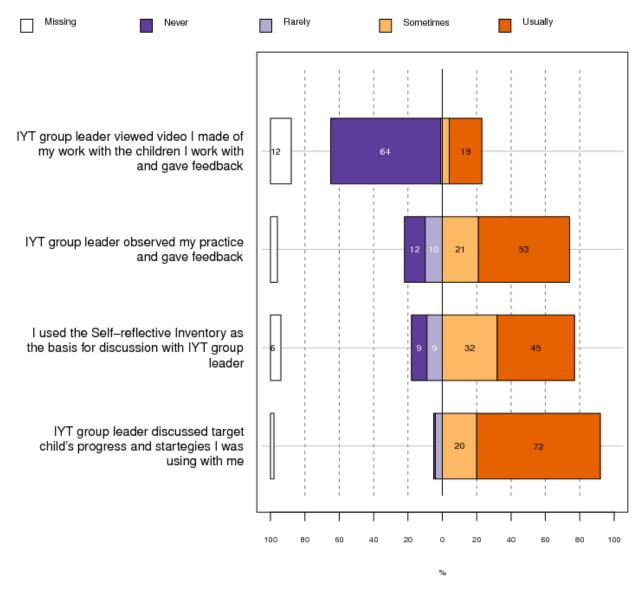


Figure 2 Support from IYT group leader in between workshops

Three-quarters of the ECE teachers thought the support from their IYT group leader was very useful and 22 percent of some use. Only 2 percent said it was of not much or no use. A similar picture comes from a question asking about how helpful their IYT group leader had been: 77 percent thought their group leader was extremely helpful, 20 percent helpful and 2 percent not helpful.

⁷ Class observation and viewing the video of a teacher's class are seen as alternative ways for IYT group leaders to give feedback. When we looked at both forms of feedback and discussion together, we found that 20 percent of ECE teachers and 8 percent of primary teachers never or rarely had either form of feedback. We also found that 17 percent of ECE teachers and 18 percent of primary teachers usually had both forms of feedback.

Teachers were also asked to rate the work of their group leaders. Here is the picture for the first group leader (ratings for the second are similar). It is very positive: very few ECE teachers thought their group leader's work was average only.

Aspect	Excellent %	Superior %	Above average %	Average %
Teaching	66	21	11	1
Preparation	71	18	9	1
Interest and concern in me and my student	64	18	13	3

Table 2 ECE teachers' views of their IYT group leader's work (n = 423)

Changes in positive behaviour management practices

One section in the TSQ asks teachers to report the frequency with which they use 38 specific teaching techniques and their view of the usefulness of these techniques. We undertook a principal components analysis to identify groups of like items in these 38 techniques.⁸ This analysis identified three categories of items and a group of four items that did not belong to these three categories, or form a new category:

- Positive coaching, problem solving and anger management
- Clarity and recognition of positive behaviour
- Attention to misbehaviour⁹
- Four unrelated items that did not form a set of like items.

Using the three categories, we found marked increases in teachers' use of the teaching techniques supporting positive behaviour over the time of their IYT programme. On average, teachers were using: positive coaching, problem solving and anger management; and recognising positive behaviour, more often at the end of the programme than at the start. They focused less on misbehaviour. They were finding positive coaching, problem solving and anger management, and recognising positive behaviour useful more often, and attention to misbehaviour useful less often, than they had when they started the programme.

⁸ We did this to make analysis of shifts in teacher practice more manageable for readers and researchers alike. Factor analysis identifies the degree of consistency in individual responses to items, and therefore gives a good indication of which items go together. Principal components factor analysis was done first with the end-of-programme items about the frequency of techniques; then confirmed with the end-of-programme items about the usefulness of techniques, and with both the start-of-programme sets of items relating to frequency and usefulness.

⁹ Most of the items in these two factors were reversed when scored so that they could be easily compared with the other factor scores (i.e., a positive difference for these factors is the same as a positive difference for the other four factors).

Positive coaching, problem solving and anger management¹⁰

Figure 3 shows marked increases in teacher reports of how often they used key IYT strategies of positive coaching, problem solving and anger management with their students from the start to the end of the 6-month IYT programme. The proportion who reported that they used these strategies very often doubled for many of the strategies asked about.

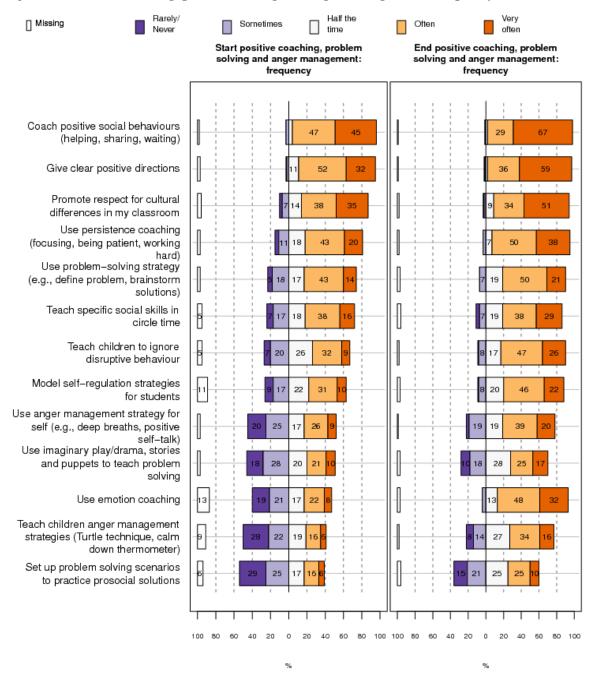


Figure 3 Positive coaching, problem solving and anger management: frequency

¹⁰ These factors have an alpha of 0.84 for frequency and 0.88 for usefulness, indicating high levels of consistency in individual responses to the items.

Teacher perception of the usefulness of these strategies also increased markedly. For example, only 8 percent of the ECE teachers thought that emotion coaching was very often useful with their learners when they started the programme but 44 percent thought so at the end (see Figure 4).

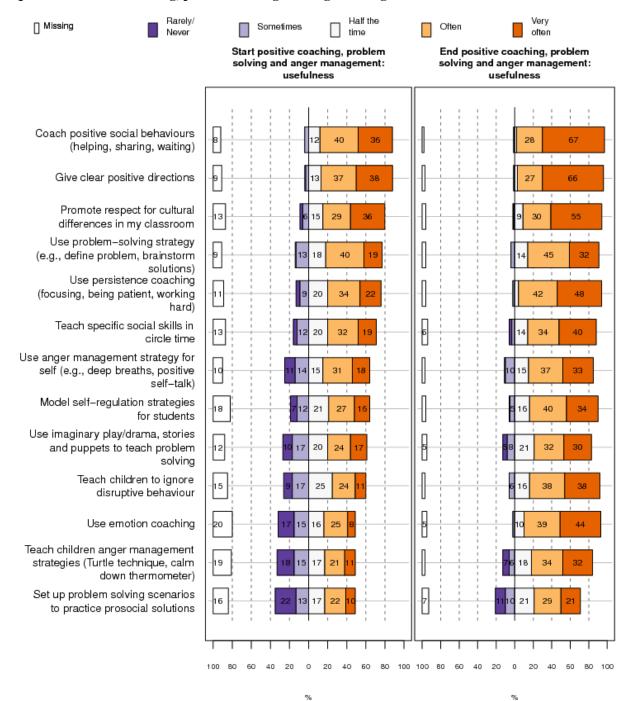


Figure 4 Positive coaching, problem solving and anger management: usefulness

It seems likely that some of this shift is due to teachers who were already using some of these strategies becoming more effective in their use of them, as well as an increase for others who used them for the first time or increased their frequency of use.

Clarity and recognition of positive behaviour¹¹

Next we look at changes in items that are about rewarding or recognising positive behaviour, and giving learners clear signals about behaviour and what they can do to get back on track. The proportion of ECE teachers who used these strategies very often by the end of their IYT programme also at least doubled. As shown in Figure 5, particularly noticeable increases occurred for the use of:

- nonverbal signals to redirect disengaged students
- a clear classroom discipline plan and hierarchy
- special privileges
- rewards for targeted behaviour.

¹¹ These factors had an alpha of 0.78 for frequency and 0.81 for usefulness.

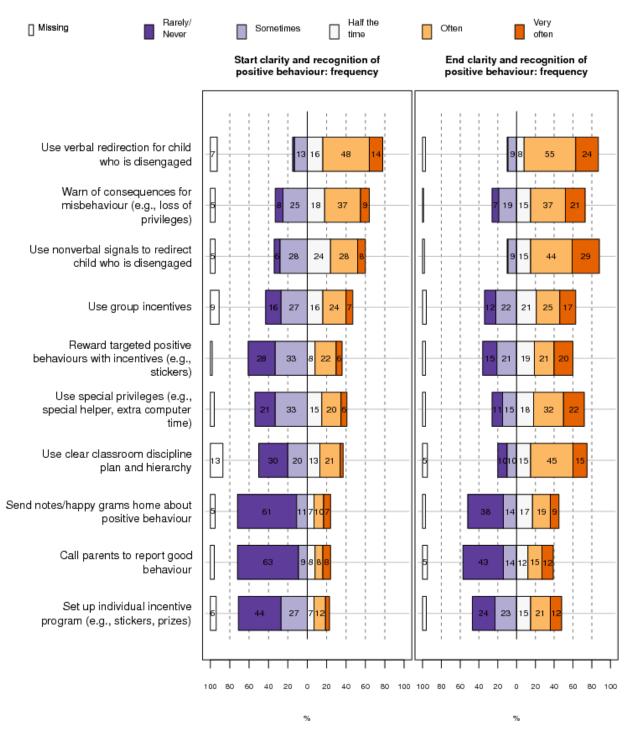


Figure 5 Clarity and recognition of positive behaviour: frequency

By the end of their IYT programme, many more ECE teachers saw these strategies to recognise positive behaviour and provide children with clear guidelines as 'often' or 'very often' useful (Figure 6). For example, 77 percent thought the use of nonverbal signals to redirect disengaged children was 'very often' or 'often' useful, compared with 37 percent at the start of the programme.

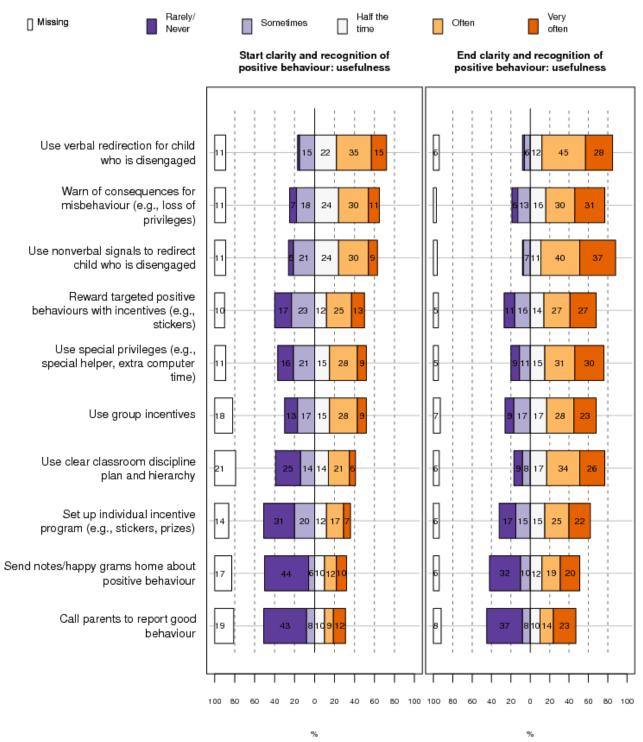


Figure 6 Clarity and recognition of positive behaviour: usefulness

Attention to misbehaviour¹²

Most of the items in this set are about strategies that IYT seeks to counter or replace. Quite a few of these strategies were not in common use by the ECE teachers anyway at the start of their IYT programme.

By the end of the IYT programme, most of these counter-productive strategies had decreased in use with the exception of calling parents to report bad behaviour, or the use of physical restraints. The reductions in these strategies shown in Figure 7 are less marked than the increases in the positive IYT strategies; and it is interesting that the use of time out (to calm down rather than punish) did not increase much. Some ECE teachers and services do not have space set aside for time out; and it is not supported in some ECE service policies since it is seen as punitive or difficult for children to comprehend. It may also be that the teachers' use of IYT strategies meant that there was not an increased need for this particular technique.

¹² These factors' alphas were lower than the other two—0.54 for frequency and 0.70 for usefulness—indicating less consistency in individual teacher responses.

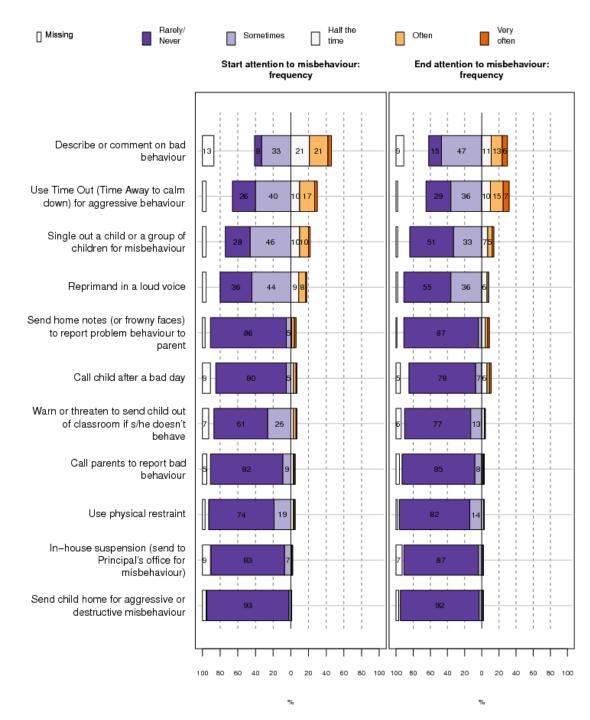


Figure 7 Attention to misbehaviour: frequency

Items that were seen to be useful more often by the end of the IYT programme were time out (to calm down) and the strategy of calling a child after a bad day (see Figure 8).

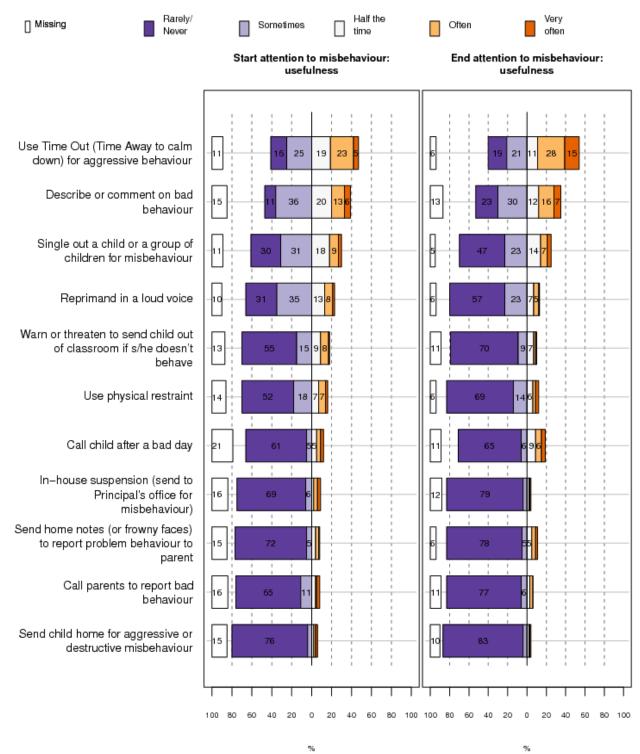


Figure 8 Attention to misbehaviour: usefulness

What supports positive changes in teacher practice?

We investigated whether these positive changes were related to the IYT group leaders' individual work with teachers, support for IYT practice within a teacher's service and how compatible teachers found the IYT approach and their *Te Whāriki* work.¹³

We found increases in the use of positive behaviour strategies and the effectiveness of these strategies were associated with:

- IYT group leader and teacher discussing target child progress and the teacher's notes in their self-reflective inventory (not class visits or video review)
- sharing of IYT learning with other teachers in the ECE service—not simply support of one another, or support from the ECE service or support from a teacher's education service worker or regular parent helper
- the degree to which ECE teachers found compatibility between IYT and their curriculum (which includes pedagogy), *Te Whāriki*.

Appendix 2 provides the detail of these results and our analysis.

Other IYT strategy items

Three of the four strategies that did not fit into any of the three sets reported above were used more by the end of IYT and were seen to be more useful. Figure 9 shows that teachers were making more use of: praising positive behaviour; preparing children for transitions with a predictable routine; and ignoring misbehaviour that was not disruptive to their class.

¹³ This information came from the NZCER end-of-programme survey.

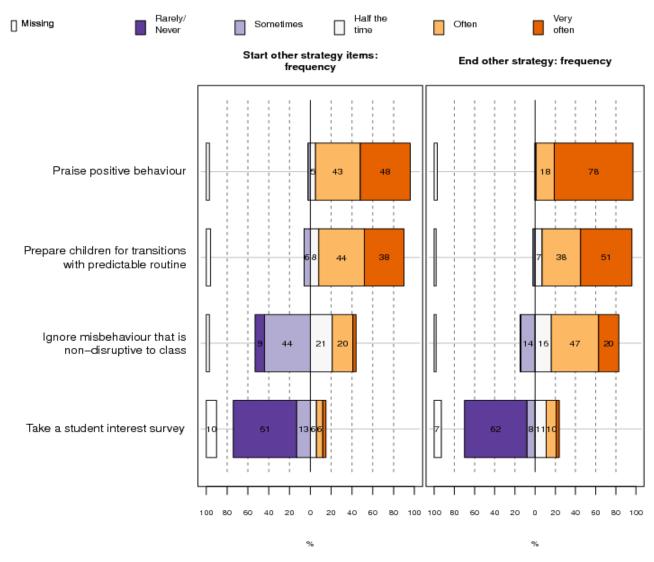


Figure 9 Praising, preparation for transitions, ignoring misbehaviour and student interest survey strategies: frequency

Figure 10 shows that teachers were also finding that their use of praise, preparing children for transitions with predictable routines and ignoring student behaviour were more effective by the end of their IYT programme.

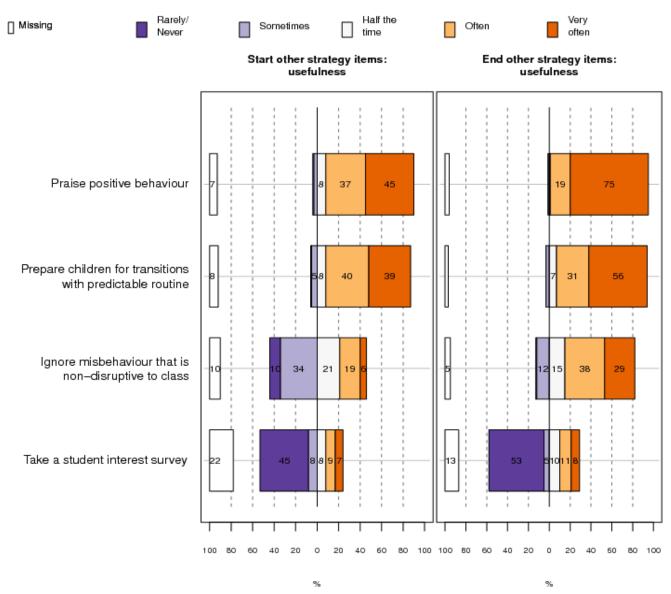


Figure 10 Praising, preparation for transitions, ignoring misbehaviour and student interest survey strategies: usefulness

End-of-course views of core IYT teaching techniques

IYT also asks participants to globally rate the usefulness of some of its core teaching techniques through the final TWSQ.

The majority of ECE teachers rated these core teaching techniques as extremely useful or useful. They were most enthusiastic about techniques that are likely to be woven through everyday practice praise/encouragement (86 percent rated this as extremely useful), followed by good commands/clear limit setting (72 percent rated this as extremely useful) and social and emotional coaching (68 percent rated this as extremely useful). Enthusiasm was less pronounced for the use of time-

out/calm-down place or loss of privileges, logical consequences (21 percent saw these as extremely useful) or incentives (29 percent saw this as extremely useful). These last three techniques are less likely to be something that teachers would do every day. Figure 11 has the details.

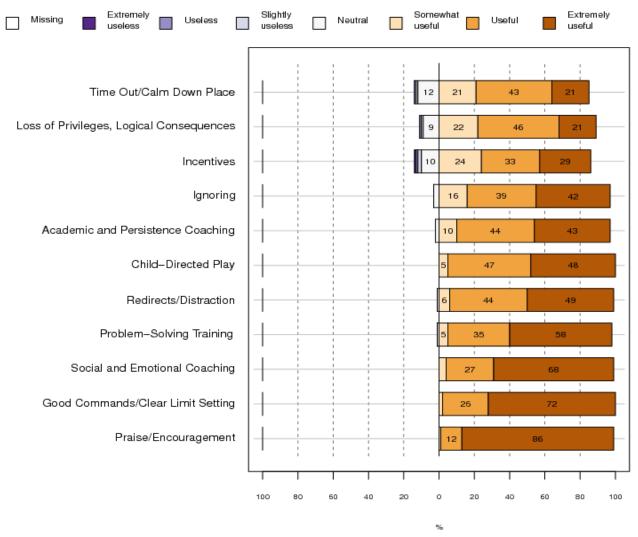


Figure 11 Usefulness of specific teaching techniques

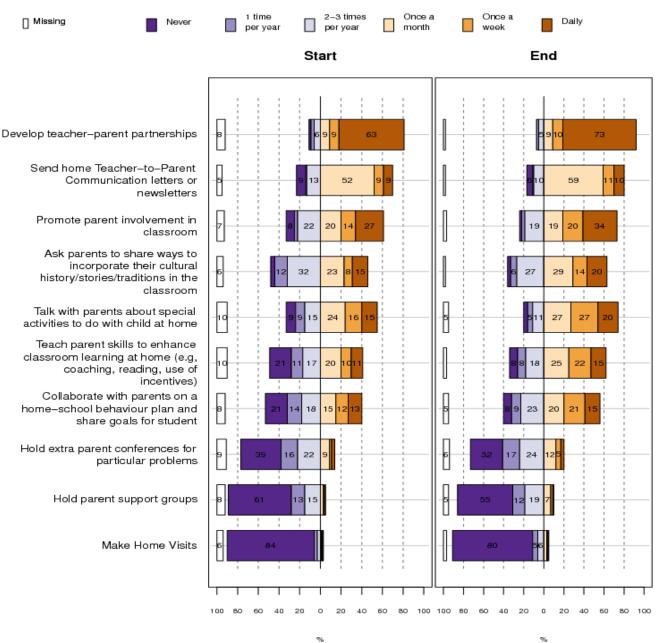
Working with parents

Figure 12 shows overall increases in the frequency with which ECE teachers worked with parents of their students, for six of the 10 related TSQ items. The ways of relating to or working with parents that did not increase are ones that are probably more dependent on ECE service policy and resources: these were sending home newsletters, making home visits, holding parent support groups. The activities showing increases would be easier to develop within existing parent–teacher contact and interaction within the ECE service.

Increases are most marked in the proportion of ECE teachers:

- working with parents on a home-school behaviour plan and shared goals for the student (the proportion of ECE teachers who never did this or only once a year halved from 35 percent to 16 percent)
- reporting daily or weekly promotion of parent involvement in their ECE service
- teaching parents skills to enhance learning at home
- talking with parents about special activities to do at home.

Figure 12 Working with parents



Planning and support

All the IYT planning and support strategies, including IYT resources (the book and self-reflective inventories) were used much more by the end of the programme. Around half the teachers daily or weekly used particular IYT strategies such as reviewing progress in reaching goals for individual student behaviour plans and reviewing their discipline hierarchy according to where students were.

Double the proportion of teachers managed their own stress levels through positive cognitive strategies once a week or more by the end of the IYT programme: an increase from 37 percent at the start of IYT to 78 percent at the end, as shown in Figure 13.

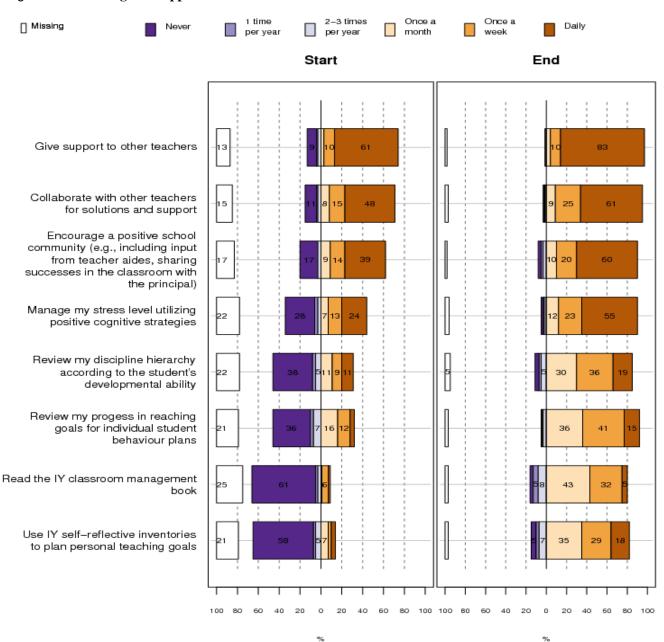


Figure 13 Planning and support

Overall views of the IYT programme

TWSQ responses show that the ECE teachers were very positive about IYT. They thought the approach used to change students' behaviour problems was greatly appropriate (57 percent) or appropriate (39 percent). Almost all would recommend the IYT programme to another teacher: 78 percent strongly recommend and 18 percent recommend.

When we asked teachers for any final comments about the IYT programme and their learning from it, most of the 286 comments were enthusiastic about the programme:

Such a positive and empowering course. I have been highly recommending it to other teachers and parents. Thank you!

I have found the course very beneficial for our whole teaching team. I like the regular group sessions with the sharing of ideas with other teachers of what has worked and not worked. I have shared the strategies and information with my team at staff meetings and have shared it in a similar way that the programme has been delivered with us. Tell me and I'll forget. However, show me and I may remember. Let me do it! ... and I will learn.

Our preschool as a whole is much calmer and more positive and the staff are working together well.

We all felt that we 'saw' positive behaviour and ignored negative behaviour—however, IY allowed us to see that in fact quite the opposite was true. Now we do focus on the positive and that has allowed us to build deeper relationships with the children at our kindergarten—even those children whose behaviour was really challenging.

The TWSQ questionnaire ends with five open-ended questions about the programme.¹⁴

Two-thirds of the ECE teachers identified several aspects that they found most helpful. Twenty-two percent made a global positive comment, such as 'everything'. Thirty percent focused on teaching strategies they could use. Particular mention was made about the value of learning how and why to be positive in interactions with students (16 percent), the behaviour plan work with target students (12 percent), relationship building (11 percent) or coaching (9 percent), and the behaviour pyramid (9 percent).

Most helpful aspects also included the IYT teaching methods such as working in small groups (16 percent), networking and sharing with other teachers (13 percent), having opportunities to practise (11 percent) or the resources (the book, worksheets; 8 percent). What they focused on could indicate the different avenues through which IYT teaching reaches individuals with different needs (their own; their current class) or what was foremost in their minds when they completed the survey.

¹⁴ We developed coding for responses to each question, using a sample of 20–25 percent of the responses, then coded all the responses. The patterns are consistent with the patterns from the closed questions reported above. This may suggest that a useful discussion for the IYT practice group would be to weigh the use of these open-ended comments in group leaders' work against the time taken by teachers to fill out this part of the TWSQ questionnaire, and whether that time could be better used.

What did teachers most like about the programme? Some of the parts they identified as most helpful were also mentioned. Teachers were most likely to mention interactive learning (sharing, discussing) and the strategies IYT focuses on.

Fewer comments were made in response to the question asking the IYT participants what they liked least about the IYT programme. Responses here were mainly about participation in the workshops, rather than the content of the programme. Role-plays and the video vignettes were most mentioned (18 percent and 17 percent respectively). Role-plays may be new to many teachers; the video vignettes were criticised as not sufficiently reflecting the ECE teachers' everyday reality in New Zealand.

Summary

Most of the ECE teachers who took part in IYT programmes in the first 8 months of 2014 increased their use of the positive behaviour strategies focused on in IYT. Along with increased use of these strategies came marked increases in perceptions that these strategies were useful—that they worked with children. There was also an increase in the frequency of teacher–parent work together.

Increases in the use of the IYT strategies and the perception that these strategies were effective were related to the work teachers did with their IYT group leader in between workshops, sharing of IYT learning within their ECE service and the degree of compatibility between IYT and *Te Whāriki*.

Time between the monthly workshops enabled ECE teachers to put their learning into practice and see what difference it made, building practice over time in their own ECE service contexts as well as in the workshop context. They valued the workshop opportunities to share their experiences with colleagues from other services and discuss the material presented. Some were uncomfortable with some aspects of the interactive workshop learning, particularly role-plays and the context of the video vignettes, which differs from New Zealand ECE settings. However, even if they disliked some of the workshop activities, they were generally very positive about the calibre of the IYT group leaders and the programme as a whole. Almost all the ECE teachers would recommend IYT to another teacher.

The IYT programme worked well across the board: for participants of all ethnicities, for those with different centre roles and years of teaching experience. On the whole it worked just as well for those whose students included the very young as well as for those who worked only with 3–5-year-olds.

3. Gains for ECE teachers and their students

In this section we start by looking at the increase in ECE teachers' confidence in managing behaviour, then at some more specific impacts on their thinking and practice. Next we look at the changes for the 'target' children they developed and used a behaviour plan worked out with their IYT group leader. Changes for their students as a whole are then reported. Finally, we look at the role of ECE service contexts in these changes and the challenges ECE teachers saw in making or sustaining IYT-related changes.

Increases in ECE teachers' confidence in managing behaviour

When they started IYT, 46 percent of ECE teachers rated themselves on the TSQ as confident or very confident in managing their students' current behaviour problems. By the end of the course, 88 percent rated themselves as confident or very confident: a very marked improvement. Figure 14 has the details.

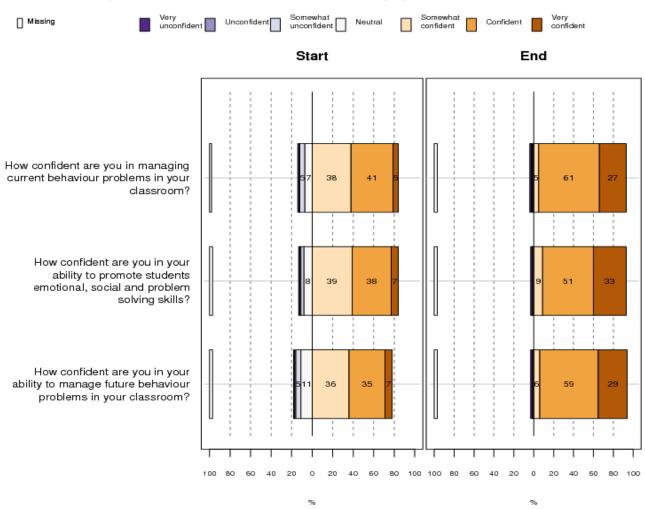


Figure 14 Change in ECE teachers' confidence levels in managing classroom behaviour

Confidence increased across the board, whether ECE teachers started the IYT programme with low or high confidence levels.

Most of those who lacked confidence in managing current behaviour problems with their students when they started the programme ended it rating themselves as confident or very confident (71 percent). Eighteen percent rated themselves as somewhat confident. Thus almost all this initially unconfident group had greatly improved their confidence by the end of the programme.

Those who were initially neutral or somewhat confident in managing current behaviour problems were likely to rate themselves as confident at the end of the course (55 percent and 75 percent respectively), with 15 to 18 percent rating themselves as very confident.

Just over a third of those who rated themselves initially as confident were very confident at the end of the course.

A few ECE teachers were less confident at the end of the course than they had been at the start, perhaps because their initial confidence was related to different behavioural approaches, and the IY approach had challenged these.

We found the same patterns of confidence increase from the IYT programme in relation to managing future behaviour problems and promoting student skills.

End-of-programme confidence levels were not dependent on teachers' years of teaching experience, or the age level they taught. Pasifika ECE teachers showed the most confidence in managing current and future behaviour. Managers and head teachers showed more confidence than qualified teachers, who in turn showed more confidence than unqualified teachers in relation to managing current behaviour problems.¹⁵

ECE teachers who saw challenge in their using IYT or continuing to develop their use of it were less confident about their management of current and future student behaviour (27 percent were very confident they could manage future behaviour, compared with 45 percent of those who did not see some challenges). Sensing challenge was not associated with their IYT programme experiences or views of the usefulness of IYT strategies with their students: it was not that they were trying to use something they doubted.

Impacts from IYT for teacher thinking and practice

Almost all the ECE teachers identified positive impacts from IYT for their understanding and knowledge of useful strategies.¹⁶ Many saw IYT as adding ideas to what they were already doing rather than being a complete change of approach. Adding ideas was not trivial: it did change practice, with only 17 percent thinking it had made little difference to what they did. Table 3 shows the details.

Aspect	%
More aware of the value of being pro-active in relation to children's behaviour	95
Much deeper understanding of how to teach social and emotional skills	93
Added some new ideas to what I was already doing	93
Useful strategies to work with children in ways that encourage their engagement in class	92
Useful strategies to build relationships with parents and whānau	82
Made little difference	17

Table 3 ECE teacher gains from IYT learning (n = 366)

Some illustrations of what these changes look like came from teachers' final comments:

¹⁵ The figures in relation to being very confident in managing current behaviour problems at the end of the IYT programme were 59 percent of ECE service managers, 54 percent of head teachers, 34 percent of qualified teachers and 14 percent of unqualified teachers.

¹⁶ This information is from the NZCER end-of-course survey.

I believe I have used and use many of the teaching strategies, particularly the first three levels of the pyramid; but what this course has done has made it far more meaningful. The course has provided these skills at a deeper level and a better understanding. I do believe I build positive relationships with children but this course has helped me develop this strength at a stronger level. I have seen the results in the children I work with and it is so rewarding!! We have been given so many strategies and skills to use as a teacher and I am so excited about putting it into practice. I have become a better teacher!!

IY has had a huge impact on my teaching practice. I now sit back and reflect on a situation, making sure I am reading the situation fully. I support the children to solve their own problems.

I found the programme very helpful. It has made me completely change the way I approach behaviour and how I deal with it and we noticed some huge changes with my focus child which is fantastic as we were all really struggling. It's really got me thinking about the positives rather than the negatives.

Gains for teachers were much the same for Māori, Pasifika, Asian and Pākehā ECE teachers. They were unrelated to their length of teaching experience. More teachers without registration thought their IYT learning had made little difference to what they did (44 percent, compared with 12 percent of fully registered teachers and 19 percent of provisionally registered teachers). More of those ECE teachers whose highest qualification was a diploma also thought this (24 percent, compared with 14 percent of those whose highest qualification was a degree). Gains reported here were unrelated to the number of IYT sessions completed.

Gains for teacher practice were most likely to be reported by those who:

- were most positive about their IYT experience
- found the teaching strategies used in the IYT programme extremely useful or useful
- rated their IYT group leader's work as superior or excellent
- saw IYT and Te Whāriki as very compatible.

Changes in target student behaviour

Teachers develop a behaviour plan for a student in their class whose behaviour they would like to change, with the advice of one of their two IY group leaders, and discuss progress on this plan with the group leader over the course of the IYT programme.

In terms of social characteristics, most target students were male, 71 percent. Sixty-one percent were Pākehā and 34 percent from the Government's priority groups in terms of ethnicity: 25 percent were Māori and 9 percent Pasifika. Four percent were Asian in ethnicity. Eleven percent did not have English as their first language. Twelve percent had special educational needs related to developmental issues and 2 percent related to physical disability. Eleven percent of the target students were getting some additional support.

Most of the ECE teachers who filled in the TWSQ thought that the behaviour of their target student for whom they had developed a behaviour plan, in conjunction with their IYT group leader, had greatly improved (35 percent) or improved (50 percent). Thirteen percent reported slight improvement. Only 1 percent said the behaviour was the same and 1 percent said it was worse.

Most of the target students showed disruptive behaviour and/or had poor communication skills at the start of their teacher's IYT programme.

Challenge	%
Disruptive activity—active disobedience	49
Disruptive activity—mean to other students/bullies/aggressive	48
Poor communication skills	39
Disruptive activity—demands teacher's attention constantly	28
Other	20
Lonely child—little interaction with other students	15
'Invisible' student—little participation in class or learning	12

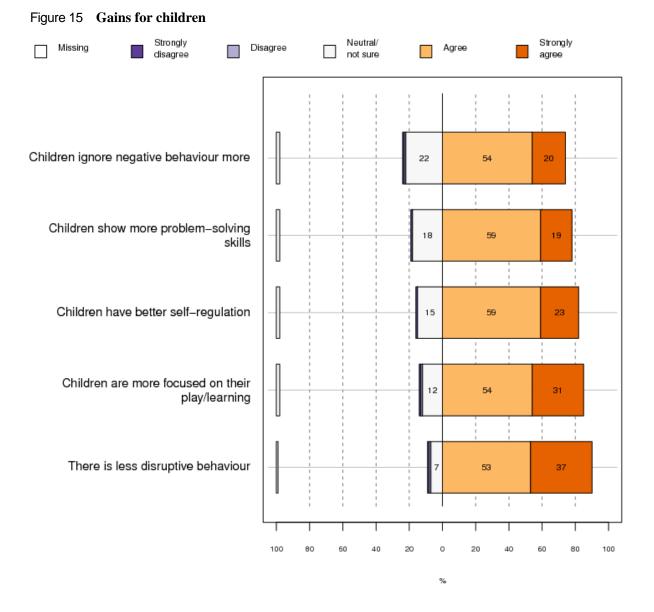
Table 4Key challenge presented by ECE teachers' target students (n = 414)

When we analysed teachers' reports on improvement in their target student's behaviour in relation to their key challenge, we found that students whose key challenge was disruptive activity, being mean to other students, bullying or aggressive were reported less often to have made great improvement in their behaviour.

ECE teachers' IYT learning also paid off for other individual students' problems they had tried to change over the programme, with 22 percent reporting a great improvement for these students and 59 percent improvement. Another 17 percent reported slight improvement. Two percent reported no change for these students.

Gains for children in general

What difference did teachers think their IYT learning had made for the children they taught? The majority saw some gains for children's behaviour and social and emotional skills, and their focus on play and learning. The changes were marked for a fifth to a third of the ECE teachers who strongly agreed with the statements we asked them to rate. Reduction of disruptive behaviour allowing a focus on play/learning was most likely to be reported.



We checked some of the assumptions included in the theory of change for the evaluation about the aspects of IYT experience and ECE service attention to and support for IYT learning that could have a bearing on the gains for students reported by IYT participants.

We found that gains for their students were reported more by ECE teachers who:

- were positive about the IYT approach and teaching strategies
- ended the course with confidence that they could manage future behaviour problems
- found the IYT programme strategies extremely useful
- usually worked with their IYT group leader in between workshops
- rated their IYT group leader's work highly
- usually used the IYT self-reflective inventory
- also reported improvements in their target child's behaviour and other individual students whose behaviour they had tried to change over the programme

- were greatly satisfied with the progress of their students
- discussed the changes they were making in their practice within their own ECE service, experienced mutual support from other teachers and general support in their ECE service to make and sustain changes
- thought that IYT strategies and approaches were compatible with *Te Whariki*, the ECE curriculum.

ECE service support for the use of IYT learning

The theory of change identified some aspects of ECE services that could have a bearing on whether teachers could use their IYT learning in their practice. This included:

- whether other teachers in the ECE service had completed IYT
- whether IYT learning was shared and supported in the ECE service
- whether education support workers or regular parent help supported their approach to behaviour.

Most teachers supported each other to make changes as a result of their IYT learning. Teachers were a little more likely to report support for each other to make changes as a result of this learning than to discuss change they were making as a result, or share their IYT learning.

Table 5	ECE teachers' in-	-house sharing and s	support to use	IYT learning $(n = 366)$

Kind of sharing	Occurs a lot %	Occurs a little %	Does not occur %
Support other teachers who have done IYT to make changes	76	22	1
Share IYT learning with other teachers	67	30	2
Discuss changes made in own teaching with other teachers	64	33	2

Similar proportions of those who said they were the only teacher in their service to have completed IYT and those who had colleagues who had completed the IYT programme said they discussed changes in practice resulting from IYT a lot. However, somewhat fewer of the former said they supported colleagues to make IYT-related changes a lot (65 percent, compared with 79 percent of the latter group) or shared their IYT learning (58 percent, compared with 68 percent).

Forty-eight percent said they had a lot of support within their ECE service to make or sustain changes related to their IYT learning, 38 percent some support, 9 percent had a little support and 3 percent lacked support. Somewhat fewer of those who were the only teacher in their service to have completed IYT said they had a lot of support (37 percent, compared with 50 percent of those who had colleagues who had also completed IYT).

Thirty-four percent of the ECE teachers who filled out the end-of-programme survey worked with an education support worker or regular parent help. Most of the ECE teachers discussed changes in their approach from their IYT learning with these people: 36 percent reported a lot of discussion and 40

percent a little. The majority of the ECE teachers thought their education support worker or regular parent help supported their approach through the way they interacted with children: 60 percent a lot, 32 percent a little.

Compatibility with the ECE curriculum, Te Whāriki

The majority of ECE teachers thought IYT was compatible with *Te Whāriki*: 57 percent thought it was very compatible and 35 percent that it was compatible. Five percent thought there were some issues around incorporating IYT into *Te Whāriki*, and 2 percent thought the two were incompatible. We left a space for any comments that ECE teachers wanted to make here if they saw issues and 43 did. These shed a useful light on perceptions that may get in the way of ECE teachers gaining from their IYT experience. Some thought IYT was more related to primary-aged children than those in ECE; some mentioned the *time-out/calm-down* strategy as different; some saw IYT as about behaviour management or about 'power relationships', rather than 'learning and assessment', with one ECE teacher epitomising this perspective:

At times IYT seems more based on a behavioural and psychological manipulation and training model rather than an ecological model, especially at the top end of the pyramid. It also seemed further back in thinking than current best practise though we stand in a similar place in the basics.

Challenges in putting IYT learning into practice and developing it

A third of the ECE teachers said there was some challenge for them about putting their IYT learning into practice or continuing to develop it.

While more Pasifika ECE teachers were positive about IYT and the gains from it, more Pasifika ECE teachers compared with teachers from other ethnic identities thought there would be challenges in putting their IYT learning into practice (57 percent).

Fewer ECE service managers foresaw such challenges (18 percent, compared with 29 percent of head teachers and 36 percent of qualified teachers). There were no associations with other teacher characteristics including length of teaching experience, registration status, highest qualification and number of IYT workshops attended (all those responding had attended at least four IYT workshops).

Interestingly, those who saw challenges in putting IYT into practice were just as positive about the overall IYT approach to behaviour and the IYT programme as those who did not see challenges ahead of them. Their views on the usefulness of the IYT programme teaching strategies and classroom strategies were also alike. This adds to the picture that the challenges they see arise more from their own context than with their experience of the IYT programme itself.

Indeed, most of the comments made here about the challenges teachers faced were around the importance of consistency in their ECE service approach:

- having or getting other teachers on board
- working as a team
- changing existing service policies
- sharing the responsibility for student behaviour rather than now being seen as the 'behaviour expert' because of having done the IYT programme
- the need for time to share learning and work on behaviour plans.

Teachers also mentioned the challenges of breaking their own habits and replacing them with new habits, and to remain persistent.

Summary

Most of the ECE teachers reported gains for the children they taught. They reported less disruptive behaviour, children more focused on their play or learning, with better self-regulation, more problem-solving skills and the skills to ignore negative behaviour. Improved behaviour was evident for most of the target children for whom they developed a plan to change. This allowed ECE teachers to see the value of such planning coupled with action and review.

While it was more challenging to put IYT into practice or sustain its use in ECE services where the teacher was the only one to have completed IYT, being the only teacher in an ECE service to complete IYT did not result in fewer reported gains for teachers or the children they taught.

What does seem to make a difference in terms of what teachers and their students reportedly gain from IYT are:

- the nature of the individual work with the IYT group leader, with more gains for those whose group leader usually used the IYT tools such as discussion of target child progress and behaviour plan and the self-reflection inventory
- (continued) use of the self-reflection inventory
- the nature of sharing with other ECE service colleagues around IYT: discussing progress and trying things out, more than simply supporting
- discussing knowledge of IYT strategies with an education service worker or regular parent help so that they understood these and could support them
- perception that IYT is compatible with *Te Whāriki*.

These patterns suggest that there would be value in focusing on how IYT group leaders could explicitly show the compatibility between IYT and *Te Whāriki* in workshops and individual work with ECE teachers, and emphasise the importance of ongoing sharing of IYT strategy use and the reasons for it within ECE services. It is also important to fully utilise the individual time ECE teachers have with their group leaders, ensuring that target children's progress is discussed, and show the value of the self-reflection inventory.

4. Primary teachers' learning and change

Characteristics of the primary teachers

Who were the primary teachers who took part in the IYT programmes that ran over the first 8 months of 2014?

- Seventy-two percent of the teachers were identified as NZ European in ethnicity, 13 percent as Māori, 4 percent as Asian, 4 percent as Pasifika and 11 percent as another ethnicity.
- Seventy-four percent were fully registered teachers and 17 percent were provisionally registered, with 1 percent subject to confirmation.
- Sixty-five percent had a university degree as their highest teaching qualification, 14 percent a postgraduate diploma and 14 percent a diploma.
- The NZCER start survey shows a median of 10 years' teaching experience. Twenty-two percent had been teaching for less than 2 years, and at the other end of the spectrum, 27 percent had been teaching for more than 15 years.
- In terms of school position, 93 percent had classroom roles. We prioritised the information teachers gave us to get a clear picture of school responsibilities (assigning each teacher to the highest level their answers indicated). Eight percent were principals, deputy or assistant principals. Three percent were Special Education Needs Co-ordinators (SENCOs); 9 percent were syndicate leaders; 8 percent were curriculum leaders; and 60 percent classroom teachers. We did not have information on school role for 12 percent of the teachers. Most of those with school responsibilities beyond being a classroom teacher also taught in a classroom (not necessarily full-time, but we did not ask what proportion of time was taken by classroom teaching).

Their school contexts:

- All but 18 of the 864 primary school teachers taught in English-medium schools.
- They came from a range of schools in terms of the socioeconomic status of the school community: 22 percent from socioeconomic decile 1–2 schools; 18 percent from decile 3–4 schools; 15 percent from decile 5–6 schools; 23 percent from decile 7–8 schools; and 18 percent from decile 9–10 schools.¹⁷ This is a wider range of schools than the intended priority of providing IYT to teachers in low socioeconomic decile schools.

¹⁷ School socioeconomic decile information was lacking for 6 percent of the teachers.

Their class contexts:

IYT is aimed at teachers of children aged 3 to 8. Most of the primary teachers who took part taught new entrants up to Year 4, but 36 percent taught older children, as shown in Table 16 below. This could be because of multi-year classes (evident in the proportions adding up to more than 100 percent), a school's interest in IYT, for example, wanting school leaders who may teach older children to attend, or who was able to be regularly relieved.

Year level	%
New entrants/Year 0	23
Year 1	34
Year 2	43
Year 3	33
Year 4	25
Year 5	15
Year 6	12
Year 7	5
Year 8	4

Table 6 Year levels taught by primary teachers (n = 823)

The number of students in the primary teachers' classes ranged from 2 to 50.¹⁸ The median class size was 22. The average proportion of boys in these classes was 52 percent, and of girls 48 percent. The classes had a median proportion of:

- 19 percent Māori students
- 7.5 percent Pasifika students
- 9 percent who had a language other than English as their first language
- 7 percent who had challenging behaviour with no specialist support
- 4 percent who had special education needs with no specialist support
- 4 percent who had special education needs with specialist support.

Very few teachers reported students with challenging behaviour for which they also got specialist support.

Fifty-two percent of the teachers worked with a teacher aide, usually one (74 percent of those working with a teacher aide), with 21 percent of those working with a teacher aide working with two and 4 percent three or more. Almost two-thirds (64 percent) of these teachers thought that the teacher aide(s) they worked with supported the way the teacher interacted with students a lot and 26 percent a little. Forty-seven percent of the primary teachers thought their teacher aide(s) understood their general approach to student behaviour a lot and 39 percent a little.

¹⁸ Some teachers team-teach, particularly in modern learning environments.

IYT programme participation

All six workshops in their IYT programme were attended by 75 percent of the teachers. Another 15 percent attended all but the sixth and last workshop, and 10 percent up to four workshops. Reasons for not completing the programme were recorded for a few of the 25 percent who did not attend all workshops and are largely to do with leaving employment at their school, illness or lack of time.

Most primary teachers were doing the IYT programme with at least one other teacher from their school as intended by the Ministry of Education funding: 42 percent with one other teacher, 20 percent with two others and 27 percent with three or more other teachers from their school. One teacher was attending the programme with 14 of their colleagues, suggesting that one programme had been populated by one school. Only 2 percent were the only teachers from their school attending their IYT programme. This could be because individual teachers had resigned or could not be released when it came to the starting date for the programme.

Almost two-thirds of the teachers were from schools where other teachers had already completed an IYT programme: 43 percent had had three or more teachers precede them and 21 percent two or more. Some were unsure if other teachers had undertaken IYT (7 percent), which might indicate it was not a prominent theme in the school, and 24 percent said they were the first from their school to participate in IYT. This is almost half the proportion of ECE teachers who said they were the first to participate in IYT in their service.

By the time the primary teachers had completed IYT, only 4 percent said they were the only teacher in their school to have done so. Many were in schools where three or more colleagues were IYT trained (62 percent) and 18 percent had one or two other colleagues who were also IYT trained. Two percent did not know and 14 percent did not answer this question.

Many of the primary teachers did not know if parents of students at their school had taken part in IYP (60 percent); 17 percent said they had not. A few parents were reported to have taken IYP by 19 percent of the teachers and 1 percent said many parents at their school had taken part in IYP.

Views of the usefulness of the IYT workshop strategies

Primary teachers were generally positive about the eight IYT workshop strategies used for their learning. As shown in Figure 16, they were most positive about:

- group discussion and sharing of ideas
- support from other teachers, followed by
- group leaders' lectures, and
- the resource book.

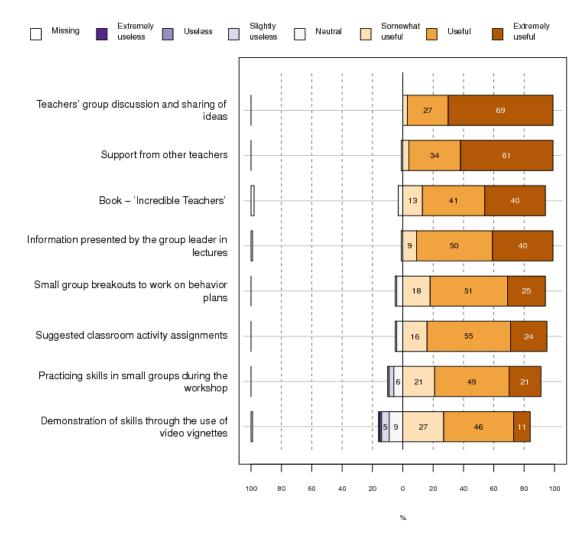


Figure 16 Usefulness of the IYT workshop strategies

IYT group leader support

As with the ECE teachers, discussion of target child progress and observation of their work in the class was the most common individual support primary teachers had from their IYT group leader in between workshops. Just over a fifth usually viewed their video with their IYT group leader (see Figure 17 below).

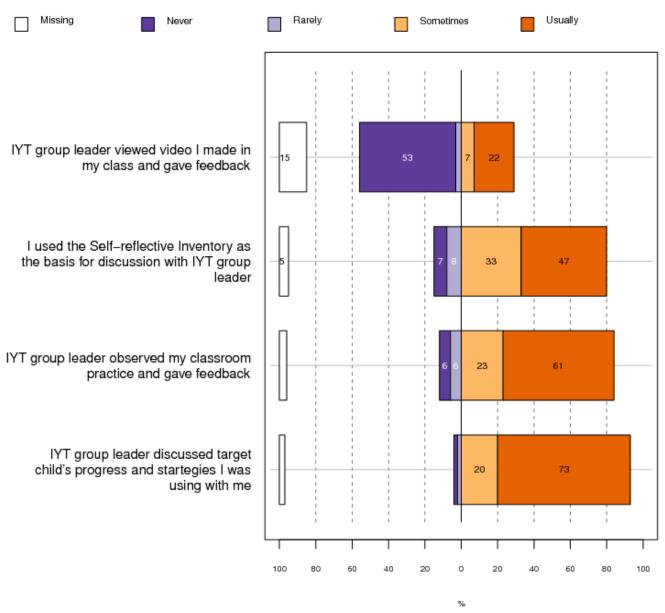


Figure 17 Support from IYT group leader in between workshops

Almost all the primary teachers were very positive about the support received from their IYT group leader: 68 percent said it was very useful and 28 percent of some use. Only 2 percent said it was of not much or no use. The majority also found their group leaders helpful: 61 percent extremely helpful, 32 percent helpful and 4 percent slightly helpful.

The teachers were very positive too about the quality of the work of their group leaders. Table 7 gives the picture for the first group leader (ratings for the second are similar).

Aspect	Excellent %	Superior %	Above average %	Average %
Teaching	48	25	20	6
Preparation	56	23	17	3
Interest and concern in me and my student	51	23	17	7

Table 7 Primary teachers' views of their IYT group leader (n = 717)

Changes in positive behaviour management practice

Notable increases occurred in primary teachers' use of the positive behaviour strategies presented and practised in IYT. At the end of their programme they used positive coaching, problem solving and anger management, and recognising positive behaviour more often on average, and found these strategies more often useful (effective).

Positive coaching, problem solving and anger management

The proportion of teachers who reported they very often used many of the positive coaching, problem-solving and anger management strategies doubled over the IYT programme. There was a decrease in the proportion of teachers never or rarely using these strategies. Coaching positive social behaviours did not show such an increase, probably because many teachers were already using this often or very often with their students when they began IYT.

Anger management strategies, emotion coaching and problem-solving teaching and scenarios were the strategies least used at the start of the IYT programme. Anger management strategies increased in use rather more than the use of problem-solving scenarios or imaginary play. This may be because the last two strategies took more time. Figure 18 has the details.

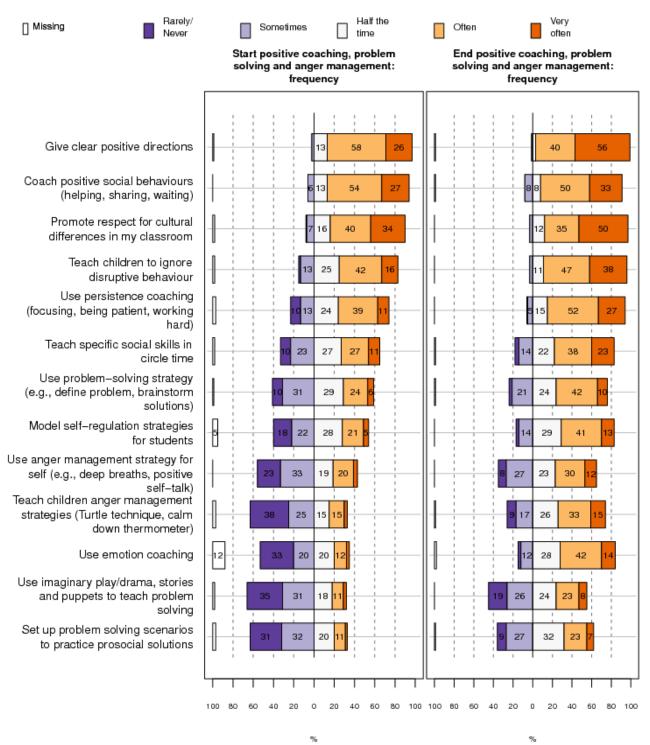


Figure 18 Positive coaching, problem solving and anger management: frequency

All these strategies were seen as more often useful (effective) by the end of primary teachers' IYT programme than at its start—including the problem-solving scenarios and play that had increased less in frequency of use than other strategies. Figure 19 gives the full picture of change for the items in this set.

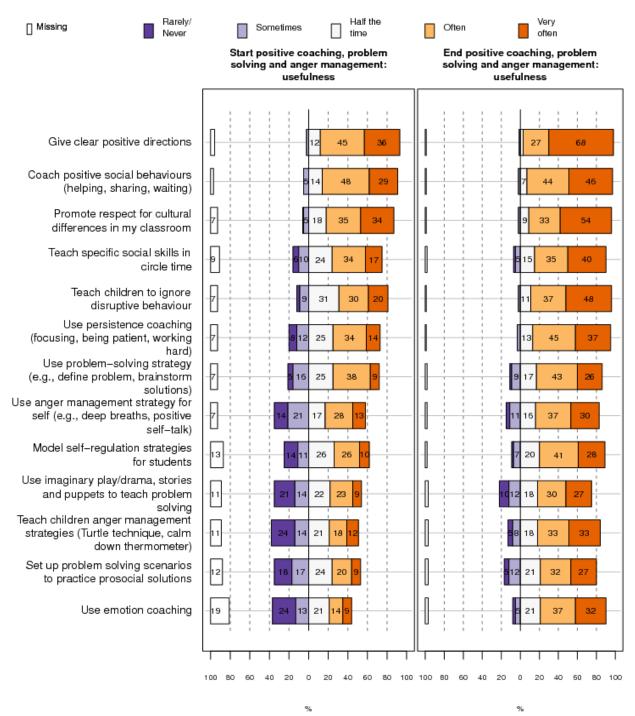


Figure 19 Positive coaching, problem solving and anger management: usefulness

Clarity and recognition of positive behaviour

All but one of the teaching strategies of clarity and recognition of positive behaviour showed marked increases in reported use by the end of the IYT programme, as shown in Figure 20. Warning of consequences for misbehaviour was the outlier showing no change.

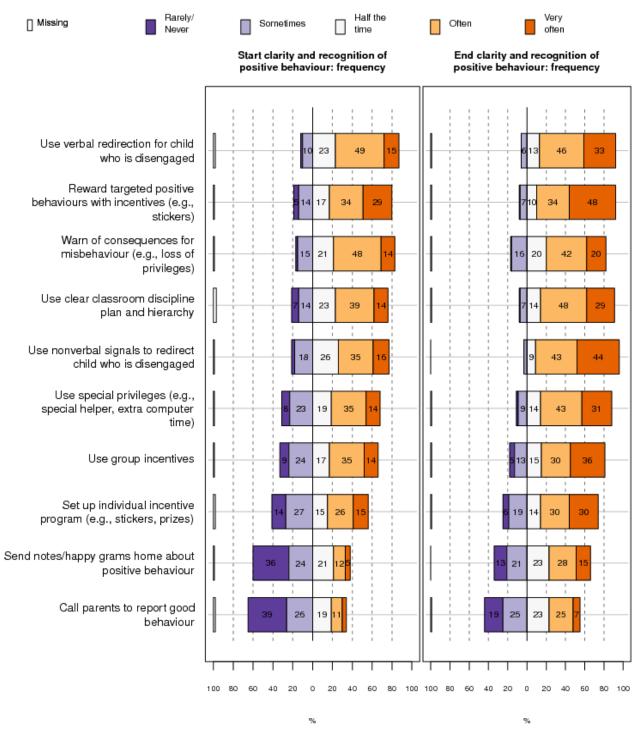


Figure 20 Clarity and recognition of positive behaviour: frequency

All these strategies to provide students with clarity around behaviour and its links with recognition and incentives were seen as much more often useful—effective—by the end of the IYT programme, including warning of consequences for misbehaviour.

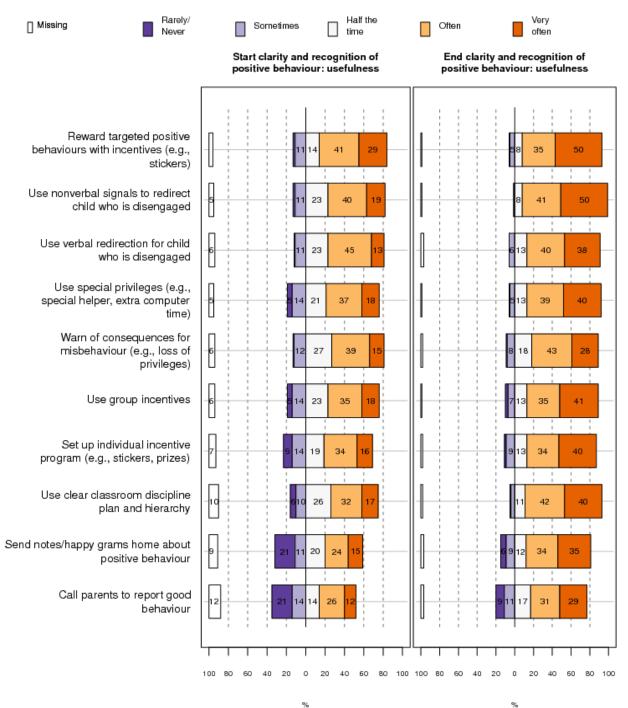


Figure 21 Clarity and recognition of positive behaviour: usefulness

Attention to misbehaviour

Primary teachers decreased their use of counterproductive responses to children's misbehaviour by the end of the IYT programme, particularly around describing or commenting on bad behaviour, singling out children, reprimanding in a loud voice and in-house suspension. More teachers sent notes to parents to report children's problem behaviour, though this was not common. Use of time out (calm down) decreased in frequency, perhaps because the positive strategies described in the two sets above were used more and their use became more effective. Details are given in Figure 22 below.

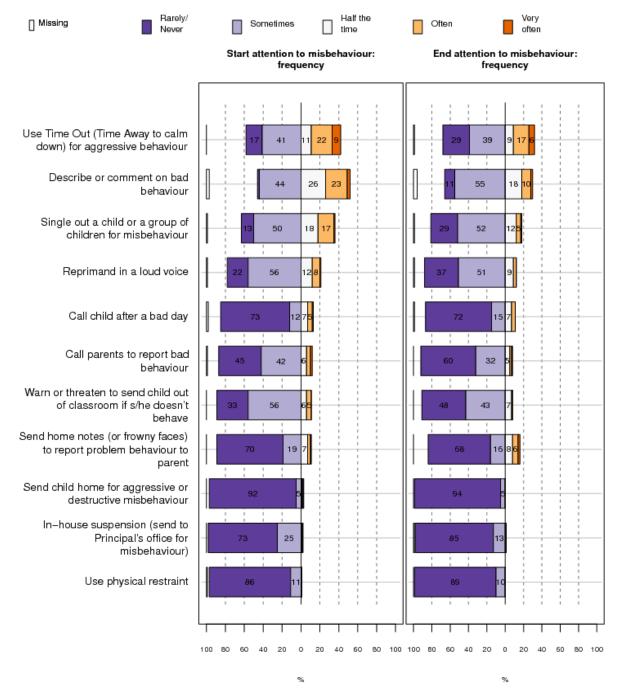


Figure 22 Attention to misbehaviour: frequency

Views about the usefulness of the use of counterproductive strategies in this set show some increases in those who found them rarely or never of use, and some decline in those who found them very often useful.

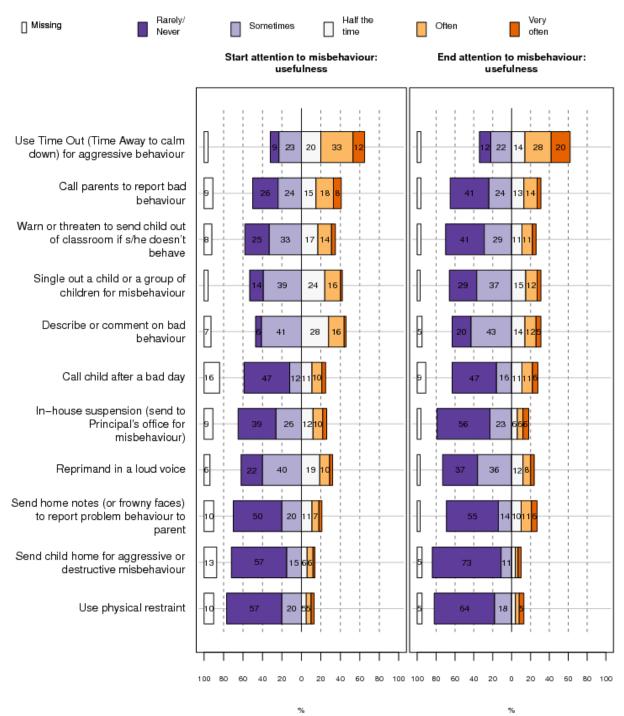


Figure 23 Attention to misbehaviour: usefulness

We investigated whether these increases in teachers' use of positive behaviour strategies and their sense that these strategies were effective were related to the work they did with their IYT group leader, how they worked with other teachers in the school and with their teacher aide, the support

they received from their RTLB and how compatible teachers thought the IYT approach was with their NZC work.¹⁹

We found increases in the use of positive behaviour strategies and their effectiveness were associated with:

- discussion of the target child's progress and strategies with their IYT group leader
- usefulness of their IYT group leader's individual support
- In-school sharing of IYT learning and changes with other teachers
- In-school discussion of the IYT-related changes the teacher makes in their class with other teachers who have completed the IYT programme
- In-school mutual support to make IYT changes
- In-school general support to make or sustain IYT changes
- Talking with teacher aide about the IYT-related changes
- RTLB support to make or sustain IYT changes.

The role of discussion and talking about the changes is interesting and points to the value of the IYT emphasis on reflection on strategy use and its effectiveness, as well as the workshop experiences of describing practice and effects with other teachers in ways that support ongoing learning.

Other IYT strategies

Figure 24 shows marked increases in primary teachers' use of three of the four remaining strategy items included in the TSQ. Teachers were making more use of praising positive behaviour, preparing children for transitions with a predictable routine and ignoring misbehaviour that was not disruptive of their class.

¹⁹ The detail of our findings is in Appendix 2.

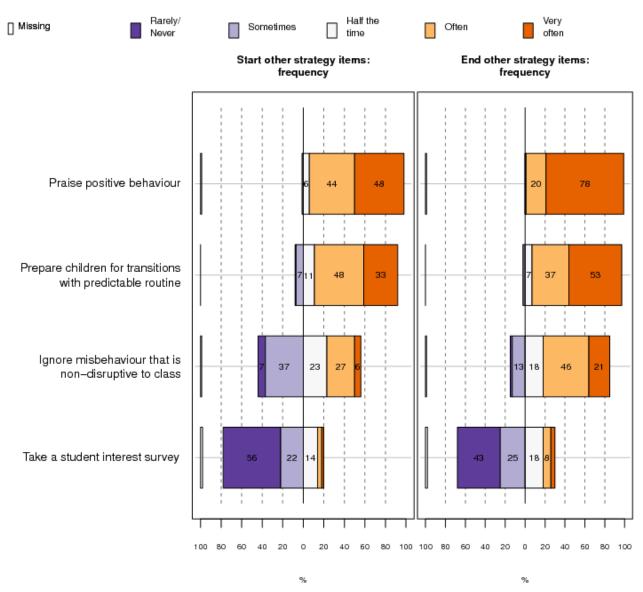


Figure 24 Praising, preparation for transitions, ignoring misbehaviour and student interest survey strategies: frequency

Figure 25 shows that primary teachers were also finding the three strategies they were using more often to also be more effective by the end of their IYT programme.

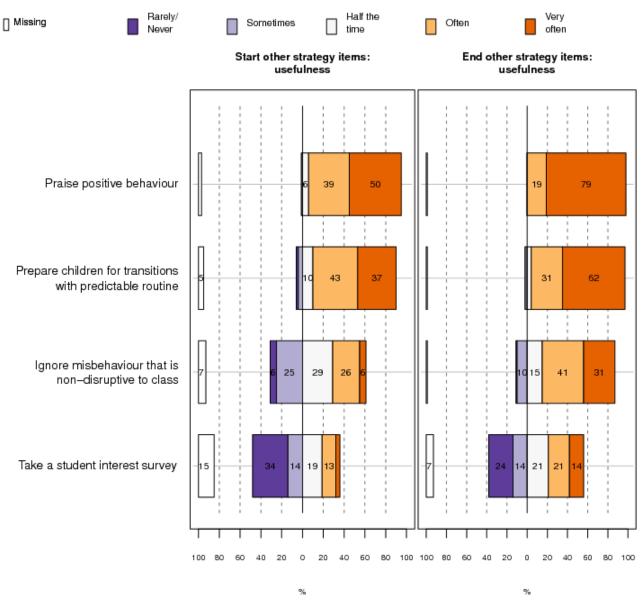


Figure 25 Praising, preparation for transitions, ignoring misbehaviour and student interest survey strategies: usefulness

End-of-course views on core IYT teaching techniques

Primary teachers were also very positive about the general usefulness of specific teaching techniques covered by the IYT programme. They were most enthusiastic about praise/encouragement (70 percent thought this was extremely effective) and good commands/clear limit setting (64 percent thought this was extremely effective). In contrast, child-directed play was seen as extremely effective by 18 percent, academic and persistence coaching by 22 percent, time-out/calm-down place by 23 percent and loss of privileges, logical consequences by 25 percent. The full picture is shown in Figure 26.

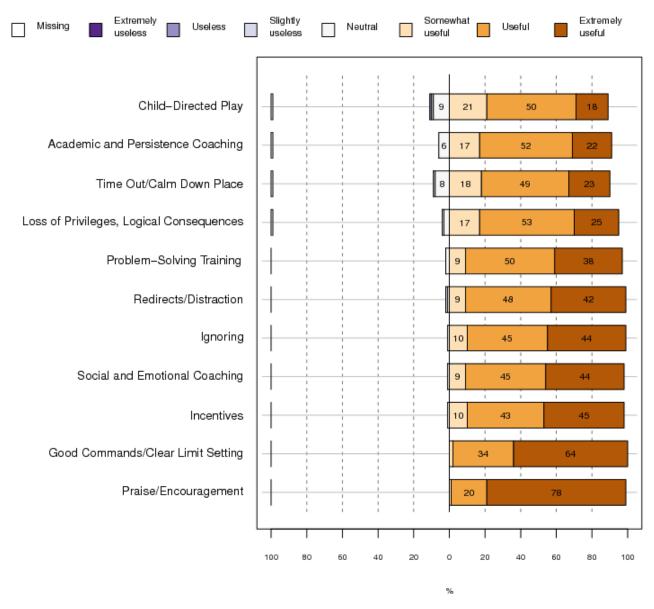


Figure 26 Usefulness of specific teaching techniques

We found that the more useful teachers found specific teaching techniques the more likely they were to also:

- have very useful support from their IYT group leader between workshops
- have a lot of in-school support to make IYT changes in their practice
- see IYT and *NZC* as very compatible

• have longer teaching experience.²⁰

There was also an indication that they taught a lower class size than others.²¹

Working with parents

Primary teachers who did little work with parents at the start of the programme were doing more with them by its end. At the end of their IYT programme, fewer primary teachers reported that the work with parents focused on in IYT never happened (home visits were the exception). There were increases in those who reported working with parents in the ways asked about at least once a month or more (see Figure 27).

²⁰ For example, 49 percent of those with more than 15 years' teaching experience found the IY book extremely useful, compared with 31 percent of those with less than 2 years' teaching experience. The strategy of good commands/clear limit setting was found extremely useful by 69 percent of those with more than 15 years' teaching experience, compared with 55 percent of those with less than 2 years' teaching experience; and the strategy of redirects/distractions found to be extremely useful by 46 percent of those with more than 15 years' teaching experience, compared with 26 percent of those with less than 2 years' teaching experience. The same trend was also evident with a smaller size difference for the strategy of problem-solving coaching.

²¹ Median class sizes were calculated for teachers in terms of their rating IYT techniques as extremely useful, useful or somewhat useful. The differences between these groups' median class sizes were not large: usually varying by one to two students. If there was a wider range of class size in New Zealand schools, the suggestion from the material here that class size may be related to teacher views could be better explored.

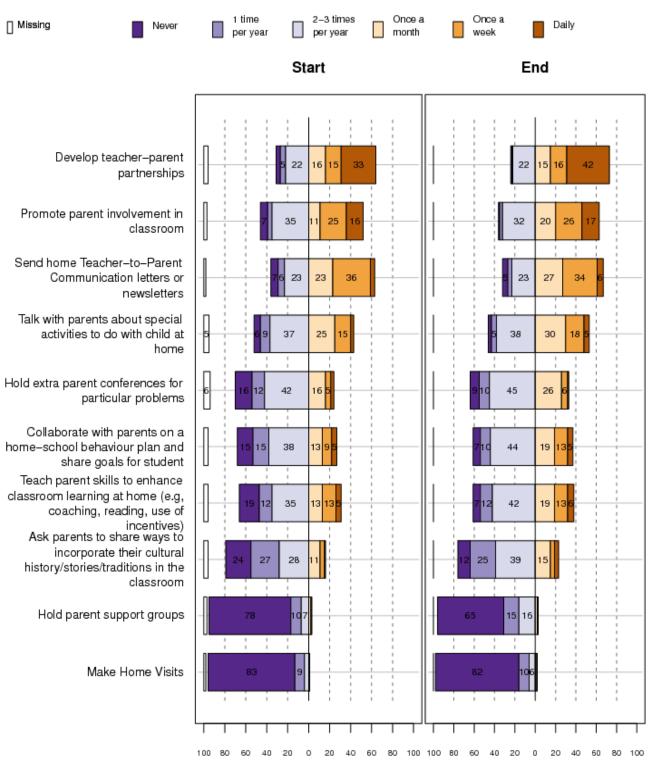


Figure 27 Working with parents

%

%

Planning and support

All the IYT strategies for teacher planning and mutual work with others were used much more by the end of the programme. For example, collaboration with other teachers for solutions and support on a daily or weekly basis increased from 49 percent at the start of the programme to 73 percent at the end. There was a doubling in the proportions of teachers who reviewed their progress in reaching goals for individual student behaviour plans at least daily or weekly, or their discipline hierarchy according to students' developmental abilities. Almost two-thirds used positive cognitive strategies daily or weekly to manage their own stress levels, compared with 26 percent at the start of their IYT programme, as shown in Figure 28.

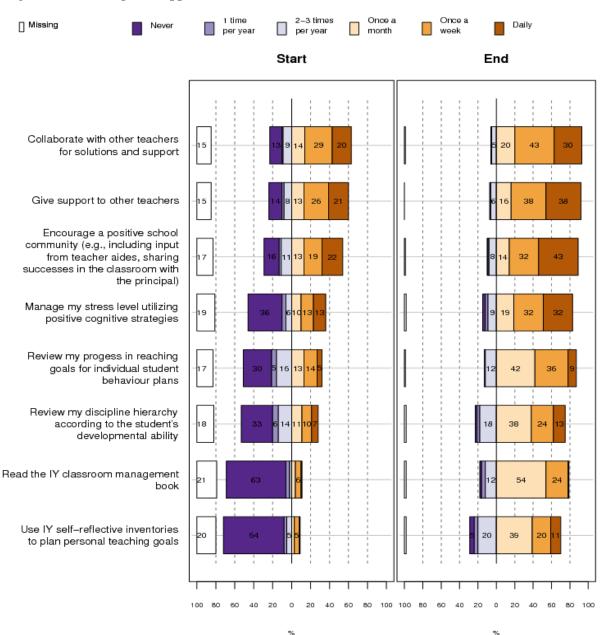


Figure 28 Planning and support

Overall views of IYT

Primary teachers were very positive about IYT. They thought the approach used to change students' behaviour problems was greatly appropriate (41 percent) or appropriate (54 percent). Most would recommend the IYT programme to another teacher: 55 percent strongly and 34 percent recommend it. Only 1 percent would not recommend it.

Comments²² about the programme as a whole were very positive:

Really enjoyed the fact that the course is held over a longer period of time, really allowing you to learn, implement and evaluate your priorities and strategies. Love the opportunity to discuss things with fellow teachers and building relationships with them.

Some noted a less powerful but still welcome affirmation of what they were doing, while extending their practice:

[group leaders' names] taught me a lot. Some I was already doing, it just didn't have a name. My class environment is much more positive as I am looking for good behaviour as opposed to focusing on the negative. A positive place with Great learning: my class and I benefited greatly from this!

IYT has given me more specific skills and ideas to build on what I was already doing in my classroom. Understanding emotions of children has helped with my teaching the strategies and skills to help the children to self-regulate.

Others felt reinvigorated as teachers:

I wouldn't have gone through this year without it. It has been such a challenging group of students that I have needed all the strategies we were taught to help the students and myself to have a successful year. Some things have been eye opening, such as the need to model to children things they don't understand—I have taken for granted that they understand what I expect when they don't know.

I have found participating in the IYT programme to be like a breath of fresh air. I have loved the collegiate sharing and support, the unpacking and revealing of skills I have forgotten about. This has renewed my love, heart for teaching, of making a difference to my precious children.

Some asked for refresher or 'end-of-year' sharing among those who took part in particular IYT programmes. The book was often mentioned as a resource they would continue to turn to. Quite a few suggested that IYT should be included in initial teacher education and for beginning teachers.

Two-thirds of the primary teachers identified several aspects of the IYT programme that they found *most helpful*.²³ They focused more on the workshop methods than did the ECE teachers, particularly on the sharing with other teachers (29 percent) and small-group work (24 percent). However, the proportions mentioning some particular aspects of the IYT approach itself were very similar among

 $^{^{\}rm 22}$ $\,$ In response to an open-ended question in the NZCER end-of-programme survey.

²³ This section summarises comments made in response to the final five open-ended questions in the TWSQ.

primary and ECE teachers. Primary teachers were less likely to mention relationship building. Twenty-eight percent mentioned IYT strategies, 14 percent learning how and why to be positive and 13 percent the behaviour plan and focus on a target student.

What did primary teachers *most* like about the programme? Networking/sharing with other teachers was liked the most (38 percent of primary teachers mentioned this), followed by the small-group work and discussions (20 percent). Particular strategies were mentioned by 14 percent and the quality of the group leaders—their support, approachability and collaborative approach—mentioned by 11 percent.

What did primary teachers *least* like about the programme? The video vignettes topped the primary teachers' dislikes of IYT (34 percent). Role-plays were disliked by 17 percent and 12 percent found the sessions too long.

Seventy-one percent of the primary teachers identified a part of the IYT programme that was *least helpful* to them. As with the ECE teachers, the main comment here was that it had *all* been helpful (24 percent). The video vignettes featured most prominently in these comments about what they had found least helpful (19 percent), followed by the role-plays (9 percent).

Finally, the IYT participants were asked "How could the programme have been improved to help you more?" The video vignettes were again to the fore, with 23 percent asking for these to be updated and have more New Zealand content. Nine percent would like more New Zealand examples in the workshops and 8 percent a shorter course or quicker pace. Sixteen percent said the programme is fine as it is.

There were also many criticisms of the video vignettes made in the final NZCER survey, as unrealistic in the resources available to New Zealand teachers in terms of time and people, as well as wanting to see strategies used with older children:

The vignettes we viewed were approximately six children with two teachers. I have 27 children and no teacher aide. Some of the strategies they used would be difficult to do.

The American model the programme is based on does not reflect best teaching practice in New Zealand. We encourage more responsibility of the child and less teacher-focused demands. This was particularly evident in the video clips which were very hard to relate to a New Zealand classroom. The overall philosophy/theory is applicable.

Teachers also asked for more focus on strategies for older students, more inclusion of Māori strategies and shorter programmes that felt less scripted:

It is very regimented. Some topics drag out and we spend a lot of time covering topics that could be done more quickly. The age of the videos makes it hard to see them as current/relevant at times, although I am sure the ideas they try to convey are.

However, some of those who were critical of the length also commented positively on the value of interacting with teachers from other schools (as well as having colleagues from their own), discussing behavioural challenges and what seemed to work for different students.

Summary

Primary teachers who completed IYT substantially increased their use of many of the strategies included in IYT and found that use more effective. They decreased their attention to misbehaviour (freeing up time for positive strategies among other things).

Changes in strategy use and finding this use more effective were related to:

- the work they did with their IYT group leader and how useful they found that
- discussions of IYT changes within their school, with other teachers and their teacher aide if they were working with one
- support within their school to make IYT changes
- RTLB support to make changes
- their view of the compatibility of IYT and NZC.

Changes were least likely in primary teachers' work with parents. Where there was change over the course of the IYT programme, it was for those who had not worked with parents before to start working with them.

By the end of their IYT programme, primary teachers were making much more use of the IYT strategies to support teachers' planning, review and mutual work with their colleagues around behaviour. The specific IYT self-reflective inventories to plan personal teaching goals were used least, but still 31 percent of the teachers said they did this daily or weekly. Most teachers were also actively managing their stress levels using the positive cognitive strategies included in IYT.

Teachers were very positive about the quality of their IYT group leaders and their experiences within the IYT workshops, valuing discussions, interactions and the lectures particularly. They were more critical of the video vignettes. Classroom strategies included in IYT that were seen as most useful by primary teachers were: praise/encouragement, followed by good commands/clear limit setting, then incentives, social and emotional coaching, ignoring and redirects/distractions and problem-solving training.

Many of the teacher, class and school characteristics we asked about were unrelated to differences in primary teacher views of the programme: the programme worked as well for those teaching Years 6–8 as for those teaching new entrants; and for those working in high socioeconomic decile schools as for those working in low socioeconomic decile schools, for example. There is a suggestion that class size may be related to views of IYT usefulness, but New Zealand class sizes are generally similar across schools so differences cannot be seen. Confidence levels were higher for teachers past the first 2 years of provisional registration and there were some strategies whose usefulness was greater for more experienced teachers. SENCOs were the most positive about IYT overall.

Related to teacher views of IYT was a combination of the quality of their work with the IYT group leader and in-school support to make changes related to IYT, coupled with views of the compatibility of IYT and *NZC*.

5. Gains for primary teachers and their students

Increases in primary teachers' confidence in managing behaviour

At the start of their IYT programme, 55 percent of primary teachers reported that they were confident or very confident managing current behaviour problems in their classroom and 31 percent somewhat confident. By the end of the programme, confidence levels had increased to 86 percent reporting they were confident or very confident and 8 percent somewhat confident. Figure 29 shows the details.

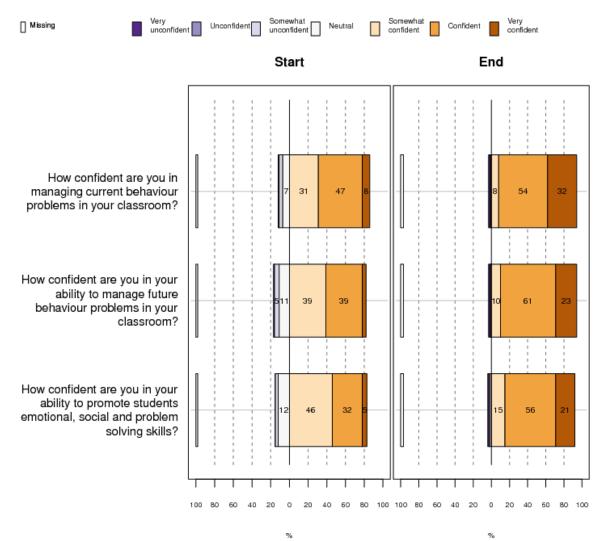


Figure 29 Confidence in managing classroom behaviour

Confidence gains were made across the board for those who started with low confidence and those who started with high confidence levels.

The majority of those who lacked confidence in managing current behaviour problems with their students when they started the IYT programme rated themselves as confident or very confident at the end of the IYT programme. All the rest rated themselves as somewhat confident. Thus, all of the initially unconfident group were much more confident about managing behaviour positively after their IYT programme.

Only one of the teachers who initially lacked confidence in managing future classroom behaviour problems still felt that at the end of their IYT programme. Confidence levels did not shift quite as much as they had in relation to managing current behaviour problems, with around a third rating themselves as somewhat confident at the programme's end. A similar trend was evident in relation to confidence in promoting students' emotional, social and problem-solving skills.

Increases in confidence were also marked for those who were initially neutral or somewhat confident in managing current behaviour problems. By the end of their IYT programme, almost all rated themselves as confident or very confident with current and future behaviour problems, and promoting emotional, social and problem-solving skills.

Just over a third of those who rated themselves initially as confident increased their confidence level to very confident about managing current classroom behaviour problems at the end of the programme.

A few teachers were less confident at the end of the programme than they had been at the start, perhaps because their initial confidence was related to different behavioural approaches, and the IY approach had challenged these. Interestingly, almost all of these came from the group who had been confident or very confident at the start of their IYT programme. This pattern was evident in all three of the items asked to gauge teachers' confidence levels.

Teachers' personal characteristics were unrelated to confidence levels, other than registration status and length of teaching experience (which are related). More fully registered teachers were very confident they could manage current classroom behaviour (43 percent, compared with 23 percent of provisionally registered teachers) or future classroom behaviour (37 percent, compared with 16 percent) than provisionally registered teachers. Fewer teachers with less than 2 years' experience were very confident that they could manage current behaviour in the classroom, but almost all completed the IYT programme confident (60 percent) or very confident (30 percent) that they could do so. This group also had fewer who were very confident about managing future classroom behaviour (22 percent, compared with 33 percent of those with 3–5 years' teaching experience and 39 percent of those with more than 15 years).

We found that the highest confidence levels at the end of the IYT programme were reported more by teachers who:

• found their IYT group leader's support between workshops to be very useful

• saw IYT and *NZC* as very compatible.

Impacts from IYT for teacher thinking and practice

Almost all the primary teachers identified gains in strategies and understanding from their IYT participation. As shown in Table 8, most saw IYT as adding ideas to what they were already doing rather than confronting them with a complete change of approach. It also gave them a sense of agency in terms of children's behaviour, and better understanding of how to teach social and emotional skills. Only 9 percent thought that their IYT learning had made little difference to their teaching.

Aspect	%
Added some new ideas to what I was already doing	90
More aware of the value of being pro-active in relation to children's behaviour	90
Useful strategies to work with children in ways that encourage their engagement in class	89
Much deeper understanding of how to teach social and emotional skills	86
Useful strategies to build relationships with parents and whanau	68
Made little difference	9

Table 8Primary teacher gains from IYT learning (n = 737)

IYT impacted less for primary teachers than for ECE teachers in their work in building relationships with parents and whānau—though it still did so for over two-thirds. This is consistent with the smaller shifts evident for primary teachers in the use of the IYT strategies to work with parents.

In their final comments in the NZCER survey, some primary participants commented on the effectiveness of the overall IYT approach:

I feel that this [overall] strategy works incredibly well with the majority of children. The few children who are very disruptive/emotional/violent need extra help but this strategy does have some effect on them—especially the culture that is developed within the class.

Have found the programme very useful in dealing with a variety of behaviours and the excitement when the behaviours of children have changed because of the hierarchy discipline!

Many noted powerful learning that changed their approach as well as giving them workable strategies:

My experience with IYT has made me see problem attention seeking behaviours as tiny little drops in the big ocean. I have a calmness about me when dealing with these behaviours. Thank you IYT for fewer wrinkles and happier classroom days.

I initially thought the programme would have no relevance to higher grade children (seemed very 'junior'). How wrong was I! Strategies learned and practised in my classroom have helped children become more self-managing and enabled them to function co-operatively as a team.

This course has greatly improved my practice and made my classroom a much nicer place to be for everyone.

There were many comments too on becoming more positive and reflective:

Become more positive, reflective, found other ways to handle problems. It's made me think of teaching their skills in another way.

Changes in target student behaviour

Disruptive activity and/or poor communication skills were the challenges most of the primary teachers faced with the students they chose as their target students to work with over the IYT programme (see Table 9).

Table 9	Key challenge prese	nted by primary t	teachers' target	students ($n = 822$)

Challenge	%
Disruptive activity—demands teacher's attention constantly	48
Disruptive activity—active disobedience	41
Poor communication skills	37
Disruptive activity—mean to other students/bullies/aggressive	32
Other	26
'Invisible' student—little participation in class or learning	23
Lonely child—little interaction with other students	12

In terms of social characteristics, most target students were male (78 percent). Fifty-two percent were Pākehā and 42 percent from the Government's priority groups in terms of ethnicity: 31 percent were Māori and 11 percent Pasifika. Two percent were Asian in ethnicity and 8 percent of other ethnicities. Ten percent did not have English as their first language. Fifteen percent had special educational needs related to developmental issues and 3 percent related to physical disability. Twenty-two percent of the target students were getting some additional support.

Most of the primary teachers thought that the behaviour of their target student had greatly improved (22 percent) or improved (56 percent). Nineteen percent reported slight improvement.

Only 2 percent said the behaviour was the same and 2 percent said it was worse. There was no clear pattern of associations between the nature of a student's behaviour and reported changes in that behaviour. This is different from the patterns seen with ECE teachers who were less likely to report

great improvement in the behaviour of students whose challenge had been disruptive activity that included being mean to other students, bullying or being aggressive.

IYT learning (including this work framed by a behaviour plan for an individual student) had also paid off for other students' problems they had tried to change, with 15 percent of teachers reporting a great improvement for these students and 65 percent improvement. Another 18 percent reported slight improvement. Two percent reported no change for these students:

I have been able to make a huge impact on the behaviour of a particular student. That in turn has had a positive impact on the whole class.

Improvements in student behaviour through IYT use

Most of the primary teachers reported gains for their students as a result of the IYT programme. Less disruptive behaviour, student ignoring of negative behaviour and more focus on class work were reported ahead of students showing more problem-solving skills and better self-regulation (see Figure 30).

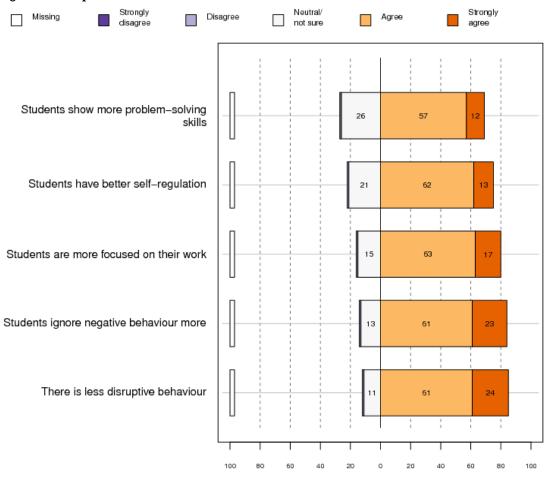


Figure 30 Improvements for students

We checked some of the assumptions included in the theory of change for the evaluation about the aspects of IYT experience and school attention to and support for IYT learning that could have a bearing on the gains for students reported by IYT participants.

We found that gains for their students were reported more by primary teachers who:

- thought their IYT group leader's individual support was very useful
- usually discussed target child progress and their self-reflective inventory with their IYT group leader in between workshops
- discussed IYT-related changes, shared IYT learning with other teachers in the school and supported colleagues in the school to make changes a lot
- had in-school support to make changes
- had RTLB support for IYT-related changes.

School-related support

By the end of their IYT programme, only 5 percent of the teachers who completed the NZCER survey were the only teacher in their school to have completed an IYT programme. At least three other colleagues had done the IYT programme for 70 percent of the 2014 participants and one to two others for 22 percent of the 2014 participants.

Table 10 shows that collaborative in-school work around IYT occurred most around mutual support to make changes. Few had no in-school support from other teachers, though in contrast to the ECE teachers this support for many was at the level of a little rather than a lot. The teachers were evenly divided in terms of whether they also had RTLB support to build on their IYT learning.

Support	A lot	A little	None
Support other teachers who have done IYT to make changes	44	49	6
Support within school to make or sustain changes	40	49	9
Discuss changes made in own class with other teachers	39	57	4
Support from RTLB to make or sustain changes	31	33	31
Share IYT learning with other teachers	28	66	4

Table 10 Primary teachers' in-school sharing and support to use IYT learning (n = 737)

Teacher aides

It is worth noting that more teachers who talked with their teacher aide a lot about changes they were making as a result of their IYT learning also said their teacher aide:

• understood their current approach to students' behaviour

• supported the teacher's approach a lot.

Understanding the teacher's approach was also linked to supporting it: 93 percent of teachers who thought their teacher aide understood their approach a lot also said they supported it a lot, compared with 44 percent of those who thought their teacher aide understood their IYT-informed approach a little and 13 percent of those who thought their teacher aide did not understand this approach.

In Section 4 we reported that teachers who talked with their teacher aides about the changes they were making as a result of their IYT learning had the highest rate of increase in the frequency with which they used positive coaching, problem solving and anger management, and found their strategies around clarity and recognition of positive behaviour useful. They also focused less on misbehaviour and found it less useful as a strategy to do so.

Compatibility between IYT approach and *The New Zealand Curriculum*

Most of the primary teachers thought the IYT approach was compatible with their *NZC* work: 47 percent found the two very compatible and 44 percent compatible. Six percent experienced some issues between the two and 1 percent of the teachers thought the two were not compatible.

We asked teachers to comment on the compatibility of the two if they wished and 143 did so. The main themes in these comments are about lack of time, often related to an emphasis on the 'academic' aspects of *NZC* and the focus on student progress as measured by National Standards:

IYT promotes developmental play time which our crammed curriculum and pressure to reach national standards doesn't allow for. I would love to be able to spend more time on play activities and social skills.

Some teachers brought IYT and NZC together through work on NZC's key competencies:

IYT helps cover key competencies, habits of mind, problem solving, relationships, thinking, etc...

Others said the focus on the academic precluded work on key competencies, suggesting that their school was not developing approaches that integrated subject area and key competency work:

There is no space in the timetable for teaching social skills and emotional strategies. It's part of the key competencies but not timetabled each week.

NZ curriculum has become very focused on national standards. More learning than behaviour. IYT focuses on behaviour and management strategies—total mismatch.

Comments were also made on a lack of linkage with Te Mātauranga and some points of difference that some saw between IYT and *NZC*:

Some of the theories clash (e.g., Vygotsky vs Piaget) which means at some courses I attend such as reading recovery there are different views on children's development, when and how teachers work with children, particularly to develop skills.

The use of food and materialistic rewards should not be part of our NZ curriculum but the textbook and programme would advocate this.

Challenges in putting IYT learning into practice and developing it

Some challenges in putting their IYT learning into practice or continuing to develop it were seen by 29 percent of the primary teachers. What difference does in-school support, views of the usefulness of IYT group leader individual support and RTLB support make to whether teachers saw challenges in putting IYT to work?

In-school support and IYT group leader usefulness both showed associations:

- Forty-one percent of those who reported no in-school support saw challenges, compared with 31 percent of those who reported a little in-school support and 25 percent of those who reported a lot of in-school support.
- Forty-four percent of those who found their IYT group leader not much or no use to them in the work between workshops saw challenges, compared with 26 percent of those who found their IYT group leader work with them of some use and 29 percent of teachers who found that work very useful.

Levels of RTLB support were *not* related to teachers' perceptions of such challenges. Those who said they had a lot of such support were just as likely as those who said they had a little or no RTLB support to perceive challenges in using their IYT learning.

Perceiving challenges in using their IYT learning was not related to reports of student gain as a result of their IYT work. Nor were views of the compatibility of IYT with *NZC* related to whether teachers perceived challenges in using IYT. Comments indicate that the challenges in using IYT lie more in school culture, collegial support and teacher workload and managing that workload.

Comments made here by 249 of the teachers on the nature of the challenges they saw gave prominence to:

- time and workload pressures
- inconsistency with their school behaviour management plan or other teachers' and school management approaches
- inconsistency with parent views about appropriate responses to behaviour
- needing to be persistent themselves in changing habits and making their new IYT learning habitual, ready to hand and adapted to children's different needs.

Some illustrations:

Time—making the time to plan, reflect, implement what I've learned. Remembering the value of what I've learned in the business of our classroom.

Just being more automatic/knowledgeable about the process so I use the strategies more effortlessly.

Different teachers coming into the class and not treating the class the same—have to go in and pick up the pieces sometimes.

Being seen as too lenient by parents/management when ignoring/redirecting as a strategy. Having so many behavioural/special needs in class that it's difficult to manage all the different needs.

Sustaining pro-active teaching and positive praise so that it becomes second nature. Having all staff on the same wavelength and not overusing or misunderstanding strategies.

Would like to see senior teachers take on board strategies and implement them throughout school—unified school wide. Some good work gets undone.

Summary

IYT participation showed marked benefits for primary teachers' confidence in managing classroom behaviour, their understanding of children's behaviour and children's behaviour in their classroom. Most teachers reported an improvement in the behaviour of their 'target' child as well as other students whose behaviour teachers had aimed to change.

Almost all teachers thought they had gained new ideas and understanding from their IYT work. Only 9 percent thought it had made little difference to their practice. Again, we found that related to experiences of gains were IYT group leader support, in-school and RTLB support.

Most teachers also reported improvements in the behaviour of students in their class, particularly less disruptive behaviour and students' ignoring of negative behaviour more. These gains for students were once more related to IYT group leader support (related to discussion of target child progress and discussion related to the self-report inventory), in-school support and RTLB support. They were also related to the gains teachers reported in their own knowledge and skills.

Challenges in putting IYT learning into practice were reported by 29 percent of the primary teachers. This was related to both the support they received from their IYT group leader and in-school support. Comments gave some insight into challenges that were both personal and contextual, such as differences between IYT approaches and school behaviour plans or parental understanding and pressures of time and workload.

Time was also an issue when it came to seeing differences between IYT and *NZC*. Teachers' comments indicate that using IYT strategies could be seen as competing on less favourable terms with core curriculum areas such as those assessed by the National Standards, where there was not some curriculum integration or connection of IYT strategies with the key competencies.

Overall, most primary teachers were very positive about their IYT programme experience. They could point to changes in their practice and what was happening in their classrooms that they saw benefiting their students and themselves.

6. Conclusion

Here we bring together findings from our analysis of the information from ECE and primary participants in 2014 IYT programmes that ran over the first 8 months, to answer some of our evaluation questions. Our findings show a generally very positive picture of gains for teachers and their classes, for those who completed all six workshops. A quarter of those who began IYT programmes did not complete them, with reasons recorded that are usually related to personal or ECE service or school matters.

What shifts towards the desired IYT objectives are occurring in the teaching practice of course participants from start to end of the course?

Information from the IYT questionnaires and the NZCER end-of-programme survey reports and comments all point to substantial shifts towards the IYT objectives of enhancing teacher behaviour management in ways that are based on positive modelling and intentional teaching of strategies that develop student self-regulation, rather than 'control' or reaction.

Notable increases in the use of IYT strategies occurred for both ECE and primary teachers over the course of their IYT programme. For example, the proportion of teachers reporting that they very often used positive coaching, problem-solving and anger management strategies, and provided clarity for students around positive behaviour and recognition of that behaviour, doubled or more for ECE teachers and increased markedly for primary teachers. Paying attention to misbehaviour occurred less by the end of the programme. Teachers also found the strategies they used more effective at the end of the programme, indicating that some had been using these strategies before they began the programme but gained new insight into how to use them well through their IYT programme (perhaps by using them in conjunction with other positive behaviour strategies).

By the end of their IYT programme, around a third of the teachers were also using the IYT selfreflective inventory to review personal teaching goals at least once a week.

Teacher reports in the NZCER end-of-programme survey showed that 91 percent of primary teachers and 83 percent of ECE teachers thought their IYT learning had made more than a little difference to their teaching. Even some of the teachers who thought it made little difference to their practice thought that they were now more aware of the value of being pro-active in relation to children's behaviour, had gained a much deeper understanding of how to teach social and emotional skills and had gained useful strategies to work with children in ways that encouraged their class engagement.

The comments made by three-quarters of the ECE and primary teachers about their IYT learning underline the quantitative picture of often substantial shift in practice, including ongoing reflection and review. Few comments suggest that teaching practice has been unaffected by IYT programme experience, though some of the changes were modest, and some teachers were waiting for a more challenging class before they expected to put their IYT learning into effect. A marked theme was that IYT had renewed teachers' sense of agency and given them the understanding and tools they needed to reframe how their classes operated, with testimonies of new calm for both students and teachers.

Two sources of information about student improvements in behaviour also point to changes in teaching practice over the course of their IYT programme. Eighty-five percent of ECE teachers and 78 percent of primary teachers reported improvement in the behaviour of their 'target' student. Such changes came about as a result of learning strategies of analysing behavioural occurrence to develop a plan and work on that with the student, checking progress and altering strategies where needed, usually with the advice and discussion of progress with their IYT group leader. Teachers were doubtless drawing on this practice when they targeted other students' behaviour as something worth changing: 81 percent of ECE and 80 percent of primary teachers reported that these behaviours had also improved. By the end of their IYT programme, around half the ECE teachers reported reviewing progress towards goals on individual student behaviour plans and discipline hierarchy at least weekly.

Almost all the teachers said there was less disruptive behaviour in their classes as a result of their IYT learning. Children were more focused on their learning work. Most also said students had better self-regulation, could ignore negative behaviour more and showed more problem-solving skills.

What are the confidence levels of teachers at the end of the course in relation to improving behaviour and engaging students in learning?

By the end of their IYT programme, over 80 percent of ECE teachers and 74 percent of primary teachers were confident or very confident that they could manage current or future behaviour problems and promote students' emotional, social and problem-solving skills. There were substantial shifts in such confidence from the start of their IYT programme, including teachers who had lacked any confidence.

The comments made by the teachers about their IYT learning also conveyed confidence that they had knowledge and skills to improve behaviour and create classrooms with positive relationships and culture, where students were focused on learning.

Thirty-three percent of the ECE teachers and 29 percent of the primary teachers did think they faced some challenges in practising their IYT learning towards these goals. These challenges were more about their ECE service or school context, time and workload, and changing habits than the IYT learning itself.

What factors enable or hinder shifts in teaching practice in relation to the desired IYT outcomes?

Our analysis points to factors both within IYT delivery and factors within the ECE or school context as having a bearing on what shifts in teaching practice occur over the course of the IYT programme.

Within IYT delivery, the quality of the IYT group leaders matters: their teaching, preparation and interest in teachers (modelling what teachers can do in their own classrooms). It also matters that

they work well with individual teachers between workshops, particularly that they *usually* discuss target student progress and the behaviour plan (modelling ongoing review and inquiry as well as sharing knowledge about strategy use) and discuss the teacher's self-reflective inventory with them (also modelling ongoing review and providing feedback, feedforward).

Within the ECE or school context, what helps shifts in teaching practice are active discussion of IYT work, sharing with others, providing mutual support to make change and feeling supported to make those changes (including having consistency between IYT and school policy or school leaders' actions). Simply having done IYT with others in the school was not enough on its own. Teacher aide and RTLB support for IYT approaches is also useful to make and sustain change in practice.

Also important are views about the coherence of IYT with curriculum. Changes in teacher practice occurred more where such coherence was found. Some views about lack of compatibility arose from conceptions that a behavioural focus lay outside curriculum, with curriculum seen as holistic or about 'academic' knowledge, or that a focus on behaviour essentially meant an exercise in adult power at the expense of child-centred support. But most of the comments made about incompatibility point to the way curriculum is enacted in particular ECE centres and schools. Thus where IYT strategies were understood as key competencies (or vice versa) and key competencies were fully included in a school's approach to curriculum and its timetabling, they were seen as compatible. Where they were not included and teachers felt pressed to focus on curriculum areas measured by National Standards or faced a timetable with no room to teach social and emotional competencies, difficulty was expressed.

How do teachers change their practice and what platform does IYT give them to make further changes?

The design of the IYT programme is consistent with research about effective teacher professional learning and development.²⁴ For example, it provided extended time for opportunities to learn, integrating theory and practice, and drawing on external expertise which allows teachers to expand their 'horizons of observation' of what is possible.²⁵ The IYT group leaders modelled positive interaction, reflection and inquiry. The workshops engaged teachers and underlined their sense of agency about student behaviour by not only providing variation in activity, but ensuring that teachers shared their experiences with one another so that the strategies were 'live' and not able to be seen as something outside their own scope. This interaction with other teachers was highly valued. It also gave teachers useful experience in discussing change and the IYT strategies that they could use in their own ECE or school contexts—one of the factors that support individual change.

²⁴ Timperley, H. (2008). *Teacher professional learning and development*. International Academy of Education, Educational Practices Series.

http://www.ibe.unesco.org/fileadmin/user_upload/Publications/Educational_Practices/EdPractices_18.pdf
 ²⁵ Ermeling, B. A., & Yarbro, J. (2014). *Expanding horizons: A case study of extended partnerships between teacher teams and outside content experts*. Condensed research report.
 http://researchnetwork.pearson.com/wp-content/uploads/Ermeling-ExpandingHorizons-CondensedReport-091114-2.pdf. p. 3.

The video vignettes seem to be a mixed source of support for change. On the one hand, they were valued as demonstrations and spurs for discussion; on the other, they also raised scepticism given the differences in group size and adult resources between the US and New Zealand contexts.

The focus on a target child seems particularly valuable in supporting change and showing its efficacy, thereby encouraging the use of gathering evidence about when undesirable behaviour occurs and which strategies change this behaviour. This focus gives teachers and their IYT group leader an ongoing touchstone in their work together.

IYT itself seems to give many of its participants a valued platform to make further changes. The book was mentioned frequently in final comments, as well as the experience of seeing IYT-based changes in their own setting lead to improvements for their class, for individual students and their sense of agency as a teacher.

Is IYT being delivered as intended in New Zealand?

The short answer is yes, on the whole. We offer four observations that are related to delivery and access.

First, within the IYT delivery itself there was some variability around what IYT group leaders were doing in their work with individual teachers between workshops. Over a quarter of teachers were not usually discussing their target child's progress or the self-report inventory or getting feedback on their practice from observations with their group leader. Most did not get feedback on their video of their own practice—probably because most teachers were not videoing their own practice. This takes time as well as equipment and most teachers were strapped for time; this may not be a feasible practice to increase.

Given that gains for teachers and students were associated particularly with *usually* discussing the target child's progress and the self-report inventory, it seems worthwhile to find out more from group leaders about what could be done to increase the incidence of this work and of teachers using the self-report inventory.

Comments made by teachers indicated that sometimes target children moved or they had difficulty identifying a child with sufficient behaviour challenge; and some said it was hard for group leaders to fix a time with them that they did not have to change. Others mentioned the use of email as a means to work with their group leader. It would be useful to understand more about what helps and hinders this productive work with individual teachers and what can be done to counter factors that lie in ECE services and schools as well as within the IYT workforce and contracting arrangements.

The second observation is about the fit of IYT with New Zealand curricula. A prime reason for the choice of IYT as a promising programme for New Zealand was that it seemed compatible with New Zealand curricula. The fact that it does fit makes it easier for teachers to change practice: they are not being asked to recast their work entirely. Teachers who thought *Te Whāriki* or *NZC* were very compatible with IYT also reported more gains for their practice and students as a result of their IYT learning. This also shows that such coherence does matter. It would seem that there is sometimes

some incoherence that is related more to how *Te Whāriki* and *NZC* are understood and given life in schools than the document intentions. Māori teachers' comments also indicated that they sought more linkage between IYT and Mātauranga.

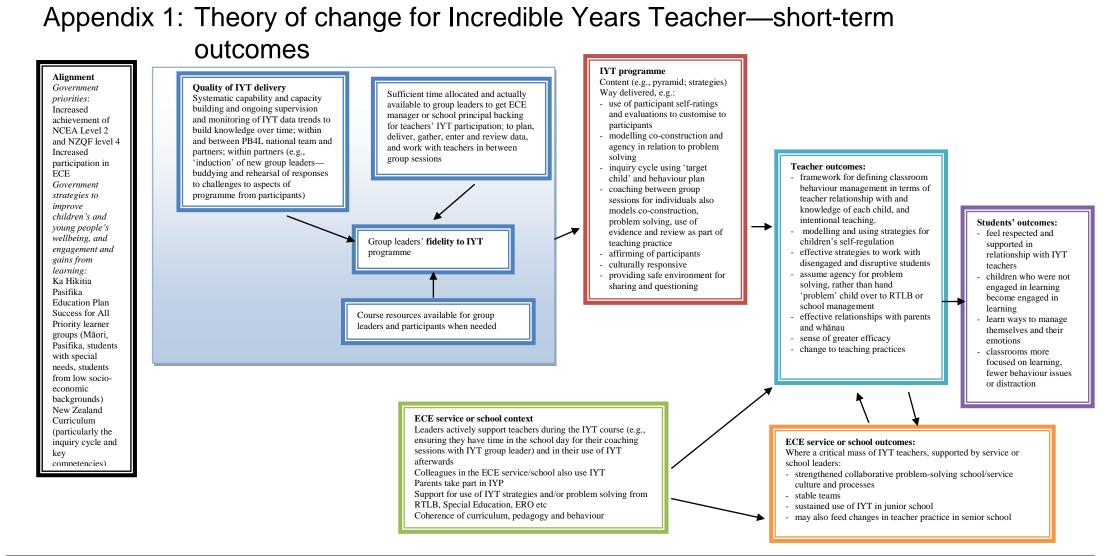
Linked to this is the marked ambivalence expressed about the video vignettes. Making new video vignettes is not within the control or resources of the New Zealand Ministry of Education. It is the group leaders' ability to put them in context and draw on other illustrative New Zealand material that will need to reduce that ambivalence.

This would be another very productive avenue for inquiry: How can IYT in New Zealand provide clear New Zealand illustrations of the compatibility, for example, of IYT strategies and the key competencies, teaching as inquiry, student voice and feedback, feedforward and show how they can be included within timetables and curriculum provision? It would be very useful for there to be linkages between the IYT practice leaders' group and the Ministry of Education and others working on *Te Whāriki* and *NZC*, particularly around the key competencies and inquiry.²⁶

The third and fourth observations we make are in relation to access to IYT. National priority has been to low socioeconomic decile schools. Information in this report shows that in fact IYT is being accessed by teachers in schools across the socioeconomic decile spectrum—and that it is as effective in high socioeconomic decile as in low socioeconomic decile schools.

Although IYT is intended for teachers of students who are aged 3 to 8 years of age, teachers of both younger and older students are accessing IYT. IYT appears to be just as effective for these teachers as for teachers of children in the 3–8 age group. It would make sense given the importance of consistency in practice within ECE services and schools and the value of sharing changes and learning across teachers for IYT not to be restricted to only part of a service or school.

²⁶ Our NZCER colleagues, for example, have recently published a book about how to weave the key competencies through curriculum areas and provided resources for teachers that the Ministry of Education has made available through TKI. Hipkins, R., Bolstad, R., Boyd, S., & McDowall, S. (2014). *Key competencies for the future*. Wellington: NZCER Press.



PB4L base

Evidence-based and researched strengths-based programmes or systematic approaches whose 'delivery' is consistent with its 'messages' (content)

Strong emphasis on building teacher and ECE service and school agency (confidence in taking responsibility for shaping the environment promoting positive behaviour rather than seeing behaviour management as largely reactive and limited to consequences), using ongoing data/evidence-based inquiry cycles

Strong emphasis on importance of relationships and sharing of knowledge, and co-construction

National teams leading and supporting local delivery through formative quality assurance, information and data-sharing and knowledge-building partnership, rather than line management

Appendix 2: Supports for teacher change

This appendix includes details of the statistical analyses we did to find out what particular aspect of IYT or teachers' ECE or school context were associated with changes made by teachers from the start to end of their IYT programme.

The numbers in the tables give the size of the shift in factor score from the start to end of the IYT programme, for each factor shown. Factor scores have an average of zero and normally range from -1 to 1. So, looking at the numbers in Table 11 below, we see that the factor score for the strategy items making up the factor Attention to misbehaviour frequency increased by 0.12 from the start to end of the IYT programme for ECE teachers who shared their IYT learning a lot with their colleagues. Because the items in this factor are reverse-scored, this means that these teachers were making less use of ineffective strategies to manage student behaviour by the end of the course. Their fellow IYT participants who shared their learning a little rather than a lot had less improvement over the course of the programme, with an increase of 0.05 in their average factor score. Those who did not share their IYT learning with their colleagues went backwards—a shift of -0.65, indicating an increase in use of these ineffective strategies.

Associations with changes in ECE teacher practice

Table 11Sharing of IYT learning or changes with other teachers in the ECE service—
factor score shifts

Factor	Share a lot	Share a little	Not shared
Attention to misbehaviour: frequency	0.12	0.05	-0.65
Attention to misbehaviour: usefulness	0.05	0.03	-0.59

Teachers whose group leader usually discussed their target child's progress and strategies with them were on average finding attention to misbehaviour less useful. By contrast, those whose group leader did not do this, or only did it sometimes, were finding it more useful.

	child's progress and strategies with teacl	ner—factor sco	ore shifts	
Factor	Target	Target	Target	Target
	child	child	child	child
	progress	progress	progress	progress
	usually	sometimes	rarely	never
	discussed	discussed	discussed	discussed

Table 12Usefulness of attention to misbehaviour and IYT group leader discussed target
child's progress and strategies with teacher—factor score shifts

Table 13Self-reflective inventory used as the basis for discussion with IYT group leader—
factor score shifts

0.07

-0.15

-0.39

-0.64

Attention to misbehaviour: usefulness

Factor	Usually discussed	Sometimes discussed	Rarely discussed	Never discussed
Clarity and recognition of positive behaviour: frequency	0.29	0.24	0.24	-0.38
Attention to misbehaviour: usefulness	0.04	0.01	-0.19	-0.25

Teachers who found that support from their IYT group leader for putting IYT strategies into practice was very useful were on average using positive coaching, problem-solving and anger management strategies more often and finding these strategies more useful than others.

Table 14 Teacher views of the usefulness of their IYT group leader's support—factor score shifts

Factor	Very useful	Of some use	Not much use	No use
Positive coaching, problem solving and anger management: frequency	0.09	-0.1	-0.63	-0.77
Positive coaching, problem solving and anger management: usefulness	0.07	-0.15	-0.23	-0.86

Teachers who found the IYT approach very compatible with their *Te Whāriki* work were on average recognising positive behaviour more often, focusing less on misbehaviour, finding positive coaching, problem solving and anger management more useful, and recognising positive behaviour more useful.

Table 15 Compatibility of IYT approach and Te Whāriki—factor score sl

Factor	Very compatible	Compatible	Some issues	Not compatible
Clarity and recognition of positive behaviour: frequency	0.35	0.25	-0.11	-1.44
Attention to misbehaviour: frequency	0.14	0.02	-0.36	-0.53
Positive coaching, problem solving and anger management: usefulness	0.19	-0.07	-0.07	-0.57
Clarity and recognition of positive behaviour: usefulness	0.38	0.17	-0.81	-2.36

Associations with changes in primary teacher practice

Table 16	IYT group leader discussed target child's progress and strategies with teacher—
	factor score shifts

Factor	Usually	Sometimes	Rarely	Never
	discussed	discussed	discussed	discussed
Clarity and recognition of positive behaviour: frequency	0.10	0.01	-0.09	-0.65

Teachers whose group leader discussed target child's progress and strategies with them were on average recognising positive behaviour more often.

Table 17 Teacher view of their IYT group leader's individual support—factor score shifts

Factor	Very useful	Of some use	Not much use	No use
Clarity and recognition of positive behaviour: frequency	0.07	0.03	-0.46	-0.55

Teachers who found the support from their IYT group leader for putting IYT strategies into practice useful were on average recognising positive behaviour more often, in contrast to those who found this support of not much use or no use, whose use of these strategies declined over the course of the IYT programme.

Table 18Discussion of changes teacher is making in their class as a result of the IYT
programme with other teachers in the school who have completed an IYT
programme—factor score shifts

Factor	Talked a lot with school colleagues about changes	Talked a little with school colleagues about changes	Did not talk about changes with school colleagues
Positive coaching, problem solving and anger management: frequency	0.28	-0.05	-0.84
Attention to misbehaviour: frequency	0.12	0.05	0.02
Positive coaching, problem solving and anger management: usefulness	0.25	-0.02	-0.57
Clarity and recognition of positive behaviour: usefulness	0.29	0.06	-0.09

Teachers who discussed IYT-related changes with other teachers in their school were on average using positive coaching, problem solving and anger management more often, focusing less on misbehaviour. They were finding positive coaching, problem solving and anger management and recognising positive behaviour more useful. By contrast, those who did not discuss IYT-related changes with other teachers were using positive coaching, problem solving and anger management less than they had when they began IYT and also finding this less useful.

Table 19	In-school teacher mutual support to make IYT changes—factor score shifts

Factor	A lot of mutual support	A little mutual support	No mutual support
Positive coaching, problem solving and anger management: frequency	0.20	0.03	-0.55
Attention to misbehaviour: frequency	0.18	0.07	-0.08
Positive coaching, problem solving and anger management: usefulness	0.32	-0.03	-0.36
Clarity and recognition of positive behaviour: usefulness	0.19	0.14	-0.12

Teachers who had support from other teachers to make changes were on average using positive coaching, problem solving and anger management more often, focusing less on misbehaviour, and finding positive coaching, problem solving and anger management and recognising positive behaviour more useful.

Table 20In-school sharing of IYT learning or changes with other teachers—factor score
shifts

Factor	A lot of in- school sharing	A little in- school sharing	No in-school sharing
Positive coaching, problem solving and anger management: frequency	0.25	0.01	0.00
Positive coaching, problem solving and anger management: usefulness	0.24	0.06	-0.11
Clarity and recognition of positive behaviour: usefulness	0.17	0.15	0.12

Teachers who shared their learning with other teachers in their school were on average using positive coaching, problem solving and anger management more often and finding these strategies more useful. They also found recognising positive behaviour more useful. The shift in factor scores was more positive for those who shared a lot than those who shared a little or for those who didn't share.

Table 21 In-school support to make or sustain IYT changes—factor score shifts

Factor	A lot of in- school support	A little in- school support	No in-school support
Positive coaching, problem solving and anger management: frequency	0.08	0.02	-0.02

Teachers who had support within their school to make changes were on average using positive coaching, problem solving and anger management more often.

Table 22 Teacher talks with teacher aide(s) about changes made as a result of IYT learning—factor score shifts

Factor	Talked a lot with teacher aide about changes	Talked a little with teacher aide about changes	Did not talk with teacher aide about changes
Positive coaching, problem solving and anger management: frequency	0.44	-0.02	-0.27
Attention to misbehaviour: frequency	0.17	0.16	0.08
Clarity and recognition of positive behaviour: usefulness	0.44	0.10	-0.22
Attention to misbehaviour: usefulness	0.27	0.15	-0.04

Teachers who talked to their teacher aide(s) about the changes they were making were on average using positive coaching, problem solving and anger management more often, focusing less on misbehaviour, finding recognising positive behaviour more useful and finding attention on misbehaviour less useful than those who didn't talk to their teacher aide about these changes.

Table 23 RTLB support to make or sustain IYT changes—factor score shifts

Factor	A lot of RTLB	A little RTLB	No RTLB
	support	support	support
Positive coaching, problem solving and anger management: frequency	0.22	0.08	-0.16

Teachers who had support from an RTLB to make changes were on average using positive coaching, problem solving and anger management more often.