

Evaluation of the use of the Social Communication, Emotional Regulation and Transactional Support (SCERTS) Framework in New Zealand

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Contents

Chapter One: Executive Summary.....	1
Chapter Two: Introduction	3
Chapter Three: Evaluation Methodology	7
Chapter Four: Key Findings	8
Priority One: Substantiality and Value of changes / gains.....	10
Impact on Knowledge.....	10
Impact on Skills.....	11
Impact on Values.....	11
Impact on Attitudes	12
Priority Two: Application and use of new knowledge, skills, attitudes and values	13
Application / Use of acquired knowledge.....	13
Application / Use of acquired skills.....	14
Application of gained knowledge and skills in ASD-related practice	16
Application / Use of developed values	17
Application / Use of developed attitudes	18
Priority Three: Value and quality of content, design and delivery	21
Knowledge and skill development	21
Improving knowledge and skill development	23
Quality of the content, design and delivery of the project	26
Priority Four: Unexpected outcomes	27
Unexpected changes in knowledge.....	27
Unexpected changes in skills.....	28
Unexpected changes in values.....	28
Unexpected changes in attitudes.....	28
Chapter Five: Conclusions and Recommendations.....	30
Appendix 1: Methodology.....	33
Success Case Method - An adapted application.....	33
Impact Model: Specifying Project Goals and Outcomes	34
Determining success case sets.....	35
Interviews and Focus Groups	36

Interviews and Focus Group Discussions.....	36
Data Analysis.....	36
Appendix 2: EI ASD Project Survey	38
Appendix 3: INTERVIEW / Focus Group Discussion Guide	40

Chapter One: Executive Summary

This report provides an evaluation of the use of the Social Communication, Emotional Regulation and Transactional Support (SCERTS) Framework in New Zealand. This evaluation identified the impact of the Early Intervention Autism Spectrum Disorder EI ASD Project on participant knowledge, skills, attitudes and values; elicited participant views as to the effectiveness of this approach to professional learning and development, and identifies the “lessons learnt” as a result of the project.

Since 2004, the Ministry of Education has had specific funding for capability-raising initiatives aimed at improving outcomes for children and young people with autism spectrum disorder (ASD). A key part of the work programme has been on building the skills and capability of specialist practitioners. From 2006-2010 the Ministry’s work programme included a particular focus on improving the knowledge, skills, attitudes and values (KSAV) of early intervention practitioners via the Early Intervention ASD Project (EI ASD Project). The Ministry funded local project teams to learn about and use the SCERTS framework in supporting young children with ASD, their families, whānau and educators.

Cognition has used a Success Case Methodology supported by a facilitated evaluation approach. In combining the two methods the key stakeholders Advisory Group has been a vital part of this facilitated success case study evaluation methodology. The facilitated evaluation approach includes an input phase where meetings with stakeholder groups allow for an open exchange of information and ideas. This approach facilitates a clearer understanding about the evaluation process, expected outcomes, and its intended use and ensures that the evaluation meets the needs of the key stakeholders. It acknowledges that the key participants in a programme evaluation also hold the context knowledge to support the data mining of information and feedback and to provide reflections that can feed into recommendations. In reality the approach models a facilitated, inclusive, evaluative approach.

The methodology comprised of five stages; the first two included developing the evaluation plan and an Impact Model with the support, advice and agreement of the Advisory group. The next two stages involved designing and then conducting a survey of project sites followed by in-depth site interviews. The concluding stage involved input from the Advisory group in the formulation of conclusions and recommendations. There are a number of key findings that can be reported from this evaluation. However it should be noted that from the small sample of interviews no conclusions can be drawn about the extent to which participants/focus groups are representative of the whole population.

The evaluation findings show that the use of the SCERTS Framework as part of the EI ASD project has developed and supported practitioner knowledge and skills. The introduction and implementation of the framework was well supported by a collaborative model for providing professional learning and development. The project and framework were seen to be consistent with current evidence, the New Zealand Autism Spectrum Disorder (NZ ASD) Guideline¹, and to be innovative and contextually appropriate. It is clear that the professional development model for the project aligned well with organisational values. The framework provides a base for participants to gather and build their existing knowledge. Participants indicated that they are still using the framework and wish to continue to do so. They would also like to be able to pass their knowledge and skills onto others.

¹ Ministries of Health and Education. (2008). New Zealand Autism Spectrum Disorder Guideline. Wellington: Ministry of Health.

Chapter Two: Introduction

Recognising the internationally growing evidence on the benefits that children with autism spectrum disorder (ASD) derive from receiving good quality early intervention services, the Ministry of Education (the Ministry) noted the need for improving such services in New Zealand. The Ministry identified SCERTS as a suitable framework for professional learning and development to build relevant knowledge, skills, attitudes and values among specialist staff. As part of the Ministry’s “research led, capability building, information sharing initiatives²” the Ministry commenced the EI ASD Project, which included the implementation of SCERTS in New Zealand. With “children, families, whānau and specialist staff” as central, the EI ASD project’s overarching goals were to³:

- > improve outcomes for children with ASD and their families, whānau and caregivers,
- > develop practitioner skills,
- > develop a collaborative model for providing professional learning and development, and
- > explore the SCERTS framework in the New Zealand context

The intended outputs and outcomes of the project were “generic and ASD-specific⁴” requiring that a body of knowledge and processes be developed, documented and shared about effective assessment, data-gathering, interventions, analysis, evaluation, team process, the identification of key resource materials and the development of skills and processes in supporting other practitioners to develop new skills. The second outcome was that a group of practitioners be skilled in using effective processes.

The SCERTS Model for working with children with ASD was developed by Barry Prizant⁵ and colleagues. The model is described by its creators as “a research-based educational approach and multidisciplinary framework that directly addresses the core challenges faced by children with ASD and related disabilities, and their families⁶”. The model’s research-base is in line with the NZ ASD Guideline⁷ that promotes an evidence-based selection of effective ASD practices. The Ministry considered this important, as internationally a wide array of often-confusing information and opinions exist about ASD practices.

² Ministry of Education (n.d.) Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet, p. 1.

³ http://www.inclusive.org.nz/asdev/asdev_home/about_the_project/what_are_we_doing

⁴ Ministry of Education (n.d.) Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet, p. 5.

⁵ Prizant, B., Wetherby, A., Rubin, E., Laurent, A., & Rydell, P. (2006). *The SCERTS Model: A Comprehensive Educational Approach for Children with Autism Spectrum Disorders*. Baltimore, MD: Paul H. Brookes Publishing.

⁶ <http://www.scerts.com/>

⁷ Ministry of Education (n.d.) *Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet*, p. 4.

The model's acronym SCERTS⁸ refers to the three key priority areas necessary to help children develop social competencies and confidence while preventing difficult behaviours that might act as deterrents to their learning and relationship development.

While it was acknowledged that there was no single approach identified as being more effective than others for children with ASD, the selection of SCERTS as a framework for professional development and learning was based on several features. It is well grounded in current evidence and is consistent with current recommended practices for educating children with ASD. The framework does not exclude other approaches nor discount any expertise currently with teams and it appears to be a good fit with New Zealand's family-centred early childhood education philosophy, Te Whariki and the key competencies⁹.

The project employed a team-based coaching, feedback model of professional development¹⁰ to provide effective and efficient support for practitioners' skills development that would increase their capacity to provide evidence-based services. Taking account the existing related evidence, the Ministry identified a number of features and aspects as contributory factors to teaming and effective professional learning and development for those supporting children with ASD:

1. A team approach to problem-solving,
2. Qualified staff that have professional development opportunities,
3. Staff time to develop essential skills and knowledge,
4. Access to training in supporting adult learning,
5. Training to effectively link assessment and intervention,
6. Learning and developing skills for effective teams, and
7. Provision of the necessary funding.

The local project team members comprised of education-funded early intervention staff from various Ministry of Education regions and also included practitioners from other sectors such as health or other providers of early intervention services¹¹. Team selection was based on specific criteria including evidence that they had achieved or were working towards identified characteristics of good early intervention practice, that there was management support and evidence that the team had developed a process for team reflection. Representation from a range of locations and ethnicity in the client group (e.g. urban, rural, Māori, Pasifika) and a spread across Ministry of Education regions was another criteria.

⁸ Social Communication, Emotional Regulation and Transactional Support

⁹ Ministry of Education (n.d.) *Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet*, p. 4

¹⁰ Ministry of Education (n.d.) *Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet*, p. 4 - 5.

¹¹ Ministry of Education (n.d.) *Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet*, p. 6.

The EI ASD Project was carried out in two phases; the first from 2007 to 2008, and the second from 2009 to 2010. The project was supported with funding for: local project teams to plan, organise and reflect; additional professional learning and development for the teams; and resources to support meetings and/or training for the team around the child (ibid, p. 8).

The key purpose of Phase 1 was to “trial and evaluate the SCERTS framework in the NZ context”. Twelve local project teams consisting of early intervention specialist staff were established throughout various locations in New Zealand. These specialist practitioners, from different organisations, agreed to “work and meet together regularly to develop their skills within the SCERTS framework¹².” In March 2007, project team members attended seminars by Barry Prizant and Amy Laurent (SCERTS developers) in Auckland and Wellington. Team members were provided access to relevant resources (the SCERTS manual and DVDs) and later received follow-up distance support from the seminar presenters. During the two years of Phase 1 the teams were requested to report on their work at six points. This reporting was “designed to encourage team reflections and discussion about their work and to assist in collecting data on the child and their [adult] partners’ progress towards their goals¹³.”

After completing Phase 1, project team members who expressed an interest in working as mentors or coaches were identified to take part in Phase 2. They engaged in additional professional learning and received further support, with the “expectation that they would then support other teams who wished to explore a similar approach”¹⁴. In the transition from Phase 1 to Phase 2, there was “some natural attrition” with teams from the first phase as well as the addition of new members into Phase 2¹⁵. In August 2009, the teams in Phase 2 underwent a series of further mastery level interactive workshops conducted by Barry Prizant in Christchurch, Wellington and Auckland. This series was based on topics requested by the teams and had a focus on developing goals and interventions, problem solving about practice issues, making the best use of practitioners’ time and making some adaptations for the New Zealand early childhood education context.

¹²Ministry of Education (n.d.) *Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet*, p. 3

¹³ Watson, M. (n.d.) *Early Intervention Autism Spectrum Disorder Development Project - Reflections on Phase One: January 2007 – December 2008*, p. 8.

¹⁴ Ministry of Education (n.d.) *Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet*, p. 3.

¹⁵ O’Sullivan, S. (2009) Summary Report: Early Intervention Autism Spectrum Disorder Development Project, Phase Two – Report One, 15 October 2009, Ministry of Education.

In addition, the project teams' professional learning and development was further supported in various ways. These included the support of the National Project Team who provided research and guidance on appropriate resources¹⁶ and encouraged familiarisation with the contents of the NZ ASD Guideline. The sharing of information via the ASDev website, a dedicated newsletter, 'LinkUp' that was sent to all team members and their managers¹⁷ and an email discussion group (listserv) set up by the National Project Team provide further support. Other SCERTS related resources (in addition to the SCERTS manual) were made available from the Ministry of Education library and links for websites focusing on SCERTS were also provided.

As stated in the Project's information sheet, it was decided at the outset, that the project would be subject to formal, external evaluation, which would feed into future project design and support¹⁸. In April 2011, the Ministry contracted Cognition Education to determine the impact of the EI ASD project and the SCERTS framework on the specialist staff who participated. The evaluation was undertaken between the period April and June 2011. This report provides the objectives of the evaluation undertaken, the methodology employed, key findings, and recommendations.

¹⁶ O'Sullivan, S. (2010) Transition from project to practice – the early intervention autism spectrum project: Some frequently asked questions (FAQs), 8 November 2010, Ministry of Education.

¹⁷ Watson, M. (n.d.) Early Intervention Autism Spectrum Disorder Development Project - Reflections on Phase One: January 2007 – December 2008, p. 7

¹⁸ Ministry of Education (n.d.) *Early Intervention Autism Spectrum Disorder National Development Projects: Summary Sheet*, p. 6.

Chapter Three: Evaluation Methodology

The Ministry's four evaluation priority areas to determine the impact of the EI ASD project and the SCERTS framework on the specialist staff who participated are:

- > **Priority one:** How substantial and valuable are the changes / gains in participants knowledge, skills, attitudes, values, confidence and other competencies as a result of their involvement in the Early Intervention Autism Spectrum Disorder (EI ASD) project?
- > **Priority two:** Are the participants applying and using their new knowledge, skills, attitudes, values, confidence and other competencies (i.e. evidence of changed behaviour)? If so, in what circumstances? If not, why not?
- > **Priority three:** How valuable/high quality is the content/design and delivery of the EI ASD project? [Include match with participant needs, level-appropriateness, consistency with current evidence (including that in the New Zealand ASD Guideline), innovativeness, consistency with principles for adult learning, implementation fidelity with framework design, person-centeredness, family-centeredness, responsiveness to Māori, cultural and contextual appropriateness].
- > **Priority four:** What unexpected outcomes (positive or negative) have resulted from participation in the EI ASD project?

In order to meet the requirements for this evaluation, Cognition used a Success Case Method supported by a facilitated evaluation approach. A key stakeholders Advisory Group was established to review and input into the evaluation project plan, and to review and provide input on the evaluation tools and mechanisms for gathering participant feedback. The group provided feedback on findings and formulation of recommendations.

Firstly, an impact model was developed through a consultative process with the Advisory Group. Secondly, based on the impact model a quick six question survey was used to determine two success case sets – two moderate success cases and two high success cases. Thirdly, interviews with coordinators and focus group discussions with participants were carried out to elicit stories and feedback to provide answer to the specific questions within the four priority areas listed above. Finally, data was analysed using a thematic analysis method. Reported themes were supported with respondents' stories as recommended in the success case method. To provide an additional estimation of the substantiality and value of changes and gains reported, prevalence of themes was counted at the data item level. In this study, a focus group was counted as a single data time, as was an interview with a project coordinator. Each success case set consists of a maximum of four data items (i.e. two focus groups and two coordinator interviews); therefore, a maximum count of four is reported for each theme – these are presented in tables in the results sections. Appendix 1 provides further details on Cognition's evaluation approach and methodology.

Chapter Four: Key Findings

As detailed in the project background, there were two phases to the project and some participants were involved longer than others. As it was anticipated that this difference in participants' length of involvement could determine the degree of knowledge and skills gained, a question was posed at the start of the interviews to clarify each individual's length of involvement with the project. The majority of participants (80%) indicated involvement in Phase 1 and 2 of the project.

To provide a detailed collection of participants' stories related comments and responses from interviewer's notes are either indented or presented as embedded quotes in the narrative. While best efforts were made to capture feedback in participants' exact words, the comments provided in the sections that follow are to be treated as extracts from interviewer notes rather than a verbatim record of respondents' feedback.

Priority one sought to investigate the sustainability and values of any changes (gains) to knowledge, skills, attitudes and values as a result of involvement in the EI ASD project. All participants reported that their involvement in the EI ASD project had developed their knowledge base, and how they thought and acted (attitudes). A high majority reported the same increase concerning their skill levels. The project did have an impact on participants' values, however a high majority indicated that the effect was more about affirming their pre-existing values rather than the development of new values. This appears to be in line with the initial criteria for selecting the SCERTS model. The nature of change across all areas was positive with a high majority describing the change in knowledge, skills and attitudes as being moderately substantial to extensive. Most participants attributed the changes/gains in knowledge, skills, attitudes and values solely to the project. Overall the response to this priority was positive and indicates that expected outcomes were achieved. In particular, participants reported that the SCERTS framework developed and supported all aspects of their knowledge, skills, attitudes and values. The selection of the framework as aligning with the organisational values was confirmed and a clear shift in attitude and overall confidence can be clearly seen.

The second priority explored the application and use of the new knowledge, skills, attitudes and values resulting from involvement in the project. All participants agreed that they had applied their new knowledge and skills in ASD related practice with a number continuing to do so even though the project had come to an end. A number described situations where they had applied their new or enhanced knowledge, skills, attitudes and values to other situations and children outside the project. As one participant commented "once you have the knowledge and skills you can't un-know them". A high number of participants are still applying the knowledge, skills, attitudes and values, and would continue to if they had appropriate cases or if the project continued, especially if the situation enabled it.

All participants were able to provide examples of their gains and its usefulness in a variety of ways. The most common areas of knowledge development included the SCERTS framework itself and the common and consistent language that it brought with it. The application and use of acquired skills centred on data-gathering and assessment including observation skills, monitoring and recording progress and report writing. The involvement in the project shifted attitudes about collaboration, the appropriateness of the approach and its continued use and their own enhanced confidence. The majority of respondents did not indicate any new values development but rather described an enhancement of pre-existing values. Once again the findings in this section are positive with the project's overarching goal of developing practitioner skills being largely met.

The third priority area questioned the value of and the quality of the content, design and delivery of the EI ASD project. A large number of factors were identified as having contributed to knowledge development with those reported as the most effective being the Phase 1 interactions with Barry Prizant. The most effective activity for skill development was collecting the data on the child's progress. Consistency with current evidence, the NZ ASD Guideline and the innovativeness of the project were seen as enablers in terms of the content, design and delivery of the project. A number of aspects of the project that could be improved to enable better knowledge and skill development were discussed. Nearly all participants mentioned the need for more time, the time to learn, implement and embed in practice, time to develop and manage relevant relationships, and time to manage the extra requirements of the framework. Time had been identified as being a contributing feature for effective professional learning and development for those supporting children with ASD. However, the time required to successfully implement what was seen as a complex framework along with its very detailed resources was underestimated.

The final priority area examined any unexpected outcomes as a result of involvement in the EI ASD Project. In general, there were more positive than negative unexpected outcomes. In the area of knowledge change, aspects such as having an awareness of their heightened comprehension of the framework and confidence to use it, and issues concerning inter-personal relationships were discussed. Increased confidence and a deeper understanding of new skills along with using these new skills in other contexts were unexpected outcomes. Changes in attitudes towards themselves and others were mentioned as well as the valuing of the teaming approach and a general increased enthusiasm towards their work.

PRIORITY ONE: SUBSTANTIALITY AND VALUE OF CHANGES / GAINS

In brief, the majority of participants in both *success case sets* indicated that the project did impact on their knowledge, skills, attitudes and values. When discussing the impact on values, however, the effect was not in the order of new ones but rather the “reinforcing”, “affirming” or “consolidating” of pre-existing values. For the three other areas, participants described related changes as being either extensively or moderately substantial. In the majority of cases, participants affirmed that these changes were attributable to the project. The following sub-sections details participants’ responses and the change examples they provided.

Impact on Knowledge

All participants in both *success case sets* indicated that their involvement in the project did develop their knowledge base. Participants described that this was because SCERTS was a new framework and it introduced a new language and assessment package and provided a different way of working collaboratively with parents. A high majority of respondents in both groups described the change in knowledge as either being extensively or moderately substantial. Only one respondent described the change as being somewhere between small to moderate.

Although SCERTS was seen as one approach amongst other ASD approaches, it appeared to stand out in terms of its scope. Participants noted that there was “more detail in it than anything else they had ever used” and “how detailed and intensive” it was.

However, some participants who became involved at the Phase 2 stage felt that their level of knowledge was still insufficient. There was the feeling that they had “missed out” in gaining key knowledge and indicated that they wished they had done the initial SCERTS and project training. One respondent described the increase to knowledge as being somewhere between small to moderate – this was largely because the respondent already had a baseline knowledge and indicated that the programme “fine tuned the skills already acquired through other related work”.

Relevant comments describing the impact on knowledge include:

The framework gave us the words and stages and a common vocabulary to use amongst us and to share with families and teachers.

Learning the new framework gave us a different way of working collaboratively with parents. It created a change of mindset – parents became an integral part of the team and important part of the model.

The framework linked the important aspects of SCERTS with learning and giving us permission to identify adult goals under these.

Most participants affirmed that their knowledge development was not attributable to any factors other than the project. In one case it was pointed out that in addition to the project the participant had also acquired knowledge through the prior participation in a special interest professional group “to help get SCERTS happening”. In another instance two individuals indicated that their knowledge increase was attributable to other professional development initiatives, their own reading and the process of disseminating knowledge to others. Nevertheless, one of them pointed out that although these outcomes were “not part of the project it came about because of the project involvement”.

Impact on Skills

A high majority of participants in both *success case sets* indicated that their involvement in the project did develop their skills. Only one individual indicated otherwise, and this was due in the main to her role in the project. With the exception of this individual, all others in both groups described the change in skills to be either *extensively* or *moderately* substantial.

Participants identified a range of different areas where skills were developed, including skills in videoing, data-gathering, assessment, collaboration and leadership. The most commonly mentioned skill development was in the area of observation as it relates to assessment. Some comments suggesting the prominence of gains in assessment skills are noted below:

It improved my assessment skills, in particular observations which are now of a better quality and I am able to take these forward to other cases. I am more confident in setting targets.

My documentation skills have improved a lot compared to what normally happens with doing observations and also to know what to do with the information.

The comments below illustrate that most participants affirmed that their increase in skill level was not attributable to any other factors other than the project:

I wouldn't be at the point I am without the project. The team learning was tremendous and all the other support that was around you contributed.

I always had technology skills, but it was the project that made us use these.

One respondent, however, indicated uncertainty. She was not able to think of any other definite contributing factors, stating that she did not know if all these skills were actually acquired through the training alone.

Impact on Values

Responses suggested that involvement in the project did have an impact on participants' values. However, a high majority indicated that the effect was that of “reinforcing”, “affirming” or “consolidating” their pre-existing values rather than development of new values. The comments below clarify this point of view:

The project reinforced my core beliefs and helped me to work more effectively.

Why it worked so well was because we all had the same values which was acknowledged and played out because of the SCERTS framework.

The project had a philosophy that included inclusive practice, was centred around team working professional practice, strengths based and authentic practice.

The values I have were one of the things that got me into the project. The values of the project already matched my own.

A high majority of respondents affirmed that the impact on values was not attributable to any other factors other than the project. In one case, however, a participant noted that her values were also a result of “four years of experience and changing roles.”

Impact on Attitudes

All participants in both *success case sets* indicated that their involvement in the project did shift how they thought and acted (i.e. their attitudes) concerning ASD-related services. With the exception of one non-response, all others in both *success case sets* described the shift in attitude to be either extensively or moderately substantial.

Attitude impact areas that respondents talked about included a developed confidence, and positive attitudes about the SCERTS framework, and towards ASD practices that the project encouraged. Responses suggesting an impact on attitudes included:

It strengthened my thoughts of a team ‘around’ the child – all having a role and information to contribute or to act on. It changed practice in terms of working with other staff with ASD cases, greater understanding was demonstrated.

If something (SCERTS) contributes to your knowledge it has to affect the way you act.

It has changed the small things, the way I do things, for example now I send a report I have written to the school / parent as a draft before correcting and before finalising, this is directly from the project.

In the majority of cases respondents affirmed that the impact on their attitudes was attributable to the project alone. In one case however, a participant noted that her attitudes were also a result of other learning about ASD and that the project contributed only partly.

PRIORITY TWO: APPLICATION AND USE OF NEW KNOWLEDGE, SKILLS, ATTITUDES AND VALUES

In general, findings reported in this section show that project participants in both *success case sets* were able to apply the gained knowledge and skills and the developed attitudes and values in various ways. This observation is illustrated by drawing from participants’ examples on the reported gains and the usefulness of knowledge, skills, attitudes and values encountered through the project. Among others, their examples illustrated how the new knowledge about SCERTS and the changed vocabulary of the team had improved their ASD work. They discussed the usefulness of their improved assessment skills and enhanced capacity to identify the most effective intervention. There was comment concerning the strengthening of values as they relate to family-centred practice and the team approach. Examples were provided in relation to enhanced confidence; positive attitudes about the SCERTS framework with emphasis on its continued use; and, their positive attitudes about the collaborative approach of sharing knowledge and skills.

All participants in both success case sets affirmed that they did apply their new knowledge and skills in ASD-related practice. In several instances they stated that they were applying their knowledge and skills to other situations and to children beyond the project and involving others outside the project. A high majority affirmed that they were still applying the SCERTS framework and that they plan to continue doing so if situations were more enabling in terms of manageable case loads, sufficient time, and management support.

Application / Use of acquired knowledge

Participants were asked to give an example of their new knowledge and to discuss how this was useful to them. The table below provides a list of key areas where they indicated acquired knowledge was usefully applied.

Table 1: Reported areas for knowledge development

	High Success Case Set ¹⁹	Moderate Success Case Set
1. The SCERTS framework	4	4
2. Commonly shared new language	4	2
3. SCERTS assessment process	0	3

All participants discussed the usefulness of the framework, this included being clearer now about explaining things to parents, clarifying how to work with the child, having a greater understanding about identifying more than ‘just’ the child’s problems, and being able to find a starting point from which to prioritise what to work on.

¹⁹ In this study, a focus group was counted as a single data time, as was an interview with a project coordinator. Each success case set consists of a maximum of four data items (i.e. two focus groups and two coordinator interviews); therefore, a maximum count of four is reported for each theme

Another consistent theme emerging from their stories concerned the “new language” that is central to the framework and how this led to the development of a commonly shared vocabulary and understanding which was consistent throughout the team regardless of their professional backgrounds. Not all team members were from the Ministry with other stakeholders involving ECE centres and families. This common language appears to have facilitated and supported the teaming approach. The following comments indicate that these changes made it easier for individuals to apply SCERTS-related knowledge when discussing with team members, ECE providers, parents and others involved.

By giving the parents a new language and having them understand and use it – we can all communicate including the child – now we all have the same understanding of the same approaches.

We were clearer now about explaining things to parents and about how to work with the child. The framework pulled out the things that we need to work on, especially for very difficult children. The framework is good to show parents how to move forward.

What the framework itself means – the individual parts – Social Communication, etc. – we can now engage in discussion with other service managers and people around SCERTS.

The outcome of a focus group discussion pointed out that in most other ASD related programmes Emotional Regulation was often talked about with negative language. By comparison, the new language of SCERTS gave this aspect a new definition and meaning. In another case, one respondent pointed out that the Transactional Support component of SCERTS which emphasised the child’s adult partner’s goals was a new knowledge that seemed to be just what was needed that could be used to meet the needs of every child.

Participants used the frameworks as a knowledge base tool to plan assessments, to teach others and as a starting point to share with others. The framework appears to have been seen as a whole programme complete with tools and its own language that could sit alongside and encompass what they already know. It provides a comprehensive amount of knowledge that could have wider applications. One respondent noted that she was able to use the gained knowledge to link with other ASD knowledge frameworks and to observe even when not actually using the framework.

Other examples participants provided comments on their application of the SCERTS assessment process:

The assessment provided incremental steps about what you need to do next and clear steps to follow...it is so long and tricky – but then once it’s done we can pull it all together, we are all on the same page.

I understood the framework rationale and where it came from and use it for assessment and implementation of support.

Application / Use of acquired skills

As listed in the table below, participants provided a range of different areas where developed skills were put to use.

Table 2: Reported skill development areas

	High Success Case Set	Moderate Success Case Set
1. Data-gathering and assessment skills – observation skills, monitoring and recording progress, report writing	3	3
2. The use of visual support	2	1
3. Skills in working with others – collaboration, teaching, leadership, mentoring	3	3
4. Capacity to identify the most effective intervention	2	
5. Use of technology		1
6. Skills in prompting and providing support	1	

In providing an example of how assessment-related skills were put to use, participants of one focus group pointed out how they used the skills from the project when they learned to modify the assessment form to suit New Zealand making it more user friendly for staff.

In another case, one respondent described how she gave the forms to families to ‘sell’ the framework and to help keep them on board. She emphasised the need to obtain information from the families and to ensure that they too benefit from the process and that the foundations of the framework lends itself to accomplishing this.

Others became skilled at understanding what they were looking ‘at’ and ‘for’. The framework helped to give meaning to what they had seen and what it meant. Collaborating with the team to confirm consensus also helped to define the next steps. These changes arising from project participation led to improved capacity to identify if the framework was appropriate for the child and in determining the most effective intervention.

Having common understandings and with other people seeing examples of behaviours in other contexts helped build a more comprehensive picture of the child.

When looking at the range of children referred there was the opportunity to think about the type of approach for that child and family.

Participants’ feedback was indicative that they were confident about their abilities in applying the framework with some indicating that they were applying their acquired skills in other contexts outside the project:

I use it a lot. I can take the framework and can now apply it quite reliably and a lot more quickly. The underlying knowledge, even if not using the framework specifically, can still link it back into other work.

I have the skills to apply the SCERTS framework. The project is much broader than just the framework itself.

Others referred to being able to use the skills that they had learned and subsequently applied to other situations outside the project:

The assessment is multilayered and I am using with my other work as well.

The framework gave us the small steps. Now I use the skills learned and not just for children with ASD, others as well.

Application of gained knowledge and skills in ASD-related practice

When asked if they had applied the knowledge and skills gained from the project in ASD-related practice, all participants in both *success case sets* affirmed that they had. They provided a range of different scenarios (often also pointing to difficulties encountered) where they had applied the SCERTS framework or a modified version of it. These scenarios include applying knowledge and skills with students on their case loads, with others who were not in the project, and with other professionals from within and outside of the project. Two mentioned that they cannot ‘unknow’ what they now know and it will always be part of their practice, that you don’t “integrate” that level of knowledge without “taking it with you.” Participant responses include the following:

Yes, I use it all the time, amongst ourselves and with two other professionals not in the project but not always with the parents. The framework may be too formally structured for our New Zealand families, but SCERTS gave us more of a focus and you get results quicker.

Yes, I am applying the framework to other children, and coaching other staff in using the framework as well. I talk to staff about how the framework fits with practice and the ways they can use it.

Yes, especially the problem solving process – I always kept it in mind as a good way to do this as a group. I suggested to a proactive mum who is a teacher, who had a [mental] block about how to assess [her child] that she look at SCERTS and she purchased the books etc. We worked together on it even though her son wasn’t part of the project, she was very pleased.

Yes, definitely. We use the knowledge with all our ASD children whether using the framework for the children and families etc or not. We can’t help but use a SCERTS lens now – we take the knowledge and skills with everything we do now.

Yes, we still have one who is transitioning into school – but there is the time factor, it is too time consuming and we don’t want to do anything half heartedly. No one else can pick this child up. I am also starting from scratch with a new child. I hope I can find someone to help me.

When asked if they were still applying the SCERTS framework, a high majority confirmed that they were and that they plan to continue applying the framework. Nevertheless, some pointed out that this was contingent upon circumstances such as case loads, time constraints and clear management support. Others noted the difficulty with using the framework in isolation and that it may not always be true to the model because of this.

In two instances participants indicated that they were not able to continue with applying the framework because of their circumstances that is, not having the necessary team, lack of new referrals and their already extensive work load. When probed further if they would continue applying the framework if the opportunity arose, they indicated that they would:

I would love to if I could get a team around it. Given the time allocated to the project so far – why introduce a framework if you are only going to do it half heartedly.

One group commented that they have their own version, this is a modified version for children not in the project. Another was curious about the next phase of the project, if there was to be one, wondering how they would bring new people in was of concern – especially around their training needs.

Application / Use of developed values

The majority of respondents did not reject any existing values, nor adopt any new values but rather described an enhancement of pre-existing values.

It reaffirmed all of these existing service values. That’s why it was easy to implement. Our base philosophy is not challenged in any way. It fitted us perfectly.

Nevertheless, further responses provided in several instances within both *success case sets* were indicative that the project’s impact on participants’ values (reinforcement, affirmation and consolidation of existing values) did consequently result in some changes to attitudes and perceptions, which did have an impact on the way they thought about certain aspects concerning ASD-related practice. The table below provides a summary of value-related areas that participants talked about.

Table 3: Reported Value-related areas that affected practice

	High Success Case Set	Moderate Success Case Set
1. Concerning family centred practice	3	2
2. Concerning assessment / intervention in natural settings	1	
3. Concerning team approach	2	3
4. Concerning inclusive practice	1	
5. Concerning culturally responsive services	1	
6. Concerning ASD practice when working with the child	2	
7. Concerning perceptions about ASD	1	1

Most comments centred on values that affected and supported existing practice, they were mostly in the areas of *family centred practice* and the *teaming approach*. Participants appeared to place greater value on family involvement and they are involving families more suggesting that perhaps their values and their practices have shifted. Comments respondents provided concerning family centred practice included the following:

The increased parent involvement in the framework fitted with what we wanted to do, it fitted our philosophies concerning family focused service.

In order to do it properly was very dependent upon the parent and what they perceive as important. The involvement of parents brings something more to the whole process.

I have always valued the families input and the work with their children – the project gave us the opportunity to look at this work in a slightly different way.

The whole framework fitted with what we think is important – our philosophies are about being a family focused service.

Comments respondents provided concerning the team approach included observations regarding the value of working collaboratively ‘inside and outside’ the organisation and teaming around the ‘cases rather than the team’. Specific comments included:

The project reinforced my preference to work as part of a team and emphasised the value of working collaboratively – also with team members from outside of our organisation. The health - education mix is critical to success.

The project reaffirmed our belief in teaming. Everyone brings something new to your practice. This brought respect and insight to the value of input from other professionals and helped us see things from a different perspective.

As shown in the table above, in two instances, respondents indicated that the project involvement developed their thinking about ASD practice in relation to viewing their work with the child:

It changed my thinking, changed it from a fix it attitude to changing what we think is normal; in other words, what we need to change to make it work for the child.

It is not a ‘change this child’ method rather a - this is what we know about this child and how can we build on it.

As the two comments below illustrate the project definitions and terminology also influenced their perceptions about ASD as being a “problem”:

The term emotional regulation (ER) provided an understanding about actions and the labels that sit around those actions and opened up possibilities I had not thought of before. Now I am not seeing aspects of children’s behaviour (ER) spoken about as a deficit but as a state that everyone has and just accepting the way these children learn and to move on from there.

The terminology and the ideas behind it that were used in the project were much more positive and provided a nice way of talking about behaviour etc.

Application / Use of developed attitudes

As noted in the preceding section, all participants indicated that their involvement in the project did shift their attitudes concerning their practice. The table below provides a summary of the different attitude areas that led to impacts on their practice.

Table 4: Reported Attitude-related areas that affected practice

	High Success Case Set	Moderate Success Case Set
1. Increased Confidence	3	2
2. Positive about practice – collaborative sharing of knowledge and skills	3	2
3. Positive about SCERTS framework – continued use	2	2
4. Positive about SCERTS framework as an ideal approach	1	2
5. Positive about SCERTS framework – compared to other ASD approaches	1	1
6. Patience		1
7. Concerning need for quality services	1	
8. Level of enthusiasm towards work	1	

The three most reported areas that affected practice included increasing confidence, becoming more positive about their practice including sharing their knowledge and skills, and positivity about the continued use of the SCERTS framework.

Respondents in both groups indicated gains in confidence and explained how this affected their practice, not only as individuals, but also in the team and with the team and the ability to deliver a “better service”. Comments included:

The project contributes to your knowledge so it has to effect the way you act. I became more confident because I was in a better position to explain to parents and teachers.

I am much more confident about going into a facility and explaining what we are doing and what our goals are.

We have been building confidence in the team. Before I had the constant feeling of ‘don’t know’ – but now I get confidence from working in a team, we have a shared big picture.

Many respondents also indicated that the project had affected their own attitudes and the attitudes of other’s towards the project’s collaborative approach to sharing knowledge and skills:

This has reinforced my view (attitude) that we need health professionals involved if this is going to be a truly collaborative model.

Attitudes can change about who has to do the assessments, it is a communal shared activity where everybody’s input is valued and can be seen to change where a child ‘is’. You can’t get ‘all’ the info you need by yourself alone.

Having to share and discuss in a team have led to a willingness to learn from and listen to others.

I previously worked in isolation – now this work is collaborative and in the natural environment of the child. This is a positive change from my initial clinical training.

A number of both sets were very positive about the model and its continued use however there were some cautionary notes and some suggestions for improvement:

If you find something that works but there are some issues, you need to find a way to make it work e.g. provide more time.

I want to continue but the time involved would be a barrier.

The framework takes time but it is time well spent – it is good to see a case through the transition to school, however there is a lot that happens that we don't know about after this.

Some indicated a positive attitude towards SCERTS as an ideal ASD approach, while others pointed out its advantage compared to other ASD approaches, and the need for its continued use:

This project provided an ideal model and a whole way of working.

I want the MoE to promote SCERTS as a preferred way of working with these children.

If you find something that can work – you need to find a way to make it work and then persuade other people to use the framework as well.

PRIORITY THREE: VALUE AND QUALITY OF CONTENT, DESIGN AND DELIVERY

Knowledge and skill development

Participants were provided a list of thirteen different aspects or features of the project and asked to identify those that had contributed to their knowledge and skills. A higher number of respondents in the High Success Case Set referred to a greater number of aspects or features that had contributed to their knowledge development. Several other contributing aspects were provided by participants and are also listed in Table 5.

Table 5: Knowledge and skills development associated to different aspects / features of the EI ASD project

Aspects / Features / Activities that contributed to knowledge and skills development	High Success Case Set		Moderate Success Case Set	
	Knowledge development	Skills development	Knowledge development	Skills development
Seminars (Phase 1) by Barry Prizant	3	1	3	
Follow-up inputs from Barry Prizant	2			
Masters level interactive workshops (Phase 2) by Barry Prizant	3			
Resources (SCERTS manual and DVDs, SCERTS related journal articles, book chapters, and web-site)	3	1	1	1
Team approach to problem-solving	3	2	2	1
Established 'learning community' – sharing of knowledge and skills and exchange of support	2	1	1	1
Established communication channels	2			
Follow up support from national ASD team	2	1		1
Writing progress reports – reflecting & discussing the work	3		1	
Collecting data on the child's progress	1	2	2	1
Email discussion group (listserve)				
Newsletter, LinkUp	1		1	
Professional development, National Days	3	1	1	1
Other aspects / activities				
	a. Utilising knowledge of Phase 1 staff			1
	b. Putting it into practice		2	1
	c. Mini project		1	

Commenting on *Prizant's seminars and workshops*, several participants pointed out that the seminar's effectiveness in building knowledge was due to the way it was presented – the presenter's "enthusiasm" and how he got them "interested and fired up." They also noted the significance of obtaining the knowledge directly from the designers or originators of the framework. In further commenting on the seminars, in three different instances, participants pointed out the connections between the Phase 1 seminars and Phase 2 workshops. While at Phase 1 they felt that they had "lots of new information [to absorb] with no grounding," they found the Phase 2 workshop to be more relevant and meaningful because it was building on base information and knowledge that they had already acquired. Another, also commenting on the effectiveness of the Phase 2 workshop, said that this was most useful because they were already using the framework and had specific examples about their own cases and questions about New Zealand culture.

In one focus group discussion, participants pointed out that they did refer to the *resources* frequently. In another, participants indicated that the manuals gave meaning and description of what they were seeing. They commented that they could not have done it without the resources, especially as all of the forms etc were contained within the manual.

Participants emphasised that following the seminars their knowledge developed through the *team approach to learning and problem solving*. In one focus group discussion, participants noted that "professional development around this [approach was] useful", while another participant emphasised that the "detailed knowledge came through the practical experience of using the model and working with others on a case study." This approach was referred to in two differing ways by one group, the problem solving of a team working together and as a team problem solving around a child.

Suggesting the usefulness of the *established 'learning community'*, participants noted how the team motivated each other and used each other's enthusiasm and shared their experiences with each other. Another emphasised the "sharing of knowledge and skills and exchange of support".

As the following comments suggest, *collecting data on the child's progress* contributed to skill development and more effective practice:

Being able to capture specific changes in progress that can be fed back to parents was useful. In the past we did not have the language to capture and use this information to target key areas that are measurable. So there is improvement for families because of the frequent progress reports. Most assessment using traditional measures do not capture this in the same way.

Videoring and then analysis of it are both crucial. Through the analysis of the video is where the skill improvement came and this was further supported by the forms, etc.

The regional *professional development days* were mentioned as being very beneficial as catching up with others was really important. This was seen as a good opportunity to share what was working well for them and other project members, and that this sharing removes the potential to become insular.

A number of groups and individuals considered that it was the practice itself that really contributed to their skills in particular the working within the team, with the manual and with the child. Some participants commented that the number of children that they did or did not work with had impacted on their ability to apply their knowledge and skills

Further to discussing the contributors to knowledge and skills, participants were asked to highlight which specific aspect had been most effective. Contributing aspects, including additional features and activities that participants provided are listed in Table 6.

Table 6: Most effective aspects contributing to knowledge and skills

Aspects / Features / Activities that contributed to knowledge and skills development	High Success Case Set		Moderate Success Case Set	
	Knowledge development	Skills development	Knowledge development	Skills development
Seminars (Phase 1) by Barry Prizant	2		3	
Masters level interactive workshops (Phase 2) by Barry Prizant	1			
Resources (SCERTS manual and DVDs, SCERTS related journal articles, book chapters, and web-site)	1			1
Team approach to problem-solving	1	1		
Collecting data on the child's progress		2	1	1
Established 'learning community' – sharing of knowledge and skills and exchange of support				1
Putting it into practice		1		1

In some instance participants had difficulty ranking aspects and nominated more than one and in another a participant felt that there had been no effective contributors. The most effective contributor to knowledge was the *seminars by Barry Prizant in Phase 1* and to skills was *collecting data on the child's progress*.

Improving knowledge and skill development

When asked what aspects of the project could be improved to enable better knowledge and skill development, participants pointed to the various drawbacks they experienced and provided a number of suggestions. These are not presented in any particular order.

1) More time allocation

In almost all cases participants indicated that more time was needed during the project to better enable knowledge and skill development, to implement the framework, and to ensure the necessary knowledge transfer process. There was a general feeling that more time was required to learn, implement and embed into practice. The manuals and framework were comprehensive, existing case loads heavy, relationships needed to be developed and time had to be used outside of work to keep on top. Time was also needed to develop relationships with teams, and other stakeholders and to actually manage the requirements of the framework around the child, and time to manage the extra requirements of the framework. The following comments illustrate this recurring point for project improvement:

We needed more time to learn about the project and gain the working knowledge. Time allocation could have been improved to give us time to apply our knowledge – only in the application of knowledge can it improve our understanding.

I felt we needed some more time – too much packed into just two days of initial training, so much packed into too little time. Because you have so many aspects coming at you, you don't get it all done. There needs to be a structured way of doing it all together so that you can all do the learning at the same time.

There needed to be changes in case loads to give us time to get our heads around everything. It was a new language for us and also for the families and centres. We also had to pass on the new information in a new way to people who also had to be up-skilled, it was difficult. We needed time to be able to do this with the parents and the ECE centres. Really have to know what you are doing to be able to confidentially pass this on to others to whom it is all new. You have to be able to convince people what you are doing is right.

There was a sense of everything being rushed and at the last minute. SCERTS is fantastic but always felt that we were not doing it justice. Time was lacking to get the knowledge we needed and coming in half way meant we had no knowledge to start with before having to act.

Time – to get skills needs experience and requires reflection. Time and co-working time – at times we had difficulties feeling we could do it well.

2) Prior preparations preceding seminars

As the comments below suggest, participants believed that some prior knowledge acquisition preceding Barry Prizant's seminars could have enhanced the knowledge change process during the seminar:

Before going to the course, it would have been helpful to have had a briefing providing a summary of the project and some pre-reading, or a small starter kit with a little DVD – having this would have led to easier access to the information in the book.

Perhaps a pre-workshop before Barry's visit, so his first visit could have been more targeted around initial concerns etc we had. It would have been good to know about the assessment forms etc. before he came. Some prior knowledge would have been helpful to build our learning on.

3) Consistency in individuals involved

In one response it was suggested that maintaining the consistency of those involved in the project would better enable knowledge development and transfer. The difficulty in imparting knowledge to teachers when they were often changing and when the project team also changed was pointed to. In another case, participants also talked about how they lost a number of Early Intervention Teachers due to their decisions to take up EIBC training. This change had a particular impact on their work in the SCERTS project.

4) Simplified information and user-friendly resources

The need for simplified information to enable knowledge absorption and transfer was another suggestion. One participant pointed to the large amount of materials and the complexity of the SCERTS manuals which made it difficult “to convince people to come on board” particularly when the manuals were all you had. In two instances, respondents suggested the need for more explanation and activities for better knowledge development on SCERTS’ assessment aspects and the need for this to be made more easily understandable.

5) Technological Support

Participants talked about the frustrations they experienced in using the technology which was often not all compatible with their systems. This made it difficult, as they needed to access these resources to complete aspects of the assessment tasks. Some also mentioned that there was difficulty when some team members needed to learn how to use the technology, this required time and skill input that had not been allowed for.

6) Management support

In two instances, participants considered the issue of a general lack of interest or awareness with regard to management support. One noted that there was no interest shown from their managers. Another commented that they did not feel that they had specific management support or that management even knew what the team were doing, therefore management did not allow the time needed to dedicate to the project. There was also an emphasised the need for the project to be made more “legitimate” in their district.

7) Expert support for initial stages

One focus group suggested increasing the frequency of support in initial stages of learning and to ensure that key personal had prior practical experience with the framework.

8) Face-to-face interactions

In one discussion it was suggested that face-to-face interactions, rather than via email, was more effective for knowledge development and transfer.

9) Mini Projects used as training material

One suggestion put forward for future development of the project, was that the mini projects that individual project teams had undertaken during the project could be made available, perhaps as a ‘taster’ for anyone being trained in the framework in the future.

Quality of the content, design and delivery of the project

Overall participant responses were mainly positive concerning the content, design and delivery of the project in terms of a number of predetermined factors. Comments were collected in terms of enablers and strengths, and possible barriers. These are shown in the table below as satisfactory (enablers and strengths) and improvable (possible barriers). It is possible the same factor to have satisfactory comments as well as improvable ones made by the same respondents.

Table 7: Reporting of satisfactory and improvable factors concerning content, design and delivery of the project

	HSC	MSC	Total	HSC	MSC	Total
	Satisfactory	Satisfactory		Improvable	Improvable	
Meeting participants needs	2	3	5	3	3	6
Level appropriateness	3	3	6	2	3	5
Consistency with current evidence	4	4	8	1	2	3
Consistency with NZ ASD Guideline	4	4	8	0	1	1
Innovativeness	4	4	8	1	2	3
Consistency with adult learning principles	4	3	7	4	3	7
Implementation fidelity with framework design	4	0	4	1	4	5
Contextual appropriateness	4	4	8	1	4	5

For four factors all participants made positive comments, these considered the consistency of the framework with *current evidence*, and with the *NZ ASD Guideline* and the *innovativeness* and *contextual appropriateness* of the project. In a number of instances both positive and negative aspects were mentioned concerning the same factor. *Contextual appropriateness* also prompted discussion concerning barriers that included the extent of the language/terminology used and aspects specific to the New Zealand context itself e.g. Special Education internal systems and processes, the nature of ECE, and relationships with other providers.

Another factor that stimulated discussion was in the area of the project *consistency with adult learning principles* with most individuals and groups making comments concerning enablers and barriers. The enablers or strengths included the time made for reflection, it was good to negotiate the goals and learning principles and that in general the project met the negotiated list. Instances where the project could have been made stronger included: finding out what parents thought about changes, lacks in “taking into account various members’ strengths”, that it was too deadline driven, there was a lack of flexibility and time for reflection, and that there were gaps between theory and practice.

Two other factors that elicited similar number of positive and negative comments were in *meeting the needs of participants* and the *level appropriateness* of the content, design and delivery of the project. Some of the strengths were considered to be the opportunity to keep building on knowledge and the variety of learning opportunities. A number of barriers were discussed including not being able to “fully apply new knowledge and skills as designed” due to a lack of cases, not feeling “supported as a participant” due to pressure and stress, a heavy front loading “too much too fast”, the relevance of some of the material and the variable knowledge of team members.

PRIORITY FOUR: UNEXPECTED OUTCOMES

Participants were asked to reflect on and describe any unexpected outcomes in terms of their knowledge, skills, values and attitude changes resulting from their involvement in the project. This challenged them to think about and discuss aspects that they were often not cognizant of and has provided unintended reflections that we would not have otherwise captured. As detailed in the table below, in general, more positive than negative unexpected outcomes resulted from involvement in the EI ASD Project.

Table 8: Reporting of positive and negative unexpected outcomes in relation to knowledge, skills, values and attitude changes

Unexpected outcomes in relation to:	High Success Case Set			Moderate Success Case Set		
	Positive	Negative	Unsure	Positive	Negative	Unsure
Change in knowledge	4			4		1
Change in skills	3		1	2	1	2
Change in values	2		2	2		2
Change attitude	3	2	1	3	2	
TOTAL	12	2	4	11	3	4

Unexpected changes in knowledge

All participants in both *success case sets* described unexpected outcomes from changes in knowledge that were generally positive in nature. Some referred to being surprised in instances where they were applying their knowledge without even realising. The following examples illustrate some unexpected outcomes:

The new jargon teases out the knowledge and then you are able to reflect on it before being able to use it in practice and then you suddenly realise you understand it.

I have increased confidence because of the knowledge development, as a result of reading more, integrating more and undergoing a professional development process, reflecting and evaluating.

I know a lot more about working with other people than I did at the beginning.

I started giving advice to others in a different setting without even realising that we were using this new knowledge. It was easy to apply to other children and contexts very quickly especially around emotional regulation and transactional support.

Being able to see visually, having something that you can show parents, the team and the child how everything is interlinked. It is surprising how the whole pathway all comes together. Other measures have all been separate or discrete. This framework pulls it all together.

Unexpected changes in skills

Likewise, in both *success case sets* unexpected outcomes from skill development tended to be positive; for example the increased confidence as a result of being able to use the acquired tools in reporting, having a better understanding about learning stages, and the realisation of just how widely these new skills can be used beyond ASD clients. There was an unexpected awareness of the number of existing gaps in terms of skills until the new skills they had acquired filled them, also how these new skills contributed to the development of other skills and strategies. For one respondent, as the quote below demonstrates, the surprise was simply being able to implement the framework:

That we managed to get our heads around the new framework, and then that we could use it in the NZ context was a surprise.

Some discussion pointed to negative outcomes when they realised that despite skills acquisitions, they felt the pure version of SCERTS was impossible to do. There was also comment concerning while they had the skills it was hard to align these with the timing of the stage of where parents were often at.

Unexpected changes in values

As shown in Table 8, respondents noted that unexpected outcomes in relation to values were positive in nature in four instances (twice in each success case set). One set of feedback provided comment that they were surprised how well they could pull things together as a ‘team’ and bounce off each other. The suggested positive unexpected outcomes can be related to values concerning the team approach that the project emphasised. Another response identified how people worked so hard on the project and were so enthusiastic especially at the beginning. They got involved and excited about what they were learning and applying and showed great commitment to the project. This suggested a positive unexpected outcome concerning an enthusiasm towards their work.

Although no definite negative outcomes were reported, the respondent who indicated uncertainty pointed out that it was challenging working across two environments that had different values. This refers to the differences between the team, ECEs and outside professionals.

Unexpected changes in attitudes

Responses provided by participants suggested that unexpected outcomes in relation to attitude included those that concerned their own attitudes as well those of others involved.

Positive unexpected outcomes in relation to attitudes that respondents described related to having the confidence to use the framework and the change in working style where the child is no longer seen in isolation. Another consideration was the ability to bring the team together, lead it and motivate others; with yet another being surprised at the impact of the videoing which resulted in a permanent record, the effect of this new skill allowed the possibility to discuss with others and review and engage more deeply.

The reported negative unexpected outcomes included some participants who wanted “to give up in the end”; the encountered difficulty in changing parents’ mindsets and clarifying their own roles as part of the collaborative approach. Another discussed the frustration in developing the framework in a New Zealand way with the given resources and the tensions involved. Some team members were not prepared for the upset they caused parents who had paid for support programmes, especially when members considered that they were providing an alternative that was “better and available for free”. One group were surprised at the perceived envy of other practitioners in their office who had attended Phase 1 but not been selected for participation in Phase 2. There was also frustration as a result of not being able to take the framework further without the time and support from management within the organisation.

Chapter Five: Conclusions and Recommendations

The evaluation findings show that the use of the SCERTS Framework as part of the EI ASD project has developed and supported practitioner knowledge and skills and was well supported by a collaborative model for providing professional learning and development. The project and framework were seen to be consistent with current evidence and the NZ ASD Guideline and to be both innovative and contextually appropriate. It is clear that the choice of the framework (primarily because of its alignment with organisational values) was well met. It is apparent that it has been well used and that it provides a base for participants to gather their existing knowledge around and continue to build on.

Conclusions:

A number of themes are apparent in the evaluation findings:

- Time – it was underestimated how much would be needed to successfully implement what was seen as a complex framework along with its very detailed resources.
- Assessment and observation skills – the most commonly mentioned area of skill development was observation as it relates to assessment.
- A new language – the consistent way of speaking that supports the framework led to the development of a commonly shared vocabulary and set of ideas that were used by all professionals including family working around the child.
- Emotional Regulation and Transactional Support – these aspects of the framework were seen as being new and useful knowledge.
- SCERTS as a knowledge base – the framework was seen as a whole programme (complete with tools and language) that can sit alongside and encompass what practitioners already knew, and one that can have wider applications.
- Continued use of SCERTS – despite the project finishing, the teams saw it as important to continue to use the framework with existing and new students and to introduce it to other colleagues.
- SCERTS is comprehensive – participants felt that the framework contains more detail than anything else they had ever used. It was detailed and intensive.
- Teaming – several notions of teaming emerged, including: the value of teaming and the team approach, the value of working with the specialist education team, and the importance of collaborative relationships in the team that surrounds the child, including parents.
- Fit with evidence and context – the project and framework were seen to be consistent with current evidence, the NZ ASD Guideline, to be innovative and contextually appropriate.
- An effective professional development model – the professional development model used for the project was deemed to be successful by participants.

Future opportunities to maximise project outcomes:

We suggest three key future opportunities for the Ministry:

1. An opportunity exists to add to the existing knowledge base and extend it to other specialist staff. Deciding whether or not to do this raises the question of whether this could be accomplished without, firstly, a similar professional development programme, secondly, provision for the teaming approach, and thirdly ensuring the appropriate resources are readily available. Maintaining the current enthusiasm and momentum must be a priority, leading to the sharing of knowledge and skills with others working with children with ASD.
2. The model developed for the professional development that sat alongside the implementation of the framework was deemed to be successful by the participants. Some reported that it was the most effective, informative and interesting support that they had encountered through the Ministry. The challenge now is to see if this innovative model could inform other professional development initiatives undertaken by the Ministry.
3. When asked to take part in the interviews, some participants noted that they were unsure they could contribute positive impacts about the project because on initial reflection only negative impacts came to mind. However, as they reflected more deeply, they talked about how the process of participating in the evaluation had empowered them, and many participants indicated that they felt more positive about the project and the model than they had initially thought. This is a positive reason for sharing the findings of this report with other project participants and would possibly open the door to other project members who were not part of the evaluation to provide feedback and to help maintain the momentum that has already been built.

The following section expands on the first opportunity listed above, i.e. to add to and extend the knowledge base that was developed as a result of the EI ASD Project. The steps below and figure 1 and 2 that follow suggest a number of ways that the existing knowledge base could be added to and extended to other specialist staff:

- > Step 1: Using a bottom up approach that invites suggestions on how project participants aspire to proceed with project maintenance and expansion given the current state and what it would take to be able accomplish this.
- > Step 2: Inviting enthusiastic individuals to become drivers and take on leadership roles within the professional learning community. This community already has experienced staff to take the roles of experts and motivators. However, it would require some degree of support from the Ministry in terms of acknowledgement of the roles and requirements of SCERTS and in terms of time, case loads and teaming.
- > Step 3: This final phase includes a number of features, transferring knowledge to new personnel, facilitating a broader application of the framework to support children who have had the benefit of SCERTS support in ECE and no longer have it upon entering school, and establishing a resources repository for supplementary material as it is developed.

(3) EXPAND PROJECT

Transfer of knowledge to new personnel, broader application of framework, established resources repository

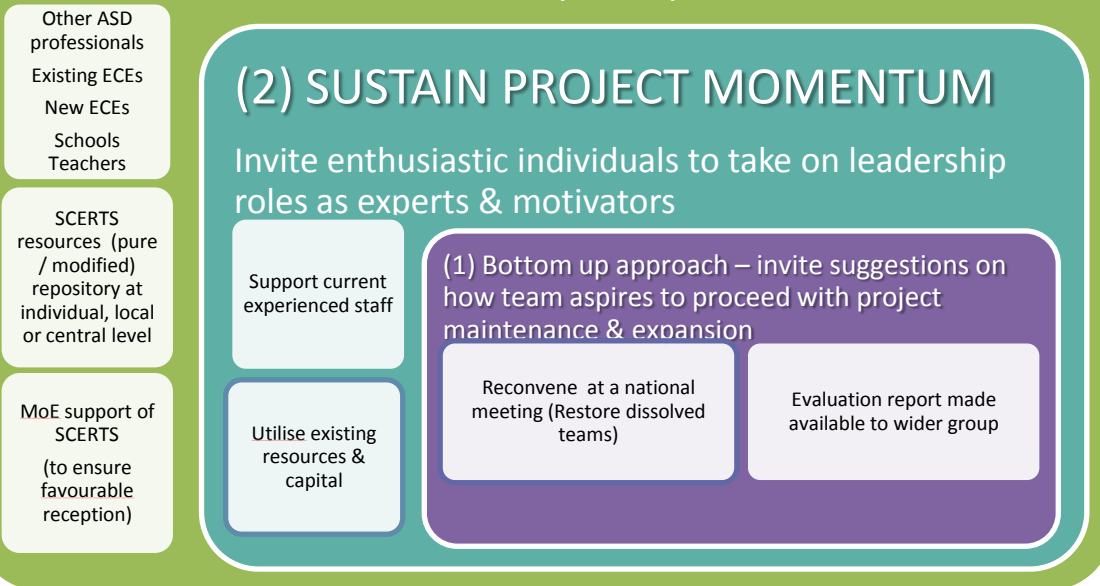


Figure 1: Considerations for continuing the SCERTS support model.

In order to sustain current levels of momentum across the team that were involved within the project the diagram below expands the elements of Stage 2, the supports required by current experienced staff and issues around utilising existing resources and capital.

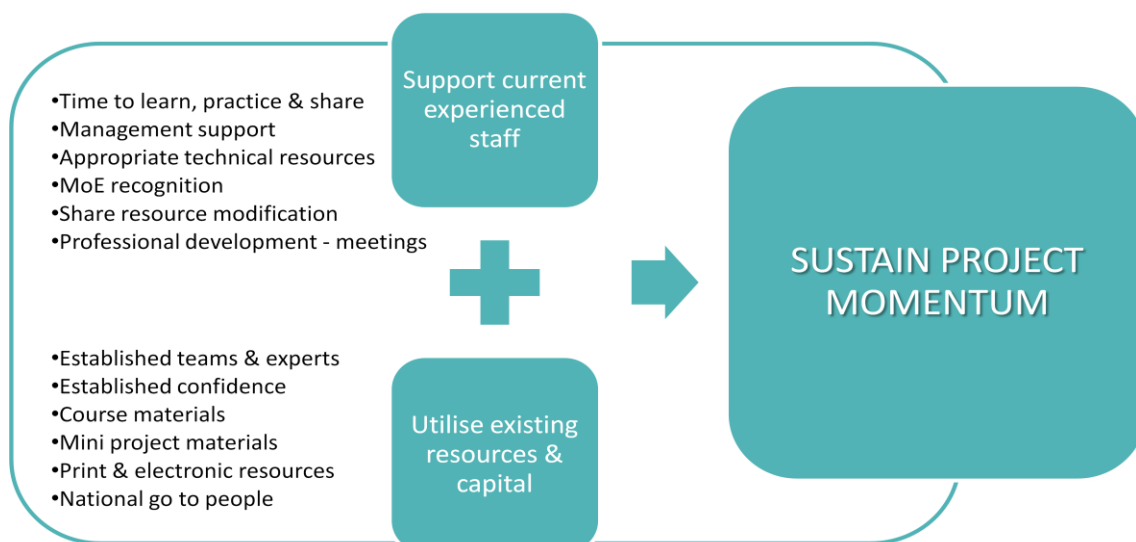


Figure 2: Sustaining the project momentum

Appendix 1: Methodology

Success Case Method - An adapted application

Success case evaluation methodology acknowledges that the key participants in a programme evaluation also hold the context knowledge to support the data mining of information and feedback and can provide reflections that can feed into recommendations. In this particular evaluation, the key informants, who were members of the project team, are also the people who can best utilise the evaluation information to improve future programme outcomes.

Data was collected using face-to-face interviews with project coordinators and separate focus groups from the same region. Discussion with these project participants was used to fully understand the stories of project impact and to elicit information to address the Ministry's four evaluation priority areas.

For the purpose of this evaluation, Cognition adapted the Success Case Method (SCM). The SCM was originally developed to assess an intervention's impact on business targets such as return on investments. It is intended to generate evidence of an intervention's effects from success cases to help "stakeholders learn what worked, what did not, what worthwhile results have been achieved, and what can be done to get better results from future efforts²⁰". In non-success cases, the SCM "pinpoints the weaknesses in the system and directs feedback to those who can address the problems." While these general aims also apply to the method's application in contexts other than in the for-profit sector, "modifications of the SCM concept and design are sometimes necessary for implementing the approach in non-profit environments where business goals are not necessarily an explicit objective."²¹

The SCM suggests that the data collection process should emphasise "the notion of confirmation" and that "confirming evidence [be collected] where possible²²". This aspect was modified for this study. The collection of evidence, which would have required additional interviews with other stakeholders (e.g. parents or co-workers) to substantiate respondents' feedback, was beyond the scope of this evaluation. It was assumed that collecting data through interviews with regional coordinators and focus group discussions would provide a process of confirmation of reported impacts and examples of application.

²⁰ Brinkerhoff, R.O. (2005) The Success Case Method: A Strategic Evaluation Approach to Increasing the Value and Effect of Training. *Advances in Developing Human Resources*, 7(1): 86-101, p. 90

²¹ Coryn, C.L.S., Schröter, D.C., Hanssen, C.E. (2009) Adding a Time-Series Design Element to the Success Case Method to Improve Methodological Rigor: An Application for Nonprofit Program Evaluation. *American Journal of Evaluation*, 30(1): 80-92, p. 80

²² Brinkerhoff, R.O. (1983) The Success Case: A Low-Cost, High-Yield Evaluation. *Training and Development Journal*, (August): 58-61, p. 61

While the original SCM focuses on “successful” and “non-successful” cases, the later serving to provide an understanding of barriers and suggestions for improvement, the SCM’s use in non-profit settings can require modifications in terms of how success cases are identified. In some cases, there is a “mix of success and non-success, rather than purely one or the other²³”. In others, three different categories of cases were identified – high success cases, moderate success cases and non-success cases²⁴. As detailed in the subsection below, a similar adaptation was necessary in the case of this evaluation.

Impact Model: Specifying Project Goals and Outcomes

The first step in this evaluation attempted to gain an overall understanding of the project – from its goals and objectives through to its outcomes and expected impacts. An Impact Model was developed and its accuracy affirmed through a process of discussions with the Advisory Group. As presented in Figure 1, the Impact Model provides an outline of the projects’ overall goals, its inputs and activities, its outcomes and expected impacts.

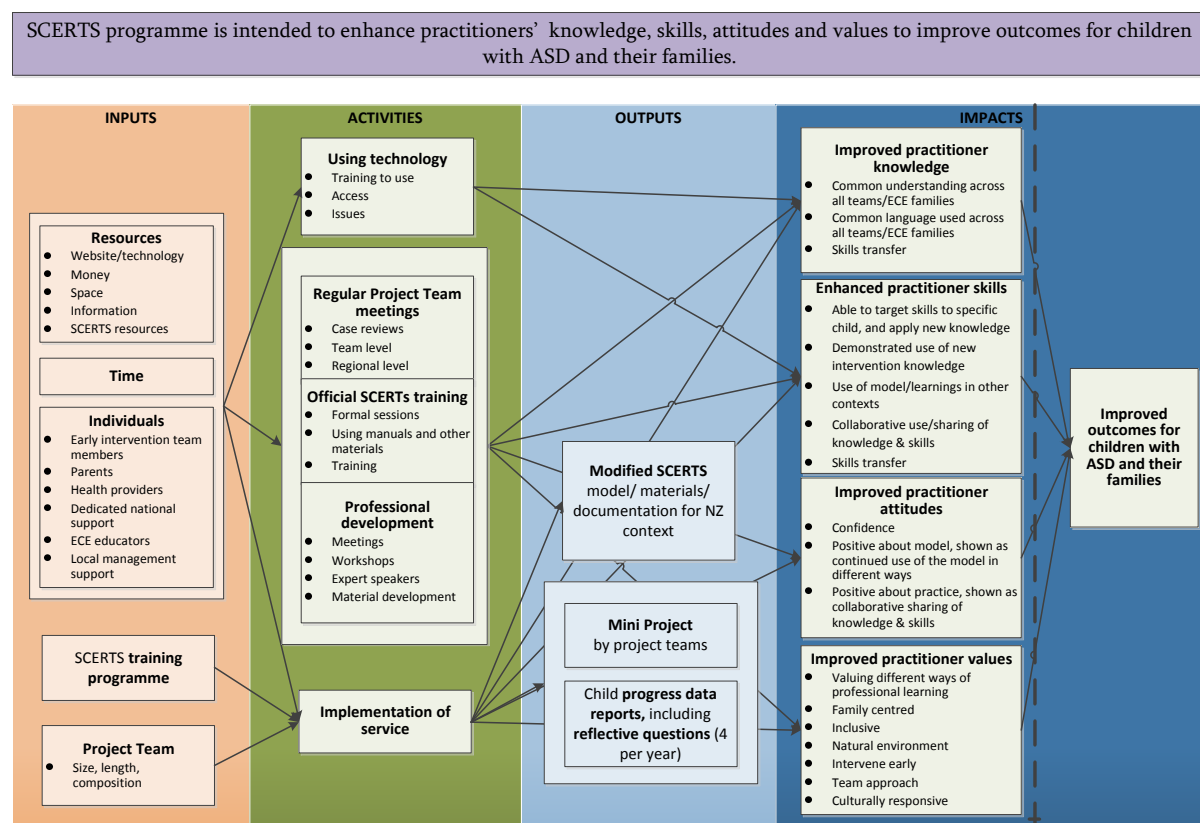


Figure 1: Impact Model

²³ *ibid.*, p. 8

²⁴ Coryn, C.L.S., Schröter, D.C., Hanssen, C.E. (2009) Adding a Time-Series Design Element to the Success Case Method to Improve Methodological Rigor: An Application for Nonprofit Program Evaluation. *American Journal of Evaluation*, 30(1): 80-92

Determining success case sets

Survey instrument

The impact model (Figure 1) served as a basis for designing a survey to select the success case sets for this evaluation. A brief survey instrument was developed consisting of five questions relating to five key impact areas and one question to determine project location (see Appendix 2). Using a four-point rating scale (1-strongly disagree, 2-disagree, 3-agree, 4-strongly agree) the survey requested respondents to provide ratings on the projects' success in contributing to the four key areas of impact – on their knowledge, skills, attitudes and values and if the project had led to continued application of the SCERTS framework in New Zealand.

Prior to carrying out the survey the four regional and twelve area coordinators who had been involved in the project were contacted by Cognition and provided with background information concerning the evaluation and its two data gathering phases to enable them to inform others. The Ministry of Education provided Cognition with a list of names and email addresses of 60 participants (regional coordinators and Ministry team members) who had been involved in the project up to its cessation in December 2010. A link to the survey (administered via Survey Monkey) was emailed to all participants. Fifty-two completed the survey generating a response rate of 86%.

Success Case Sets

The data were organised into the 12 regional SCERTS groups, and an overall success score for each group was calculated for each location, as the average of the participants' responses to the five impact areas. The average scores resulted in all positive values (i.e. success) and these values were sorted numerically according to the scores.

Based on the above analysis, two project sites with the lowest averages and two with the highest were selected to form two success case sets: a *Moderate Success Case Set* and a *High Success Case Set* (see Figure 2). For each project site a focus group including team members and an interview with the team coordinator was conducted – generating four *data items* for each success case set. The *High Success Case Set* represented 9 individuals and the *Moderate Success Case Set* represented 6 individuals.

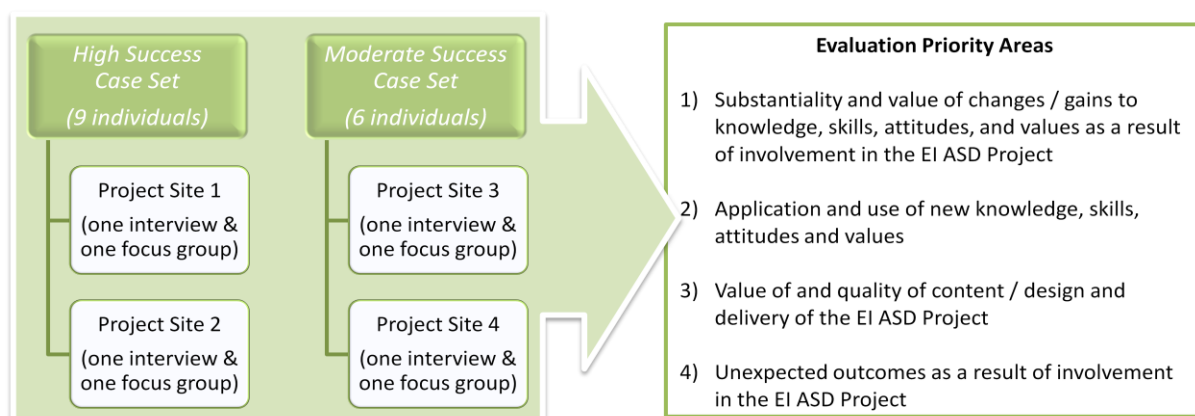


Figure 2 Project evaluation based on two success case sets

Responses were analysed and presented collectively for the two success case sets. This method of presentation provides a richness in data in demonstrating the success stories as each success case set draws from a range of different individuals from two project sites, while at the same time protects the identity of individuals.

Considering that this evaluation encompassed a small number of four focus groups and four individual interviews, to ensure identity protection the location of the four selected project sites are not referred to in this report. In addition, any information that could be used to identify the level of success of a site, group or any individual (i.e. their success case set category) based on their responses is not provided to maintain confidentiality.

Interviews and Focus Groups

Interview / Focus Group Discussion Guide

Using a similar process of consulting with the Advisory Group an *Interview / Focus Group Discussion Guide* was developed (See Appendix 3). Questions were separated into general sections focusing on the project's four key impact areas – knowledge, skills, attitudes and values. Respondents were taken through a discussion process that generated data to answer questions relating to specific aspects of the project's outcomes and impacts as detailed in the four evaluation priority areas.

Some minor adjustments were made to questions wordings in the final draft of the *Interview / Focus Group Discussion Guide* following a pilot test with one EI ASD project participant.

Interviews and Focus Group Discussions

Data Analysis

The “aim of the success case is a richly detailed description²⁵” of participants' stories gained through interviews and the analysis and reports “should be as comprehensive and specific as possible, including examples and demonstrations of uses and effects”. Keeping this in mind data was analysed using a thematic analysis method. As thematic analysis is not tied to any particular theoretical framework it “provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data²⁶”. As the purpose of this evaluation was to generate answers to specific evaluation questions, themes were identified in a deductive manner.

Firstly, the hand-written interviewer notes were typed by the analyst and checked for accuracy with the interviewer. Secondly, all collected data were reorganised into different data sets in

²⁵ Brinkerhoff, R.O. (1983) The Success Case: A Low-Cost, High-Yield Evaluation. Training and Development Journal, (August): 58-61, p. 61

²⁶ Braun, V. and Clarke (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3, 77-101, p. 78

accordance with the questions and sub-questions within the four evaluation priority areas defined by the Ministry. Thirdly, each data set was carefully read and reread to identify and code relevant categories (e.g. relating to project aspects, reported changes, or reported gains) for the respective research questions. In most instances, the preliminary codes went on to form the main themes. The decision on what counted as a theme was based on “whether it capture[ed] something important in relation to the overall research questions”²⁷ rather than on its prevalence across the data sets. Nevertheless, to gauge the substantiality of reported gains and changes, in addition to respondents’ self-reported assessments, prevalence of themes was counted at the data item level. As each success case set consisted of four data items (i.e. two focus groups and two coordinator interviews) - a maximum count of four is reported for each theme. These figures (presented in tables in the results section) provided an additional estimation of the substantiality and value of changes and gains to participants’ knowledge, skills, attitudes and values. The data was then reviewed to ensure that the names given to the themes were a clear reflection of the coded extracts. Finally, in reporting results, the identified themes were supported with examples extracted from interviewer notes. A sample of the data was peer-reviewed to ensure accuracy in themes identification and counts.

²⁷ (*ibid.*), p. 82

Appendix 2: EI ASD Project Survey

Note: Administered via Survey Monkey on 29 April 2011

The Ministry of Education has contracted Cognition Education to determine the impact of the EI ASD project and the SCERTS framework on the specialist staff who have been involved.

As you participated in this project between 2006 and its conclusion in 2010, your response to the six questions of this survey is vital. Your response will contribute to the selection of four sites that will participate in in-depth interviews, which will examine the factors that have led to quality outcomes and those that have contributed to positive and negative results as a result of participation.

Your individual response is confidential and you cannot be identified. The only descriptive information that we ask from you is in Q.6 where you identify from a list the location of the team that you were in. The survey will take approximately 2 minutes to complete online. In order for your response to be included in the analysis we need to receive your response by 6 May 2011.

The following questions concern the EI ASD Project activities, such as team discussions, professional development and learning, and implementation of the SCERTS framework.

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The EI ASD Project activities provided the necessary knowledge to successfully support the needs of children with ASD and their families	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The EI ASD Project activities helped build skills in implementing the SCERTS framework to successfully support the needs of children with ASD and their families.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. The EI ASD Project activities provided the **confidence** and **shift in attitudes** necessary to deliver quality ASD-related services.

4. The EI ASD Project activities have positively impacted on **values** concerning the principles and practices recommended by the New Zealand ASD Guideline (family centred practice, assessment and intervention in the natural setting, strong team approach, inclusive practice & culturally responsive services)

5. The EI ASD Project activities have led to **continued** successful **application** of the SCERTS framework (or a modified version of it) within New Zealand.

6. Which team do you belong to?

- Waikato (Hamilton)
- Te Haunui (Palmerston North)
- Taranaki (New Plymouth)
- Auckland
- Dunedin
- Greymouth
- Tai Tokerau (Whangarei)
- Christchurch
- Northwest (Auckland)
- Invercargill
- Greater Wellington
- Hawkes Bay

Appendix 3: INTERVIEW / Focus Group Discussion Guide

OPENING QUESTIONS

PARTICIPANTS' DESIGNATED ROLES & LENGTH OF INVOLVEMENT

1. **How long have you been involved** with the project? There were **two phases** to the project; some of you are likely to have been involved longer than others.
 (① - Phase one only ② - Phase two only ①+② - Both phases)

INTERVIEW / FOCUS GROUP DISCUSSION QUESTION

IMPACT ON KNOWLEDGE

Knowledge: (1) "...familiarity gained by experience or learning"; (2) "specific information about a subject"

1. Do you think involvement in this project has developed your knowledge base?

YES -- In what ways?

NO --why not?

How **substantial** was this change? [small, moderate, extensive]

Give an **example of new knowledge**. In what ways was this **useful**?

2. What **aspects / features** of the project **contributed to your knowledge**?

Which specific aspect was **most effective** in contributing to your knowledge? **Why**?

- (1) Seminars (Phase 1) by Barry Prizant
- (2) Follow-up inputs from Barry Prizant
- (3) Masters level interactive workshops (Phase 2) by Barry Prizant.
- (4) Resources (SCERTS manual and DVDs, SCERTS related journal articles, book chapters, and web-site)
- (5) Team approach to problem-solving
- (6) Established 'learning community' – sharing of knowledge and skills and exchange of support.
- (7) Established communication channels
- (8) Follow up support from national ASD team
- (9) Writing progress reports - reflecting & discussing the work

- (10) Collecting data on the child's progress
 (11) Email discussion group (listserve)
 (12) Newsletter, LinkUp
 (13) Professional development, National Days
 (14) Other aspects / activities
3. Do you think that this change in knowledge can be attributed to anything other than the project?
YES -- What other factors?
NO
Not Sure
4. Are there any **aspects of the project that could have been improved** (to enable better knowledge development)?
5. Describe any **unexpected outcomes**?
 Positive outcomes
 Negative outcomes
Not sure

IMPACT ON SKILLS

Skill: (1) "Ability acquired by training"; (2) "Trade or technique, requiring special training or manual proficiency"

6. Do you think involvement in this project developed your skills?
YES -- In what ways?
NO --why not?
 How **substantial** was this change? [small, moderate, extensive]
 Give an **example of skill development**. In what ways was this **useful**?

7. What **aspects / features** of the project **contributed to your skills**?

Which specific aspect was **most effective** in contributing to your skill? **Why**?

- (1) Seminars (Phase 1) by Barry Prizant
 (2) Follow-up inputs from Barry Prizant
 (3) Masters level interactive workshops (Phase 2) by Barry Prizant.
 (4) Resources (SCERTS manual and DVDs, SCERTS related journal articles, book chapters, and web-site)
 (5) Team approach to problem-solving

- (6) Established 'learning community' – sharing of knowledge and skills and exchange of support.
- (7) Established communication channels
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- (10) Collecting data on the child's progress
- (11) Email discussion group (listserve)
- (12) Newsletter, LinkUp
- (13) Professional development, National Days
- (14) Other aspects / activities

8. Do you think that this change in skills can be attributed to anything other than the project?

YES -- What other factors?

NO

Not Sure

9. Are there **any aspects of the project that could have been improved** (to enable better skill development)?

10. Describe any **unexpected outcomes**?

Positive outcomes

Negative outcomes

Not sure

KNOWLEDGE & SKILLS APPLICATION

11. Have you **applied the knowledge and skills gained** from the project in ASD-related practice?

YES -- Give an example (examples) of how you applied knowledge & skills?

NO -- why not?

Are you still applying the SCERTS framework?

YES -- Do you plan to continue applying the framework?

NO -- Why not? If the opportunity arose would you continue applying the framework?

IMPACT ON VALUES

Value: "The moral principles or accepted standards of a person or group" (Collins Concise Dictionary)

12. Do you think involvement in this project affected your values in any way?

YES -- In what ways?

NO --why not?

How **substantial** was this change? [small, moderate, extensive]

What values were affected?

Can you provide an **example**? Describe how a change in value **usefully affected** your practice.

13. Do you think that this change in values can be attributed to anything other than the project?

YES -- What other factors?

NO

Not Sure

14. Were there any **changes in your values that surprised you**?

Positive outcomes

Negative outcomes

Not sure

IMPACT ON ATTITUDES

Attitude: “the way a person views something or tends to behave towards it” (Collins Concise Dictionary)

15. Do you think involvement in the project caused a shift in how you think and act (attitudes) around ASD-related services?

YES -- In what ways?

NO --why not?

How **substantial** was this change? [small, moderate, extensive]

What attitudes were affected?

In what ways was this **useful**? Give an **example** of how the change in attitude affected your practice?

16. Do you think that this change in attitudes can be attributed to anything other than the project?

YES -- What other factors?

NO

Not Sure

17. Describe any unexpected outcomes?

Positive outcomes

Negative outcomes

Not sure

ASSESSMENT OF INPUTS & ACTIVITIES

18. How would you **describe the quality** of the **content / design & delivery of the project** in terms of the following factors:

(1) Meeting your needs as participants

Clarification: knowledge & information needs

(2) Level appropriateness

Clarification: comprehensibility, absorbability

(3) Consistency with current evidence

Clarification: existing evidence on ASD-related and early intervention practices

(4) Consistency with NZ ASD Guideline

*Clarification: person-centred, family-centred, responsive to Māori, culturally & contextually
Appropriate*

(5) Innovativeness

(6) Consistency with Adult Learning Principles

- (1) Flexibility
- (2) Inclusive / engaging (involving others)
- (3) Take account of individual team members strengths / skills style
- (4) Effective feedback
- (5) Maintain motivation
- (6) Making time for reflection
- (7) Working with complexity
- (8) Ability to manage time (being aware of time constraints / time needed)
- (9) Take account of family priorities
- (10) Family needs
- (11) Family readiness to learn

- (12) Family coping style / culture
- (13) Empowerment
- (14) Realistic expectations / negotiate goals
- (15) User-friendly teaching

(16)

(7) Implementation fidelity with framework design

Clarification: Remaining true to the SCERTS framework design

(8) Contextual appropriateness

Clarification: Intervention in the natural environment; NZ children; Within early intervention practices

