Improving Quality, Enhancing Inclusion

Partnerships for Inclusion ~ Nova Scotia ~

EXECUTIVE SUMMARY

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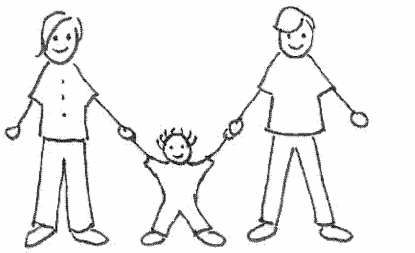

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EXECUTIVE SUMMARY

Partnerships for Inclusion – Nova Scotia

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INTRODUCTION

The international Organization for Economic Cooperation and Development (OECD) in its recent publication, *Starting Strong II*, has documented the important work being done in many countries to develop systems of well-supported early childhood education and care programs.[1] Such programs are seen as both an essential support to parental employment and as a critically important way to promote children's health, early development, and preparation for success in adulthood. Key to the success evident in a number of countries is substantial policy work to develop quality standards for practice (often in cooperation with early childhood professionals), along with accompanying investments in training and infrastructure supports.

In Canada, policy development at the national level has been uneven. Yet, even though recent bilateral funding agreements between the Government of Canada and the provincial governments have been cancelled, continuing and increased levels of funding are being expended under the terms of the 2000 *Early Childhood Development Initiative* and the 2003 *Multilateral Framework on Early Childhood*. Each provincial and territorial government is working to develop and implement plans to improve access to high quality early learning and care programs and to address some of the long-standing issues (funding models, the need for increased qualifications, and serious recruitment and retention challenges) that have plagued the child care field.

The Nova Scotia government has been engaged in these areas and, in particular, has expanded initiatives that support inclusiveness, such as special needs programming and supports. Notable in its commitment to child care services inclusive of children with special needs, *Nova Scotia's Early Learning and Child Care Plan* (May 2006)[2] commits the province to increase spaces for children with special needs from about four per cent to eight per cent — an increase of approximately 530 children. As a consequence, there is considerable interest in learning about initiatives such as *Partnerships for Inclusion - Nova Scotia* (*PFI-NS)* that can provide evidence-based examples of ways to improve program quality and enhance inclusion capacity and inclusion effectiveness that could be expanded or adapted in other jurisdictions. Indeed, as this report is being written, "sister" initiatives are under way in New Brunswick, Prince Edward Island and in Newfoundland and Labrador. Other jurisdictions have undertaken somewhat different approaches to quality assurance and enhancement (e.g., accreditation in Alberta and the U.S., a pilot project sponsored by Community Living Manitoba, and peer-administered approaches such as "Raising the Bar" in Southwestern Ontario). In each case, there is much that can be learned and shared to inform researchers, practitioners, and policy makers and to ensure that optimal investments are made to improve and sustain inclusive, quality care.

This evaluation report describes the first four years of an innovative approach that combines assessment, on-site consultation, and the provision of resources and personal support to directors and lead educators (head teachers) in preschool rooms in licensed child care centres. The project was designed to achieve two goals: (1) To improve overall program quality in child care centres, with a focus on promoting change in the preschool classrooms, and (2) to enhance child care centres' inclusion capacity and inclusion quality. Evaluation procedures were used to determine both immediate and longer-term impacts of this model on the first four cohorts (98 child care centres) in Nova Scotia that volunteered to participate in the program.

The *PFI-NS* project period addressed in this evaluation report ran over the course of four years, beginning with a start-up and training phase in November/December 2002 and extending until 2006. The project coordinator, Ms. Carolyn Webber, and four inclusion facilitators (quality consultants), who were selected for their knowledge and experience, worked directly with centre staff, engaging them in collaborative action planning and providing a range of resources and support to facilitate improvements. Each director, lead educator, and inclusion facilitator was trained in how to administer a well-known measure of overall program quality (the *Early Childhood Environment Rating Scale-Revised* (*ECERS-R*)[3] and inclusion facilitators were trained to administer two additional measures (*The SpeciaLink Child Care Inclusion Principles Scale* and *The SpeciaLink Child Care Inclusion Practices Scale*).[4] These measures were used to assess progress towards greater inclusion capacity (in centres not yet including children with special needs) and progress toward higher inclusion quality for children with special needs (in centres already including children with special needs).

Each inclusion facilitator worked with the director and a lead preschool educator in five centres to develop collaborative action plans to improve quality following the initial assessments, and provided consultation, workshops, resources, and direct personal support to enable positive change — usually on a weekly basis for about six months. A second set of assessments was made at the end of the active consultation phase and a complete report was provided to the director and lead educator to help them see where improvements had been made. The report to the centre and the second set of scores were used to develop a second collaborative action plan to promote continued improvement through a sustainability period of 4-5 months.

In addition to quantitative data collected at baseline, the end of the consultation phase, and 4-5 months later, semi-structured interviews were conducted with directors and lead educators at the end of the sustainability period to capture their thoughts about the project and its impacts on staff, on programming, and on the children attending the centres. These interviews and the extensive case notes provided by the facilitators and project coordinator provided rich information about the changes, what facilitated change and what acted as impediments or barriers. While no control group data were available, this multi-method approach provides rich information about the project and its impacts based on a variety of data sources.

This evaluation report provides ample evidence that the *PFI-NS* approach to on-site assessment, consultation and support results in strong and robust improvements in program quality in preschool classrooms in child care programs. Statistically significant

improvements in inclusion quality (the adoption and implementation of inclusion principles and effective inclusion practices) were observed in centres that already were including children with special needs. More modest improvements in inclusion capacity were evident in centres that did not enrol children with special needs at any time during the project.

A BRIEF DESCRIPTION OF THE CENTRES AT BASELINE

The 98 centres that participated in the first four cycles of *PFI-NS* were drawn from five regions of the province: the Halifax/South Shore region, Dartmouth/Valley, Antigonish, Truro/Northern region, Cape Breton and Yarmouth/Western. While not a statistically representative sample of centres in the province, the centres that volunteered to participate are a fairly diverse group in a number of ways. The majority of centres (66%) are non-profit, community-based programs, including some that operate as individual, stand-alone programs and others that are affiliated with another organization or service (a college or university, a military base, a community centre). The vast majority of centres (80%) offered both full-day and part-day programs. Seven of the 98 centres offered only full-day care; 13 offered only part-day or part-time programs. Two of the part-time programs in Cohort 4 offered a part-day nursery school in the morning and after school care in the afternoons. Three programs in the total sample offered child care and early education at more than one site. Some centres were purpose-built as child care centres, but a number of others were in converted homes or were located in other buildings, many of which are not wheelchair accessible, especially if the centre is on more than one level.

The number of children that centres were licensed for ranged from as few as 12 to as many as 153. 59% of the centres in this sample were licensed for fewer than 50 children, including twenty (20%) that were licensed for fewer than 25 children. By contrast, five centres (4%) were quite large, licensed to accommodate more than 100 children.

The programs in these four cohorts of centres offered care to children of many ages. Infants from as young as 3 months of age to school-aged children up to and including 12-year-olds were included. The majority of programs (64%) provided care to children under two years old. Slightly fewer than half (48%) of the centres offered care only to children 5 years of age or younger, while the remaining 52% accommodated school-aged children as well.

Program Quality at Baseline

Two measures of program quality (in actuality, quality within the particular preschool room that was the focus of the project) were used — the *Early Childhood Environment Rating Scale-Revised (ECERS-R)* and the *Caregiver Interaction Scale* (*CIS*).[5] At Baseline, prior to the active consultation phase, the 98 centres averaged 4.58 on the full *ECERS-R* scale. A score of 4.58 would be interpreted as indicative of a mediocre level of quality by Harms, Clifford & Cryer, the developers of this assessment procedure, and is not atypical in North American samples. Individual centre scores ranged from a low of 2.4 to a high of 6.50 out of a maximum of 7. While only three of the centres scored in the inadequate range (less than 3.0), most centres (63 or 63%) had scores in the minimal to mediocre range (3.0 - 4.9), and only 34 centres (34%) had scores indicative of good to very good overall quality at Baseline. Average scores on the seven *ECERS-R* subscales at Baseline indicated that the educators in these centres were generally very positive and

responsive to children and encouraged positive peer interactions. The average score on the *Interaction* subscale was 5.94, and this high score was confirmed by scores obtained on the *CIS* in Cohort 1, which yielded generally high scores on the index of teacher Sensitivity and low scores on indices of observed Harshness and Detachment. Average scores on the *ECERS-R* subscales averaged between 3.72 and 5.1, reflecting mediocre levels of quality, except for *Program Structure* (5.1), which barely achieved the level of "good." Average scores were lowest on the *Activities* subscale (3.7), indicating a need to enhance curriculum activities. *The Caregiver Interaction Scale* was not used after Cohort 1 because the Interaction Subscale of the *ECERS-R* addressed similar issues.

Inclusion Capacity and Inclusion Quality at Baseline

Approximately two thirds (66) of the centres in this sample had at least one child with identified special needs enrolled at baseline. It is important to note that almost a quarter of the centre directors also indicated that there were one or more other children in the centre who had not yet been assessed whom they thought had special needs. In addition, 38 of the 57 directors who were asked reported that there were other children in their centre who, while not identified as having special needs, required additional supports or a modified curriculum (i.e., children "at risk" due to familial circumstances and children who do not speak English as a first language). In most centres, only one or two children with identified special needs were enrolled, however 26 programs reportedly had 4 or more children with special needs attending. In total, 220 children with identified special needs were participating in 66 programs at baseline.

The children with special needs who were attending these programs had a range of conditions — the most common of which were autism and related spectrum disorders, speech and language problems, global delay and cerebral palsy. Of those children for whom information was available, 38% were described as having a mild disability, 38% were described as having a moderate disability, and 24% were described as having a severe disability. The nature and extent of support provided to centres by specialists and intervention agencies varied depending on the children's and staff's needs and the availability of support in the geographic area. Each centre's history of including children with special needs, resources available to the centres to support inclusion, staff attitudes and beliefs toward inclusion, and directors' and educators' reflections of their centres' inclusion capacity were also probed for this evaluation.

There were significant differences across cohorts in the proportion of centres that included children with special needs at Baseline, and the number of children with special needs that were participating. Considerably fewer centres in Cohorts 3 and 4 had any children with special needs enrolled, and when they did, generally enrolled only 1 or 2 children, supporting the *PFI-NS* facilitators' comments that they were experiencing more difficulty finding centres with children with special needs in later cohorts. Differences in the number of children with special needs enrolled reflect a combination of differences in inclusion history and centre resources, whether parents and community professionals perceive a particular centre as a desirable and positive program for a child with special needs, and centre size. As the province doubles its support for inclusive child care, it is anticipated that the number of centres enrolling children with special needs, as well as

inclusion quality, will need to increase - a persuasive argument for inclusion training and consultation to staff in child care centres.

Three measures were used to assess inclusion quality. The first, *ECERS-R Item 37* is a specific item that assesses provisions for children with disabilities. It was obtained only if a child with special needs was enrolled and present in the target classroom at the Baseline assessment. The average scores obtained for the classrooms that included a child with special needs at Baseline on this *ECERS-R* item ranged from 4.9 to 6.1 out of 7. Seven of the 44 classrooms (15.9%) had an item score of 1 or 2, indicating inadequate provisions for children with disabilities. Of the remaining 37 classrooms, 2 received a score of 4, indicating mediocre provisions; while 35 classrooms (80%) had scores of 5, 6, or 7, indicating good or very good provisions for children with special needs. This finding is noteworthy, as it suggests that many of the centres that were including children with special needs at Baseline were already attentive to program planning, program modifications, and engaging in activities and interactions to support these children. Centres that had many years of experience with children with special needs and staff with specialized training and ongoing support from external professionals and agencies were most likely to be rated 6 or 7.

Two additional measures consisted of *The SpeciaLink Child Care Inclusion Practices and Principles* measures. *Form A* of both scales was used in Cohorts 1 and 2, and was replaced by *Form B* for centres in Cohorts 3 and 4. The *SpeciaLink Inclusion Principles Scale* is based on five questions (6 in *Form B*) posed to the centre director and is designed to assess the extent to which a centre has adopted principles to guide decisions about enrolling children with disabilities and to ensure that their needs are met, as far as possible, within the regular setting. *The SpeciaLink Child Care Inclusion Practices Scale* is based on observations initially and then on questions posed to the centre director. It is designed to assess 11 specific practices related to inclusion and was used to assess inclusion quality at Baseline and again at Time 2 and Time 3. Each item in *Form A* is scored on a scale of 1 to 5 with 1 indicating that only beginning efforts have been made to ensure inclusion quality, while 5 indicates an ideal setting with respect to that specific practice. Score values reflect the director's replies, tempered by the inclusion facilitator's own opinion if she observed instances when practice appeared to diverge from the principles espoused by directors.

Form B of both the *Specialink Inclusion Principles* and *Practices Scales* was developed by Sharon Hope Irwin in 2005 to provide more rigorous methods of scoring, capitalizing on early childhood educators' increasing familiarity with the use of indicators to score items in the *ECERS-R*. Each item is scored from 1 to 7, with very specific indicators used for scoring purposes.

PFI-NS facilitators were trained in the use and scoring of the new *Specialink Inclusion Principles* and *Practices Scales* prior to their adoption in Cohort 3 and later cohorts. Scoring of individual items on both new scales often is not based on easily observable indicators, but requires respectful questioning of the director and staff (and sometimes a parent as well) and document review. In Cohorts 3 and 4, scores were provided based on the director's and staff's report of what principles guided current practice or what would normally occur when no children with special needs were enrolled at that time.

Form B of both *SpeciaLink Inclusion Scales* are available at www.specialinkcanada.org and are being used in a number of projects across Canada.

Summary of Baseline Inclusion Quality Data

Scores are presented separately for Cohorts 1 and 2 and for Cohorts 3 and 4, since different versions of the *SpeciaLink Inclusion Scales* were used, *Form A* having a maximum score of 5 and *Form B*, based on observation of specific indicators, having a maximum score value of 7. For Cohorts 3 and 4, there is a subdivision between centres that did and did not include children with children with special needs, to more accurately reflect their status and the amount of change that occurred during the project, for each group.

At Baseline, scores on the *Inclusion Principles* measure for Cohorts 1 and 2 averaged 3.6 out of 5, while scores on the *Specialink Inclusion Practices Scale* averaged 3.4 out of 5. For centres in Cohorts 3 and 4, centres that did not include children with special needs had an average *Principles* score of 2.6 out of 7 at Baseline, and an average *Practices* score of 1.9 out of 7. Centres that did include children with special needs in Cohorts 3 and 4 had average *Principles* scores of 3.2 at Baseline and an average of 2.8 out of 7 on the *Inclusion Practices Scale*.

Another way to summarize the status of the participating centres' inclusion quality at Baseline is to consider how they scored on all three measures of inclusion quality simultaneously. In our previous research (*Inclusion: the Next Generation*, Irwin, Lero & Brophy, 2004), we developed an Inclusion Quality Index that effectively differentiated centres that demonstrated high, moderate and low levels of inclusion quality. Among those centres in Cohorts 1 and 2 for which all three scores were available (n=25), only two would qualify as evidencing high inclusion quality using this method, one would be classified as demonstrating low inclusion quality, and the majority would be in the moderate range. For Cohorts 3 and 4, the psychometric properties of Form B were not yet established in a way that would justify specific cut-off points for a similar analysis. However, if we employ the same criterion for *ECERS-R Item 37* and use 4.0 as the criterion for high inclusion quality on both the *Principles* and *Practices* measures, only one of the 19 centres in Cohorts 3 and 4 for which all three measures were available would be considered to demonstrate high inclusion quality. This is not surprising, given that 30% of the centres in Cohorts 3 and 4 did not include children with special needs, as compared to no such centres in Cohort 1 and 19% in Cohort 2. High scores on any measure of Inclusion Quality require, at a minimum, that children with special needs are enrolled and that the program and staff are involved in ensuring that the program and interactions with other children enhance children's development and offer a positive arena for social interactions and skill development.

When all the data available in this section are considered, one can conclude that most centres at Baseline could improve in their capacities to include children with special needs effectively. The generally positive attitudes of the directors and staff provide a good starting point, but many centres had very limited experience with inclusion on a regular basis, suggesting that they lacked the opportunity to benefit from ongoing experience and effective partnerships with agencies and therapists in the community.

Most centres have no written statement on inclusion and had not yet had an opportunity to develop principles to guide their efforts. Our past research demonstrates that effective inclusion requires a mix of resources within the centre and supports provided to the centre. Of course, one always wants to ensure that the programs children are included in are of high overall quality. That is exactly why the *Partnerships for Inclusion – NS* approach focuses on improving both overall program quality and inclusion capacities.

IMPACTS OF *PFI-NS* INTERVENTIONS

Program Quality as Assessed by the *ECERS-R*

The data clearly show strong, positive effects of the *PFI-NS* interventions on program quality that were evident at the end of the consultation phase and that were maintained or increased over the 4-5 month sustainability period. The average *ECERS-R* score increased from 4.58 at Baseline to 5.35 at Time 2 and 5.52 at Time 3. At Baseline, twenty centres out of 98 (20.4%) had overall *ECERS-R* scores in the minimal or inadequate range (below 4.0); including three with an average score below 3.0; only one third of the centres (33.6%) had scores of 5.0 or above, indicating good quality care that contributes to children's development. In contrast, at Time 2, 70 of the 98 centres (71.4%) had overall *ECERS-R* scores above 5.0, including 20 centres that exhibited very good to excellent quality with scores above 6.0. Very few centres (five at Time 2 and four at Time 3) scored below 4.0 and none of the centres scored below 3.0 at Time 2 or Time 3.

Statistical comparisons of differences between Baseline and Time 2 on the *ECERS-R* average scores and subscale scores were all highly significant at the .001 level. Scores on the *Activities* and *Space and Furnishings* subscales showed the greatest average improvement (+1.0 and +.94, respectively).

In addition to tests of statistical significance, 44 of the 98 participating *PFI-NS* classrooms (45%) demonstrated an "observable change" in program quality between Baseline and Time 2, the end of the active intervention period. An observable change is defined in the literature as a change from one quality category to another (i.e., a change from inadequate to adequate care or adequate to good quality care *or* an increase of 1.0 or more on the *ECERS-R* in centres that were already evidencing good quality care). (Forty of the 44 classrooms changed quality categories, while four made observable improvements within the good quality range).

At the end of the Sustainability period, the average overall score on the *ECERS-R* was 5.52, which was statistically significantly higher than the average score of 5.35 at Time 2, indicating that many centres were able to maintain the gains they had made during the active consultation phase and progress further on their own. At Time 3, *ECERS-R* scores ranged from 3.02 to 6.64. Only four centres had scores below 4.0 and the proportion of classrooms with scores above 5.0, indicating good to very good quality, increased from 71% at Time 2 to 82% at Time 3. The fact that almost all centres showed and maintained some improvement is important, as it indicates that the *PFI-NS* model has positive effects across the range of centres, including those that started off with scores indicating overall good

quality. Obviously, centres that had the lowest scores on the *ECERS-R* measure at Baseline had the highest potential for improvement.

Changes Made in Classroom Arrangements and Teacher Practices Related to Measured Quality; Comments on Effects on Children's Behaviour and Experiences

Directors and lead educators' responses to semi-structured interviews and the inclusion facilitators' case notes described the changes that were made in each area measured by the *ECERS-R*, changes in staff attitudes and behaviour, and corresponding changes observed in the children.

- *Space and Furnishings*: 78% of directors reported having made changes in space and furnishings as a result of PFI-NS, as did two thirds of the lead educators. The most common and visible changes resulted from rearrangement of the classroom.

- *Personal Care Routines*: 65% of the directors and 68% of lead educators commented on changes made in personal care routines. Changes in snack and meal times enabled children to become more involved in helping and there was more interaction between staff and children at meal times that made them more pleasant and facilitated conversations.

- *Language and Reasoning*: 71% of directors and almost 80% of lead educators described changes related to staff interactions with children that promoted language development through the use of open-ended questions and more extended conversations, as well as greater awareness on the part of staff about the importance of doing so. Educators also reported becoming more encouraging of children's problem solving and interactions with other children.

- *Activities*: 84% of directors and 88% of lead educators reported development and expansion of different activity centres. Improvements were most notable related to dramatic play, art, science and nature activities, and music and movement.

- *Interactions*: Fewer changes were reported related to the nature of staff-child interactions, as this was already an area of strength across the centres in this sample. Nevertheless, 28% of directors noted that staff initiated more interactions with children and observed improved peer interactions, and 50% of lead educators reported being more focused on listening to and playing with the children.

- *Program Structure*: 63% of directors and 72% of lead educators commented that, as a result of *PFI-NS*, schedules were better planned and were more flexible, allowing smoother transitions between activities.18% of lead educators spontaneously commented that their program was more inclusive of all children, including children with special needs, as a result of these and other changes.

- *Parents and Staff*: 60% of directors and 41% of lead educators reported greater support for staff, including professional development, staff breaks, and more effective and consistent evaluation procedures. Fully half of directors and one third of lead educators reported improvements in communication with parents, and, in some cases, increased parental involvement, as well as parents commenting on the positive changes that were being made in the centre.

Creating Reflective Practitioners: Impacts of *PFI-NS* on Staff

Throughout the follow-up interviews, directors repeatedly mentioned having observed positive changes in staff awareness and attitudes as a result of their participation in *PFI-NS.* They noted that educators were more positive, more actively involved in their work, and more aware of how to deliver quality care to meet children's needs. Staff were said to be more enthusiastic, focused, and reflective about quality care. Thirty-four percent of directors reported staff had improved their skills and knowledge. Staff were also described as having become more confident and involved in their work. In current human resource management terms, these descriptors apply to the phenomenon of employee engagement. Engagement is believed to be critical not only to employees' performance, but also to job satisfaction and reduced turnover.

About a quarter of the directors discussed improvements to management-related issues in their interview. They reported that they and their staff had become more effective in working together as a team and that more attention was being given to professional development. Staff meetings were described as more productive and valuable. As well, some mentioned that they, as directors, were better equipped to organize and evaluate staff.

Lead educators also reported that *PFI-NS* had a positive impact on themselves individually and on other classroom staff. More than half reported an improvement in staff attitudes, awareness and approach. They noted that they and other educators in their classrooms were more confident and comfortable in their abilities to meet the needs of children and parents. Some said that they had become more enthusiastic about their work and more attentive to the children. About one in five lead educators who responded also reported that there was an improvement in working together as a team. Other positive effects on staff included an increase in knowledge and skills, and the feeling that they were doing a better job providing quality care.

Importantly, changes in staff attitudes and behaviour were seen to have a positive impact on children's experiences. Some educators saw themselves as listening to and interacting more with the children. As well, many believed that they were better able to respond to children's needs.

They said:

> *"The project has definitely helped the children. We are always listening to them, watching them. We talk about what we can do now, how can we extend this. … I feel the children are more empowered and have better self-esteem."*

Changes to Inclusion Quality and Inclusion Capacity

Improvements in program quality and more child-centred practices can enable children with special needs to participate in child care programs more easily. However, other changes and

additional resources are required to ensure that children with special needs will benefit fully and that staff are supported in their efforts.

To better interpret the quantitative data that might suggest changes in inclusion effectiveness, we thought it important to undertake separate analyses that might reflect differences between centres that included at least one child with special needs and centres that did not include any children with special needs during the project.[1] Centres in the latter group might be expected to improve their capacity and willingness to include children with disabilities, but could not be expected to demonstrate observable changes in effective inclusion practices. Centres that do include children with special needs could and would be expected to evidence improvements in inclusion practices, however. In all, 21 of the 98 centres in the first four cohorts did not include any identified children with special needs during the time they were participating in *PFI-NS* (i.e., in the period between Baseline and Time 3 assessments). The number and percentage of centres that did not include any children with special needs during the project was 4 centres in Cohort 2, 6 centres in Cohort 3, and 11 centres in Cohort 4 (19% in each of Cohort 2 and 3 and 44% of centres in Cohort 4).

Changes to Scores on *ECERS-R Item 37* — Provisions for Children with Special Needs

Scores on *ECERS-R Item 37* were available for the 39 preschool rooms that included a child with special needs at both Baseline and Time 2. Four classrooms showed a decline; 20 rooms had the same score at both points, including seven that maintained their rating of 7; and 13 classrooms had higher scores at the end of the intervention period. Of the 34 classrooms that had scores at both Time 2 and Time 3, 19 classrooms maintained their score (16 of which were scores of 7 on both occasions) and 10 improved their score on this item; however, 5 classrooms had lower scores at Time 3 than at Time 2. Overall, these results suggest that most classrooms improved their practice or were able to maintain a very good level of inclusion quality, as measured by this item, over time. Those very few situations where ratings declined by more than one point signal the need to be vigilant about maintaining effective inclusion practices that are responsive to individual children, especially as children with special needs enter and leave particular classrooms with varying levels of support from government, resource consultants, and specialized professionals.

Changes Related to Inclusion Principles and Practices

Analyses of the effects of *PFI-NS* on inclusion effectiveness were carried out separately for centres in Cohorts 1 and 2 and for Cohorts 3 and 4, in part because the *SpeciaLink Inclusion Principles and Practices Scales* were redesigned and the new form and new scoring procedures were used in the latter cohorts. As well, centres in the first two cohorts generally had more experience in including children with special needs, while centres in the latter cohorts had more limited or irregular experience with inclusion. In fact, 30% of centres in Cohorts 3 and 4 did not enroll any children with special needs during the project.

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[1] Readers are referred to Chapter 3, section 3.2.3 for a discussion of some of the challenges involved in measuring inclusion capacity and inclusion quality.

Analyses of data from centres in Cohorts 1 and 2 indicated little evidence of change in overall scores or on individual items on the *Inclusion Principles* scale over the course of the project. Approximately half of this group had average scores at Baseline of 4.0 or higher (out of a maximum of 5.0), suggesting that their experience and ongoing commitment to inclusion was already fairly advanced. Improvements in *Inclusion Practices* became evident in most centres that included children with special needs during the Sustainability period. Average *Inclusion Practices Scale* scores for this group increased from an average score of 3.45 at Baseline to 3.71 at Time 3 and the proportion of centres with scores of 4.0 or higher increased from 31% to 50%. Statistically significant improvements were observed in Practices related to the *Use of Therapies, Effective Use of Individual Program Plans,* and *Involvement and Support of Parents*. There were also marginally significant improvements in overall *Inclusion Practices Scale* scores and in the item pertaining to *Staff Training Related to Inclusion.* These findings and the directors' and educators' reports of changed interaction patterns and involvement with children with special needs confirmed that *PFI-NS* made a significant contribution to improved inclusion quality in these centres.

Centres in Cohorts 3 and 4 that included children with special needs evidenced significant improvements in inclusion quality as evidenced by improvements on both the *SpeciaLink Inclusion Principles* and *Practices Scales*. Statistically significant improvements occurred on the overall *Inclusion Principles Scale* and on one of the six individual items comprising it, the principle of *Full Participation.* When Baseline and Time 3 scores were compared, these centres evidenced statistically significant improvements in average *Inclusion Practices* scores and on three practice items: *Equipment and Materials*; the *Director's Support for Inclusion,* and effective use of *Individual Program Plans,* as well as marginally significant improvements on four other practice items. Directors and lead educators described some of the major ways they changed practices, commenting on the fact that staff had gained increased knowledge, skills and confidence in working with children with special needs. In many centres, one of the most obvious changes was noted in the fact that all staff interacted with children with special needs, rather than relying on only one teacher or resource assistant. Centres that gained additional resources during the project or improved their relationships with community professionals also commented on the importance of those changes to support their efforts.

Analyses of centres that did not include children with special needs, particularly those in Cohorts 3 and 4, revealed different effects. As expected, centres that did not enroll any children with special needs (many of whom had only occasional prior experience with inclusion) had significantly lower scores on both the *SpeciaLink Inclusion Principles and Practices Scales* at Baseline. These centres evidenced limited improvement on the *Principles* measure over the course of the project and could demonstrate only limited improvement in inclusion practices. Interview data suggested that some directors and staff in these centres felt better prepared to include children in the future, particularly as a result of improvements in overall quality and as a result of staff training on inclusion provided by the *PFI-NS* facilitators and, sometimes, through other initiatives (Building Blocks or Autism training). However, it is fair to conclude that many of these centres were still consolidating their efforts to improve program quality and were in the early

stage of developing greater inclusion capacity at the end of 10-12 month period during which they were evaluated.

In short, centres that were already including children with special needs evidenced continuing improvements in inclusion quality. Centres that were just beginning to build inclusion capacity were at various points on that path at the end of the Sustainability period. In some centres visible improvements in inclusion capacity had started to emerge once the major changes in the physical environment and in the curriculum were under way or completed.

While the three tools used to measure inclusion quality did not provide a full picture of changes in inclusion capacity in centres that did not include a child with special needs, inclusion facilitators' case notes and reports, and the extensive exit interviews of directors and lead ECEs provided examples of a number of centres and classrooms that made specific changes that enhanced their inclusion capacity. Improvements in inclusion capacity were evident in the ways that improvements in program quality and the educators' approach to working with the children more effectively would allow children with diverse abilities and needs to participate in the program. For example, while creating a quiet area benefits all children, it is particularly helpful for children with autism or ADHD who often need a place to withdraw from the stimulation of a typical early childhood classroom. Similarly, adding picture labels, changes in program scheduling that lead to increased flexibility, the use of a curriculum approach that is more child-centred and child-initiated, and the provision and use of equipment that supports varying levels of development all enable centres and classrooms to more easily accommodate children with special needs who can participate at their own level of ability. Increased inclusion capacity was also evident in the fact that 71% of directors and two thirds of lead educators reported that they and their centre had become more accepting of including children with a broader range of special needs and that *PFI-NS* had increased staff's awareness and knowledge of inclusion principles.

> *We just got a child with special needs two months ago…[The classroom is] relaxed, comfortable, he's really included. He even does his speech therapy with the whole class." [Lead Educator]*

> *As this is a relatively new centre, they did not and still don't have a history of inclusion. The original director wanted to rectify this and become another resource to families of children with special needs within this community…At the end of the project the centre was getting ready to receive their 'first' child with special needs who would have supported child care funding. This child has autism — moderate to severe. They told me after completing the project and with the support the new director was giving them that they feel they can handle this child with more confidence." [PFI-NS facilitator]*

At the same time, it is fair to note that directors, lead educators and inclusion facilitators noted other changes in policies, funding and access to additional training and resources that are required to ensure that centres have the resources they need to effectively include more children with special needs. In summary, it would appear that *PFI-NS'* impact on both inclusion quality and inclusion capacity could be strengthened by more focused efforts and planning with centre directors and staff, but that structural modifications to ensure accessibility, additional staff training and on-going support, including extra staffing and

additional funding provided in a timely manner, are other important aspects that require attention.

Wider Impacts: Diffusion Effects to Other Classrooms, Parental Involvement, and Other Positive Effects

One of the major additional positive effects of *PFI-NS*, mentioned by 84% of directors and lead educators, was a positive diffusion of intervention effects into other centre classrooms. Staff in other centre classrooms became interested in the changes that were occurring and often expressed interest and enthusiasm in understanding how to better meet children's needs in their rooms. Positive centre-wide effects occurred, as a result of shared information, materials and encouragement, but also as a result of the *PFI-NS* inclusion facilitators being willing to provide professional development workshops to all staff (and in some cases to parents, as well), and sharing materials with other staff.

A second wider impact that was noted was improved relationships with parents and increased parental satisfaction. Thirty percent of lead educators specifically commented that the project had resulted in more positive and frequent communication with parents and that parents were more involved and satisfied.

A third wider impact of the project described by directors, educators, and inclusion facilitators is related to enhanced community involvement and networking among ECEs both within and across centres. In several cases, *PFI-NS* inclusion facilitators arranged for staff to visit other centres or provided professional development workshops that were open to staff from several centres in the same region. In addition, the project sometimes forged stronger connections with other community professionals, particularly in support of more effective efforts to include children with special needs. These experiences provided for both formal and informal networking and information sharing, and, in some cases, led to a stronger sense of professionalism and community building among centres and their staff.

Finally, it should be noted that professional development opportunities, such as inclusion-related workshops, originally designed for participants in the current *PFI-NS* Cohort, are now offered to all previous *PFI-NS* participants, to potential *PFI-NS* participants, and often to the ECE community at large. These workshops serve as an ongoing PD opportunity for ECEs and enable them to maintain a sense of belonging to an inclusion initiative.

ENABLERS AND FRUSTRATORS OF POSITIVE CHANGES

The factors that enabled and limited positive changes in program quality, inclusion quality and inclusion capacity reflected both sides of the same underlying aspects within centres. Enablers included:

- The capabilities, sensitivity and resourcefulness demonstrated by *PFI-NS* inclusion facilitators in gaining trust and providing the kinds of support that enabled directors and

child care staff to commit to the project. Their professionalism and friendship was critical to the success of *PFI-NS* and enabled staff to feel supported and valued. Their skills and knowledge were also essential.

- Directors who provided leadership and demonstrated their support for making positive changes and following through by doing their part to address issues important to staff;
- Early childhood educators' active involvement in the process and receptiveness to change;
- Early childhood educators' increased knowledge, skills and understanding of what is important and valuable and how they can better apply that knowledge to curriculum development, activity planning, and ways of interacting with all children to enhance their learning and development; and
- In some cases, access to funding and additional resources were critical enablers and demonstrated that centres' efforts to include children with special needs would be supported by government and community professionals.

Significant barriers or challenges included:

- High rates of staff turnover and instability. In a number of cases this was a significant impediment to making positive changes and maintaining momentum. Over the long run, the recruitment and retention of skilled, committed early childhood educators who are appropriately compensated for their efforts is a critical systemic factor that must be addressed to ensure program quality and inclusion capacity.
- Inadequate funding to make major physical changes to centres, including those that would improve access and facilitate the full participation of children with a variety of special needs;
- Initial resistance on the part of some staff to making changes in long-established routines and practices;
- Disagreement among staff and lack of effective team work in a few centres;
- Lack of recognition or compensation for the additional time that was required on the part of early childhood educators to fully participate in the project; lack of resources to centres to provide paid planning time or professional development opportunities; and
- Continuing or new uncertainties about the availability and adequacy of extra support funding to support centre's efforts to include children with special needs.

Despite these barriers, there were many positive impacts noted among the 98 centres that participated in *Partnerships for Inclusion – Nova Scotia.*

LESSONS LEARNED ABOUT THE EFFECTS OF *PFI-NS* ON PROGRAM QUALITY

1. There is clear evidence of the project's success in effecting improvements in program quality, and in engaging staff in a process of renewal.

   Improvements included those measured by the *Early Childhood Environment Rating Scale-Revised* (*ECERS-R*) and other changes in child care environments, teacher-child interactions, and staff attitudes and behaviour described by directors, lead educators and inclusion facilitators in interviews and case notes. By the end of the consultation period, 82% of centre classrooms received ratings indicative of good or very good quality, compared to only 34% of the preschool classrooms at Baseline.

2. Improvements in classroom quality were sustained over time.

   Improvements on all subscales and total *ECERS-R* scores were sustained for 4-5 months beyond the period of active consultation and, in some cases, continued. Staff involved in the project maintained their commitment and were able to act on their new knowledge and the collaborative actions plans for improving quality in which they had participated.

3. There were substantial diffusion benefits – *PFI-NS* had centre-wide impacts.

   Directors, lead educators, and inclusion facilitators reported that the benefits of the consultations tended to spread to other rooms in the centres beyond the individual preschool rooms that were the initial target of the *PFI-NS* intervention. Most directors, lead educators and facilitators felt, by the end of the project, that *PFI-NS* would be more effective if introduced on a centre-wide basis.

4. *PFI-NS* also had impacts on early childhood practitioners at the regional / local level.

   Directors, lead educators, and inclusion facilitators reported that the benefits of the consultations tended to spread to other rooms in the centres beyond the individual preschool rooms that were the initial target of the *PFI-NS* intervention. Most directors, lead educators and facilitators felt, by the end of the project, that *PFI-NS* would be more effective if introduced on a centre-wide basis.

5. Sustainable quality in child care programs requires that systemic issues be addressed – *PFI-NS* is not a panacea.

   While centres were able to improve in many areas, they still faced challenges to enhancing quality and effectively including children with special needs. Staff turnover was a particular challenge in many centres, and was the biggest impediment to making and sustaining changes over the course of the project. Other concerns are lack of funding for capital improvements and to purchase materials and equipment, and opportunities for professional development that are locally available and of high quality. Many directors and staff also identified the need to be assured that appropriate and timely access to additional funding and staff support will be available to support their efforts to include children with special needs, along with access to on-going training and support.

LESSONS LEARNED ABOUT THE EFFECTS OF *PFI-NS* ON INCLUSION CAPACITY AND INCLUSION QUALITY:

1. There is evidence of positive impacts of *PFI-NS* on:
   - Directors' and educators' attitudes towards inclusion,
   - The use of individual program plans to ensure children's continuing progress in making developmental gains, and
   - Staff comfort and confidence in being able to meet children's individual needs more effectively.
2. Improvements in centre and classroom environments and in teacher-child interactions benefit all children and enhance inclusion capacity.

3. *PFI-NS'* impact on inclusion effectiveness varied among centres that did and did not include children with special needs during the project.

   Centres in Cohorts 1 and 2, which tended to have more experience in including children with special needs, improved significantly in *Inclusion Practices* scores and in specific practices that reflect staff training, therapeutic interventions, the use of individual program plans, and support for parents of children with special needs. Centres that included children with special needs in Cohorts 3 and 4 evidenced statistically significant improvements on both the *Inclusion Principles* and *Inclusion Practices* measures. Centres that did not include children with special needs, on average, evidenced minimal improvements in the development of inclusion principles and could not demonstrate changes in practices. More limited success was evident in improving measured inclusion capacity among centres that did not include any children with special needs in the latter cohorts. While there were some specific successes, these centres appear to need more time to consolidate improvements in program quality than was possible in the 10-12 month *PFI-NS* project cycle, as well as the opportunity to learn from peers in successful inclusive programs.

4. Other issues must be addressed to ensure inclusion quality: trained support staff when children with disabilities are enrolled; environmental changes; access to specialized equipment; secure, prompt and adequate funding to support centres' efforts; additional staff training; and continuing and appropriate support from specialists are all needed.

LESSONS LEARNED: POLICY, PRACTICE AND PROGRAM ISSUES

1. *PFI-NS* is an example of the infrastructure that is needed to support program quality, inclusion quality and inclusion capacity.

2. A resource such as *PFI-NS* can be particularly important when programs are under stress or during a period of planned major expansion in the number of children with special needs in child care programs.

3. *PFI-NS* requires significant involvement on the part of centre staff. Staff involvement should be recognized and compensated. Costs may be a barrier to participation and to improvements.
4. The importance of voluntary participation and the importance of administering quality enhancement programs through mechanisms that are arms-length from government were reinforced. Programs such as *PFI-NS* provide a means to promote quality and enhance inclusion that is complementary to the work of licensing officers and other initiatives.
5. *PFI-NS* and related initiatives can be used as a component in program accreditation efforts, or can function well on their own.

LESSONS LEARNED: SUGGESTIONS FOR FURTHER RESEARCH

1. It is important to continue research on factors that affect inclusion effectiveness in child care programs, to examine effects of *PFI-NS* at full program maturity and to consider ways to build on the successes evident in this project. A further extension could include more deliberate coordination among *PFI-NS* and early interventionists and could include more deliberate attention to facilitating effective transitions to school.

2. There is a need to continue to develop effective means to assess both changes in inclusion capacity and inclusion quality.

3. More could be learned by directly assessing the impacts of improved inclusion quality on children with special needs and their parents.

CONCLUSIONS AND RECOMMENDATIONS:

The data presented in this report strongly support the finding that the *PFI-NS* on-site consultation model is an effective means to help centre directors and early childhood educators be actively engaged in processes that lead to improved program quality. These findings were robust across cohorts, large and small centres, and centres that started at both lower and higher initial levels of assessed program quality. The *PFI-NS* approach was also effective in helping centres that were already including children with special needs improve significantly in inclusion quality — in a number of inclusion practices that enhance children's experiences, contribute to their development, and provide additional support to parents of children with special needs. There were more modest gains in inclusion capacity among centres that did not include children with special needs when the project began, but there was evidence that some directors and early childhood educators were developing appropriate attitudes and modifying their environments and programs in ways that will help them be more effective with inclusion in the future.

The major impediments to success tended to be either systemic issues in the early childhood field (i.e., high rates of staff turnover and limited formal training in early childhood education in general, and inclusion in particular), difficulties in attaining prompt

assessments that could, in turn, provide *Supported Child Care* funds to hire staff to support centres' inclusion efforts, or, in some cases, lack of leadership and active support on the centre director's part to facilitate programmatic improvements and adapt a proactive approach to strengthening inclusion capacity**.**

Beyond the improvements in program quality and inclusion effectiveness observed in most centres, it is worth noting that the *PFI-NS* model had strong effects on early childhood educators' engagement in their work, promoting renewal and an active approach to making positive changes in support of higher quality provision of early childhood education and care for Nova Scotia's children. Additional benefits include the development of local peer networks and support among early childhood educators and among directors.

Given these very positive results and the lessons learned, we make the following recommendations:

1. We recommend that *Partnerships for Inclusion-Nova Scotia* be funded and established as an ongoing program to support program quality and inclusion effectiveness across the province.

PFI-NS has proven itself to be an effective, responsive, and unique way of supporting centres and their staff to improve program quality and inclusion effectiveness. It has also helped some centres take the first steps towards developing greater capacity to be inclusive in the future. Moving *PFI-NS* from a project to a program would establish it as a form of community-based infrastructure support to child care programs that is complementary to the work of licensing officers and other services and initiatives. Ongoing funding would enable access to a successful source of information and support to centres across the province. It would establish *PFI-NS* as an ongoing support to the child care community and capitalize on the knowledge and skills that have been developed by *PFI-NS* staff.

2. We recommend that the Nova Scotia government use its recently initiated review of *Supported Child Care* Funding to improve aspects that were observed to be problematic for centres and their staff, and hence, to better support the goal of enabling more children with special needs to participate in high quality, inclusive early childhood programs.

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allocations must be sufficient and allocated in a timely fashion. Transparency in the criteria for decisions must be evident so that early childhood directors and staff are more certain about the resources that will be available to them. As part of its *Supported Child Care* review, it is important to address these issues and for government to take all necessary steps to ensure that diagnostic assessments are made as early as possible. The time when children with special needs transition into early childhood programs from home or early intervention is a time when supports must be in place to benefit the children and support early childhood staff's best efforts. In addition, it is important to

consider how *SCC* funding can help maintain inclusion quality and best practices in centres that regularly include a number of children with special needs while building capacity in centres that have no or very limited experience to date.

3. We recommend that the Nova Scotia government review other critical aspects that affect a range of human resource issues in the child care field, including qualifications, innovations in education and training programs, staff turnover rates; wages and working conditions, recruitment and retention, and opportunities for advancement and further development of knowledge and skills within the early childhood field.

As described throughout this report, program quality and inclusion quality require that centre directors, early childhood educators, and resource teachers/support workers have the appropriate qualifications to prepare them for the important positions they have, and that they are compensated appropriately. A number of provinces[6] and the Child Care Human Resources Sector Council[7] have already studied these issues and are developing strategic plans and new initiatives to enhance training, support participation in diploma programs and in professional development, and recruit and attract people to this sector. Nova Scotia can benefit from some of the work that has already been done and contribute to it, in part, by sharing the Lessons Learned from this project and others.

4. We recommend that efforts be made to enhance the capacity for effective collaboration among early childhood educators, early interventionists, and professionals and specialists who work with young children with special needs and their families.

While every community is unique, it is obvious that some centres have benefited tremendously from positive, respectful relationships with early interventionists, the Progress Centre, APSEA, and individual therapists and professionals, in addition to staff from *PFI-NS*. It would be most useful to help others understand how various people and agencies with common goals can work effectively with child care programs, and beyond that, to develop guidelines for effective practice. Promoting early referrals, appropriate assessments, access to technical assistance and specialized equipment, and developing ways to support effective transitions into child care programs and from child care to school could be a focus of a designated group that is brought together to address these issues.

5. We recommend that the Nova Scotia government consider other ways to enhance the quality, inclusiveness and sustainability of early childhood programs by reviewing alternative funding models and considering initiatives being undertaken by other jurisdictions both in Canada and in other countries.

Efforts that focus on the quality of child care programs include consideration of funding models that underlie this set of services. It is evident that a number of centres face financial challenges due to fluctuating and/or reduced enrolments, especially in rural areas. Funding child care primarily as a support for parental employment with fees that are difficult for many families to afford is at odds with current thinking about early childhood education and care as an important way to enhance children's learning and development. We encourage Nova Scotia to help provide leadership in thinking about every young child's right to high quality, inclusive early education and care.

6. We recommend that the Nova Scotia government share this report and continue discussions with other provincial/territorial governments and the federal government to ensure that new initiatives to expand child care spaces are always complemented by the provision of adequate funding and other programmatic supports to ensure high quality, inclusive care provision.

End Notes

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