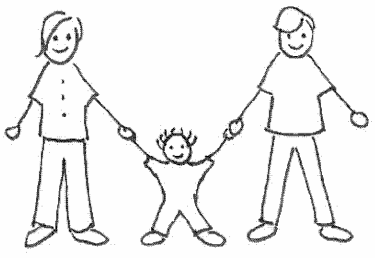
Improving Quality, Enhancing Inclusion

Partnerships for Inclusion ~ Nova Scotia ~

DONNA S. LERO, Ph.D
SHARON HOPE IRWIN, Ed.D.



Centre for Families, Work & Well-Being

SpeciaLink
THE NATIONAL CENTRE FOR CHILD CARE INCLUSION

The project was funded by the Government of Nova Scotia, Early Childhood Development Services, Department of Community and Social Services, through an allocation of resources received under the terms of the *Federal/Provincial/Territorial Early Childhood Development Agreement*. The opinions and interpretations in this publication are those of the authors and do not necessarily reflect those of the Government of Nova Scotia or the Government of Canada.

To obtain additional copies of this report, please contact:
Centre for Families, Work and Well-Being
University of Guelph
17 University Avenue, East
Guelph ON N1G 2W1
Tel: (519) 824-4120, ext. 53829
Fax: (519) 823-1388
Email: cfww@uoguelph.ca
Websites: http://www.worklifecanada.ca
http://www.specialinkcanada.org

Lero, Donna S.
Improving Quality, Enhancing Inclusion: Partnerships for Inclusion - Nova Scotia. Includes bibliographical references.

1. Child care—Nova Scotia 2. Children with disabilities—Nova Scotia I. Irwin, Sharon H. II. Title. III. Improving Quality, Enhancing Inclusion: Partnerships for Inclusion - Nova Scotia

The recommended citation for this publication is:

Lero, D.S. & Irwin, S.H. (2008). Improving Quality, Enhancing Inclusion: Partnerships for Inclusion – Nova Scotia. Guelph, ON: Centre for Families, Work and Well-Being, University of Guelph.

ACKNOWLEDGEMENTS

We would like to express our sincere thanks to the *Partnerships for Inclusion - Nova Scotia* staff: Carolyn Webber, project manager, and Elizabeth Hicks, Shannon Harrison, Elizabeth MacDonald and Margo Barrett, inclusion facilitators—for their commitment to this project and for their enthusiastic participation in the evaluation research.

Our thanks go, as well, to the 98 directors and 98 lead early childhood educators who volunteered to participate in the first four cohorts of *PFI-NS* and for so generously sharing their experiences, challenges and learnings with us.

At the governmental level, we are indebted to Virginia O'Connell, Director of Early Childhood Development Services; to Denise Stone, Coordinator of Special Needs Policy and Program Development; and to Nancy Taylor, previous Coordinator of Child Care Services for Children with Special Needs. Their commitment to this project and their support for evaluation research has been most gratifying.

At the community level, our thanks go to Isabel den Heyer and Brendan Putnam of Early Intervention Nova Scotia for their leadership for *PFI-NS*.

We appreciate the work of Tanya Darisi, Andrea Brown and Erin Allard for their contributions to data coding, entry and analysis.

Finally, we would like to thank Dr. Pat Wesley, co-initiator of *Partnerships for Inclusion - North Carolina*, the program that inspired this project, and Dixie (Van Raalte) Mitchell of the New Brunswick Association for Community Living, who "Canadianized" *Partnerships* and shared her skills and vision with us.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS iii

EXECUTIVE SUMMARY x

PREFACE: AN INTRODUCTION AND GUIDE TO READING THIS REPORT xxi

CHAPTER 1: BACKGROUND TO PARTNERSHIPS FOR INCLUSION–NOVA SCOTIA 1

1.1 A SHORT HISTORY OF INCLUSIVE CHILD CARE ACROSS CANADA 1
1.2 A SHORT HISTORY OF RESOURCE SUPPORT TO CHILD CARE CENTRES IN NOVA SCOTIA TO INCLUDE CHILDREN WITH SPECIAL NEEDS 4
1.3 TRAINING IN SPECIAL NEEDS AND INCLUSION 6
1.4 CONSULTATIVE SUPPORT AND IN-CENTRE SUPPORT STAFFING 8

CHAPTER 2: BEGINNINGS: *PARTNERSHIPS FOR INCLUSION – NOVA SCOTIA (PFI - NS)* 11

2.1 IDENTIFYING THE PROBLEM / SEEKING A SOLUTION 11
2.1.1 Looking at the Research – *Partnerships for Inclusion (North Carolina)* 11
2.1.2 Keeping the Door Open: Enhancing and Maintaining the Capacity of Centres to Include Children with Special Needs (New Brunswick, PEI, Saskatchewan) 12

2.2 GETTING STARTED: *PARTNERSHIPS FOR INCLUSION – NOVA SCOTIA (PFI-NS)* 12
2.2.1 Administrative and Management Structure 12
2.2.2 The Process 13

2.3 SELECTION OF CHILD CARE CENTRES 14

2.4 TRAINING 15

2.5 OVERALL PROJECT DESIGN: 3 PHASES AND 10 STEPS 17

2.6 ROLE OF THE INCLUSION FACILITATORS 17

CHAPTER 3: METHODS USED TO EVALUATE PFI-NS PROCESSES AND OUTCOMES 23

3.1 EVALUATION DESIGN 23

3.2 RESEARCH MEASURES 25
3.2.1 Survey Questionnaires from Centre Directors and Lead Educators 26
3.2.2 Measures of Program Quality 26
The Early Childhood Environment Rating Scale-Revised (ECERS-R) 27
The Caregiver Interaction Scales 28
3.2.3 Some Challenges in Assessing Changes in Inclusion Capacity and Inclusion Quality 28
3.2.4 Measures of Inclusion Quality / Inclusion Capacity 30
ECERS Item 37 – Provisions for Children with Disabilities 30
The SpeciaLink Inclusion Principles Scale 31
The SpeciaLink Inclusion Practices Profile 32

3.2.5 Qualitative Data **34**
Interviews with Directors and Lead Educators **34**
Inclusion Facilitators' Reports **34**

CHAPTER 4: A DESCRIPTION OF PARTICIPATING CENTRES AND STAFF AT BASELINE (TIME 1) .. **37**

4.1 CENTRE CHARACTERISTICS **38**
4.1.1 Centre Type and Auspice **38**
4.1.2 Centre Size, Enrolment, Ages of Children Served **39**

4.2 DIRECTORS **41**
4.2.1 Roles **41**
4.2.2 Experience in the Child Care Field **42**
4.2.3 Director's Experience in Their Current Position **42**
4.2.4 Directors' Educational Background **42**
4.2.5 Director's Experience in Working with Children with Special Needs **42**
4.2.6 Leadership for Inclusion **43**

4.3 FRONT-LINE STAFF **44**
4.3.1 Number of Front-line Staff and Their Education **44**

4.4 LEAD EDUCATORS **44**
4.4.1 Lead Educators' Educational Background **44**
4.4.2 Experience in Child Care **45**
4.4.3 Experience Working with Children with Special Needs **45**

4.5 PROGRAM QUALITY AT BASELINE **46**
4.5.1 *ECERS-R* Baseline Scores **46**
4.5.2 Comparison of Baseline *ECERS-R* Scores across Cohorts **48**
4.5.3 *Caregiver Interaction Scale* Scores **51**

4.6 INCLUSION CAPACITY AND INDICATORS OF INCLUSION QUALITY AT BASELINE **51**
4.6.1 Enrolment of Children with Special Needs at Baseline **52**
4.6.2 Centres' History in Including Children with Special Needs **54**
4.6.3 Resources Available to Support Inclusion **55**
4.6.4 Directors' and Lead Educators' Attitudes and Beliefs about Inclusion **56**
4.6.5 Directors' Reflections on Their Centre's Inclusion Capacity **58**
Directors' Perceptions of Increased Capacity or Effectiveness **58**
Directors' Perceptions of Barriers to Inclusion **59**
Directors' Perceptions of Their Centre's Baseline Capacities, Strengths, and Challenges Related to Inclusion **59**
Directors' Views of Additional Supports That Would Help **60**
4.6.6 Lead Educators' Reflections and Experience with Inclusion at Baseline **60**
Experiences with Inclusion **60**
Change over Time **62**

4.7 OBSERVATIONS AND SCORES RELATED TO INCLUSION OBTAINED AT BASELINE **63**
4.7.1 Scores on *ECERS Item 37: Provisions for Children with Disabilities* **63**
4.7.2 Scores on the *SpeciaLink Inclusion Practices Profile* **64**
4.7.3 Scores on the *SpeciaLink Inclusion Principles Scale* **66**

4.8 SUMMARY OF CENTRES' INCLUSION QUALITY AT BASELINE **68**

CHAPTER 5: ASSESSING THE IMMEDIATE AND LONGER-TERM EFFECTS OF *PFI-NS*..... 70

5.1 IMPACTS ON MEASURED PROGRAM QUALITY..... 70
5.1.1 Improvements in ECERS-R Scores from Baseline to Time 2..... 70
5.1.2 Improvements Maintained and Continuing: *ECERS-R* Scores from Time 2 to Time 3..... 72
5.1.3 Differences in Quality Improvement Across Cohorts..... 74
Improvements in ECERS-R Scores from Baseline to Time 2..... 74
Improvements in the Sustainability Phase..... 75

5.2 DIRECTORS' AND EDUCATORS' ACCOUNTS OF THE CHANGES MADE TO ENHANCE PROGRAM QUALITY..... 76

5.3 CREATING REFLECTIVE PRACTITIONERS: IMPACTS OF *PFI-NS* ON STAFF KNOWLEDGE AND ENGAGEMENT..... 80
5.3.1 Directors' Observations..... 80
5.3.2 Lead Educators' Observations..... 82

5.4 CHANGES TO INCLUSION CAPACITY, PRINCIPLES AND PRACTICES..... 82
5.4.1 Changes to Scores on *ECERS-R Item 37* – Provisions for Children with Disabilities..... 83
5.4.2 Changes Related to Inclusion Principles and Practices in Centres in Cohorts 1 and 2..... 85
Changes in Inclusion Principles among Centres in Cohorts 1 and 2..... 85
Changes in Inclusion Principles among Centres in Cohorts 1 and 2 that Did and Did Not Include Children with Special Needs during the PFI-NS Project..... 86
Changes in Inclusion Practices..... 88
Changes in Inclusion Practices among Centres in Cohorts 1 and 2 that Did and Did Not Include Children with Special Needs during the PFI-NS Project..... 88
Summary of Changes in Inclusion Principles and Inclusion Practices for Centres in Cohorts 1 and 2..... 91
5.4.3 Changes Related to Inclusion Principles and Practices in Centres in Cohorts 3 and 4..... 92
Changes in Inclusion Principles..... 92
Changes in Inclusion Principles among Centres in Cohorts 3 and 4 that Did and Did Not Include Children with Special Needs during the PFI-NS Project..... 92
Changes in Inclusion Practices..... 95
Summary of Comparisons between Centres that Did and Did Not Include Children with Special Needs in Cohorts 3 and 4..... 96
5.4.4 Beyond the Numbers: Changes in Staff Attitudes, Resources and Interactions with Children with Special Needs..... 97
5.4.5 Changes Made to Support Inclusion: Facilitators' Observations..... 99

5.5 OTHER POSITIVE IMPACTS OF *PFI-NS*..... 101
5.5.1 Diffusion Effects: Positive Impacts in Other Centre Rooms and in Communities..... 103
5.5.2 Perceived Impacts of *PFI-NS* on Children's Experiences..... 105
5.5.3 Improved Relationships with Parents..... 106
5.5.4 Community Involvement and Networking..... 106

5.6 SUMMARY..... 106

CHAPTER 6: FACTORS THAT ENABLE AND LIMIT IMPROVEMENTS IN PROGRAM QUALITY AND INCLUSION CAPACITY..... 109

6.1 FACTORS THAT ENABLED SUCCESS IN MAKING POSITIVE CHANGES..... 109
6.1.1 Inclusion Facilitators' Effectiveness in Engaging Staff and Creating Reflective Practitioners..... 109
6.1.2 Staff Receptiveness..... 110
6.1.3 Director's Involvement and Leadership..... 111

6.1.4 The Use of the *ECERS-R* as a Tool; The Use of the *SpeciaLink Inclusion Principles and Practices* Measures 111
6.1.5 On-site Workshops, Mentoring and the Development of Peer Networks 112
6.1.6. Additional External Resources 112

6.2 CHALLENGES AND IMPEDIMENTS TO CHANGES IN PROGRAM QUALITY 113
6.2.1 Staff Resistance to Change 113
6.2.2 Demands of *PFI-NS* Participation 116
Time….. 116
Other Concerns Related to Staff Involvement 117
Funding and Physical Constraints 117
6.2.3 Recruitment and Retention of Skilled Staff 118

6.3 CHALLENGES AND BARRIERS THAT LIMIT INCLUSION OR PRESENT LINGERING CONCERNS 120

6.4 SUMMARY 122

CHAPTER 7: LESSONS LEARNED AND RECOMMENDATIONS FOR IMPROVING AND EXTENDING THE *PARTNERSHIPS FOR INCLUSION-NOVA SCOTIA* APPROACH 124

7.1 LESSONS LEARNED ABOUT THE EFFECTS OF *PFI-NS* ON PROGRAM QUALITY 126

7.2 LESSONS LEARNED ABOUT THE EFFECTS OF *PFI-NS* ON INCLUSION CAPACITY AND INCLUSION QUALITY 128

7.3 LESSONS LEARNED: POLICY, PRACTICE AND PROGRAM ISSUES 130

7.4 LESSONS LEARNED: SUGGESTIONS FOR FUTURE RESEARCH 133

7.5 CONCLUSIONS AND RECOMMENDATIONS 134

REFERENCES 139

APPENDIX A-1: INTERVIEW SCHEDULE FOR DIRECTORS 142

APPENDIX A-2: INTERVIEW SCHEDULE FOR LEAD EDUCATORS 144

APPENDIX B: THREE CASE STUDIES OF CENTRES PARTICIPATING IN *PFI-NS* 146

LIST OF FIGURES

Figure 2.1 The *Partnerships for Inclusion – Nova Scotia* Model 18
Figure 4.1 Licensed Capacity of Participating Programs 40
Figure 4.2 Role of Centre Directors, by Cohort 41
Figure 4.3 Director's Experience in Work with Children with Special Needs 43
Figure 4.4 Lead Educators' Experience with Children with Special Needs 45
Figure 4.5 Distribution of Baseline Average *ECERS-R* Scores, All Centres 47
Figure 4.6 Average Baseline Scores on *ECERS-R* Subscales, All Centres 47
Figure 4.7 Distribution of Baseline *ECERS-R* Scores, by Cohort 49
Figure 4.8 Distribution of Baseline *ECERS-R* Subscale Scores, by Cohort 49

Figure 4.9 Centre Enrolments of Children with Identified Special Needs at Baseline 52
Figure 4.10 Proportion of Centres with Identified Children with Special Needs Enrolled at Baseline across Cohorts 53
Figure 4.11 Lead Educators' Views and Attitudes 63
Figure 5.1 Distribution of *ECERS-R* Scores at Baseline and Time 2 71
Figure 5.2 Average *ECERS-R* Scores at Baseline, Time 2 and Time 3 in *PFI-NS* Preschool Rooms 73
Figure 5.3 Directors' and Lead Educators' Comments on the Effects of *PFI-NS* on Staff 81
Figure 5.4 Distribution of Classrooms on *ECERS-R Item 37* Scores at Baseline, Time 2 and Time 3 84
Figure 5.5 Distribution of *SpeciaLink Inclusion Practices* Scores at Baseline, Time 2 and Time 3 for Centres in Cohorts 1 and 2 that Included Children with Special Needs 89
Figure 5.6 Distribution of *SpeciaLink Inclusion Practices* Scores at Baseline, Time 2 and Time 3 for Centres in Cohorts 3 and 4 that Did and Did Not Include Children with Special Needs 94
Figure 5.7 Reported Changes that Support Greater Inclusion 98
Figure 5.8 Directors' Observations of Other Positive Impacts of *PFI-NS* 102
Figure 5.9 Lead Educators' Observations of Other Positive Impacts of *PFI-NS* 103
Figure 6.1 Directors' Views of Challenges to Implementing Changes in *PFI-NS* 114
Figure 6.2 Educators' Views of Challenges to Implementing Changes in *PFI-NS* 115
Figure 6.3 Perceived Challenges that May Limit Inclusion 120

LIST OF TABLES

Table 2.1 Inclusion Facilitators' Multiple Roles 20
Table 4.1 Key Phases and Assessment Points for Each Cohort 38
Table 4.2 Centre Type, by Cohort 39
Table 4.3 Centre Auspice, by Cohort 39
Table 4.4 Licensed Capacity of Child Care Programs, by Cohort 40
Table 4.5 Ages of Children Attending Programs, by Cohort 41
Table 4.6 Directors' Leadership Activities 44
Table 4.7 Distribution of Baseline Scores on *ECERS*-R Average Scores and Subscales, All Participating Centres 48
Table 4.8 Baseline *ECERS-R* Average and Subscale Scores, by Cohort with Statistical Analysis of the Significance between Means 50
Table 4.9 Number of Children with Identified Special Needs Enrolled in Centres at Baseline across Cohorts 54
Table 4.10 Resources Available to Centres to Support Inclusion 55
Table 4.11 Directors' Beliefs about Inclusion 57
Table 4.12 Lead Educators' Beliefs about Inclusion 58
Table 4.13 Scores on *ECERS-R Item 37* across Cohorts at Baseline 64
Table 4.14 Average Scores on Items from the *SpeciaLink Inclusion Practices Profile* at Baseline For Centres in Cohort 1 and Cohort 2 that Included a Child with Special Needs 65
Table 4.15 Average Scores on Items from the *SpeciaLink Inclusion Practices Profile* at Baseline for Centres in Cohort 3 and Cohort 4 that Included a Child with Special Needs 66
Table 4.16 Average Scores on Items from the *SpeciaLink Inclusion Principles Scale* at Baseline For Centres in Cohort 1 and Cohort 2 that Included a Child with Special Needs 67
Table 4.17 Average Scores on Items from the *SpeciaLink Inclusion Principles Scale* at Baseline For Centres in Cohorts 3 and 4 that Included a Child with Special Needs 67
Table 5.1 *ECERS-R* Scores Before and After Consultation 72
Table 5.2 *ECERS-R* Average Scores Before and After Consultation, by Cohort 74
Table 5.3 Distribution of *ECERS-R* Average Scores at Baseline and at Time 2 Assessments, by Cohort 75
Table 5.4 Average *ECERS-R* Scores at Baseline, Time 2 and Time 3, by Cohort 76
Table 5.5 Average *ECERS-R Item 37* scores at Baseline, Time 2 and Time 3 Across Cohorts of Centres 85
Table 5.6 Average Scores on Items from the *SpeciaLink Inclusion Principles Scale – Form A* at Baseline, Time 2 and Time 3 for Centres in Cohorts 1 and2 that Included Children with Special Needs 87

Table 5.7 **Average Scores on Items from the *SpeciaLink Inclusion Principles Scale – Form A* at Baseline, Time 2 and Time 3 for Centres in Cohorts 1 and2 that Did Not Include Children with Special Needs..... 87**

Table 5.8 **Average Scores on Items from the *SpeciaLink Inclusion Practices Profile* at Baseline for Cohorts 1 and 2 and Statistical Comparisons of Baseline and Time 3 Scores in Centres that Included Children with Special Needs 90**

Table 5.9 ***SpeciaLink Inclusion Principles* Scores at Baseline and Time 3 for Centres with and Without Children with Special Needs in Cohorts 3 and 4 ..... 93**

Table 5.10 ***SpeciaLink Inclusion Practices* Scores at Baseline and Time 3 for Centres with and Without Children with Special Needs in Cohorts 3 and 4 ..... 95**

EXECUTIVE SUMMARY

Partnerships for Inclusion – Nova Scotia

Donna S. Lero, Ph.D., University of Guelph
Sharon Hope Irwin, Ed.D. SpeciaLink

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 effective-ness, 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.[i] Centres in the latter group might be expected to

[i] 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.

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.

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.

in
tions

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

1. OECD (Organization for Economic Co-operation and Development) *Starting Strong II: Early Childhood Education and Care*, Paris, France: OECD Publishing, UK.

2. Government of Nova Scotia. (2006). *The Early Learning and Child Care Plan*. http://www.gov.ns.ca/coms/families/provider/documents/ELCC_Plan.pdf

3. Harms, T., Clifford, R. M., & Cryer, D. (1998). Early Childhood Environment Rating Scale - revised edition (ECERS-R). N.Y.: Teachers College Press, Columbia University.

4. Irwin, S. H. (2005). *The SpeciaLink Child Care Inclusion Scales* (Revised). Available from SpeciaLink at http://www.specialinkcanada.org

5. Arnett, J. (1989). Caregivers in day care centers: Does training matter? *Journal of Applied Developmental Psychology, 10*: 541-55

6. Government of Ontario (2007). *Investing in Quality: Policies, Practitioners, Programs and Parents.* Report of the Expert Panel on Quality and Human Resources. Ministry of Children and Youth Services. http://www.children.gov.on.ca/NR/CS/Publications/QHRReport_en.pdf

7. Child Care Human Resources Sector Council (2007). *Career Promotions & Recruitment Strategy*. http://www.ccsc-cssge.ca

PREFACE: AN INTRODUCTION AND GUIDE TO READING THIS REPORT

This report describes four cycles of an innovative approach that combines assessment, on-site consultation, and the provision of resources and personal support to 98 child care centres in Nova Scotia. The project, named *Partnerships for Inclusion - Nova Scotia (PFI-NS)*, is based on the successful *Partnerships for Inclusion* model developed at the University of North Carolina, Chapel Hill by Palsha and Wesley[1] and was adapted through experiences gained in Canada through the *Keeping the Door Open* project led by Dixie (VanRaalte) Mitchell.[2] The project benefits from knowledge gained from research and practice on inclusion quality in Canadian child care centres and the leadership provided by Dr. Sharon Hope Irwin, Senior Researcher of SpeciaLink: The National Centre for Child Care Inclusion. Funding was provided by the government of Nova Scotia through an allocation of resources received under the terms of the Federal/Provincial/Territorial *Early Childhood Development Agreement (ECDA).*[3]

This evaluation study was designed to test the effectiveness of this model that combines training, assessment, consultation and support in order 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.

The first four cohorts of the *Partnerships for Inclusion - Nova Scotia* project were run over the course of four years, beginning with a start-up and training phase in November/December 2002 and extending until October of 2006.[ii] The project coordinator, Ms. Carolyn Webber, and four trained "inclusion facilitators" worked with a director and a lead preschool educator in each centre that volunteered to participate. Each director, lead preschool educator and inclusion facilitator was trained in how to administer a well-known measure of overall program quality and inclusion facilitators were trained to administer two additional measures to assess progress towards the provision of high quality inclusive care for children with special needs. The inclusion facilitators worked with the director and centre teachers to develop collaborative action plans to improve quality following the initial assessments and the facilitators provided consultation, workshops, and direct personal support to enable positive change. 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. This report and the second set of scores were used to develop a second collaborative action plan to promote continued improvement beyond the active consultation period.

The evaluation method used to assess the short-term and longer-term impacts of *PFI-NS* involved collecting extensive data on the centres initially, and on program quality and inclusion practices at three points of time:

[ii] Two further cohorts (2006-2007 and 2007-2008 were still in progress at the time of this evaluation.

- ❖ at Baseline, before or at the very beginning of the *PFI-NS* assessment and consultation process;
- ❖ at the end of the active intervention / support phase; and
- ❖ approximately 4-5 months after the active support phase ended (the end of a sustainability phase).

Program quality was assessed using the Early Childhood Environment Rating Scale-Revised (*ECERS-R*) and inclusion effectiveness was assessed using the *SpeciaLink Inclusion Principles and Practices Scales*. In addition to quantitative data collected at these three points of time, 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 change processes that occurred and also provided contextual information to assess what facilitated change and what acted as impediments or barriers. This information also contributed to the identification of lessons learned from the first four cycles of the *PFI-NS* model, including ways to enhance success with future cohorts of centres in Nova Scotia and in similar programs in other jurisdictions.

This report includes seven chapters.

- Chapter 1 provides historical and contextual background on the history of inclusive child care across Canada and efforts to support inclusive child care for children with special needs in the province of Nova Scotia.
- Chapter 2 describes the development and features of the *Partnerships for Inclusion - Nova Scotia* model as utilized in the first four cycles of centres and describes the role of the inclusion facilitators as change agents.
- Chapter 3 describes the methods used to conduct this evaluation and the specific measures used to assess program quality and centres' inclusion principles and practices.
- Chapter 4 provides additional descriptive information about the participating centres and their history with inclusion, as well as Baseline data on program quality and inclusion effectiveness.
- Chapter 5 presents evidence of both short-term and longer-term improvements in program quality and inclusion effectiveness based on analysis of quantitative data and director and staff responses to semi-structured interviews at the end of the Sustainability period.
- Chapter 6 describes the factors that promoted and impeded positive changes as described by centre directors, lead teachers and inclusion facilitators.
- Chapter 7 extracts the Lessons Learned from the first four intervention cycles and provides some suggestions to improve the process and outcomes in successive offerings. It also provides Recommendations for research, policy and practice.

End Notes

1 Palsha, S.A. & Wesley, P.W. (1998). Improving quality in early childhood environments through on-site consultation. *Topics in Early Childhood Special Education*, 18:4, 243-253.

2 Mitchell (VanRaalte), D.L.. (2001). *Keeping the door open: Enhancing and monitoring the capacity of centres to include children with special needs*. NB: New Brunswick Association for Community Living.

3 Government of Canada (2000). *Early Childhood Development Agreement*. Reports and background documents are available at http://www.socialunion.gc.ca/menu_e.html.

CHAPTER 1: BACKGROUND TO *PARTNERSHIPS FOR INCLUSION -NOVA SCOTIA*

1.1 A SHORT HISTORY OF INCLUSIVE CHILD CARE ACROSS CANADA

It is important to understand the history of inclusive child care across Canada if we are to understand its current context in Nova Scotia and, perhaps, avoid repeating previous problems.

As we see it, the **1950s** provide the earliest benchmark for inclusive child care and can be characterized by "behaviourism, antibiotics, and *Brown versus the Board of Education*." The behaviourists proved that anyone could learn, provided tasks are broken down into their smallest units, repeated to mastery, and reinforced for success. This gave hope to parents and to staff who worked with people with intellectual challenges that their children and clients could learn more than previously expected. The availability of sophisticated antibiotics meant that children born with physical disabilities and long-term health conditions were likely to have much longer life spans than previously anticipated. Both of these advances suggested that there were other options for parents of children born with disabilities than the traditional two — take him home and care for him or institutionalize her and have another child. And, finally, the U.S. Supreme Court decision on *Brown vs. the Board of Education*[1] signaled in the strongest terms the inherent injustice of segregation. Although *Brown* was a U.S. decision and was related to racial segregation, it had a profound influence on other disadvantaged groups, including persons with disabilities.

The **1960s,** from the perspective of inclusive child care, focused on the first and second themes **–** "behaviourism" and "antibiotics," and gave rise to developmental preschools (for children with intellectual challenges) and child development centres attached to rehabilitation centres (for children with physical disabilities). Mainly driven by parent volunteers, the developmental preschools were generally part-day programs, free to eligible children, and based on huge amounts of volunteer labour for fund-raising, transportation, and assistance in the classrooms. Still, many children (including those who were blind, Deaf, autistic, with special health care needs, or aggressive, and those who were "difficult to care for") were either sent to special schools or programs or were simply ineligible for enrollment in any preschool program. The issue of "integration" was minor during the 1960s, as program advisors and staff concentrated on the new techniques of task analysis, mastery learning, and positive reinforcement. Targeted preschool programs were also the societal norm in the U.S. Head Start program (for poor children) and in remedial Canadian programs for the same population.

By the **1970s,** with the advent of federal programs such as the Canada Assistance Plan, the Local Initiatives Program, and Canada Works, and dramatic increases in maternal employment, licensed child care expanded rapidly in Canada. During the same decade, a visiting scholar to the Canadian National Institute on Mental Retardation, Wolf Wolfensberger (1972)[2] was educating a generation of Canadian researchers, parents and advocates about the injustice and ineffectiveness of segregation for persons with intellectual disabilities, generalizing *Brown vs. the Board of Education* to persons with disabilities, from people of racial minorities. Although it would be many years before most Canadian Association for the Mentally Retarded (CAMR) locals (now renamed the

Canadian Association for Community Living) would disband their specialized preschools or integrate them into community-based programs, another voice had taken up the theme of *Brown*. As well, it was obvious to parents of children with disabilities that the part-time segregated preschools could not easily be transformed into full-day programs, since they usually occupied space without kitchens, playgrounds, nap rooms and the like. Thus, by the mid- or late-1970s, *some* community-based child care centres were including *some* children with special needs. Provincial policy documents from that period provide evidence of some flexibility of structuring and funding such spaces, generally in a fairly reactive, rather than proactive way. Child care curriculum development for children with special needs was generally characterized by an attempt to mimic the processes current in special education and clinical settings — namely "pull-out sessions" for skill development, hopefully followed by generalization of those new skills into the classroom settings. The Individual Program Plan (IPP) became a widely used tool for measuring and monitoring child progress.

The **1980s** saw further growth in maternal employment, as well as continuing growth of licensed child care in Canada. Obviously, mothers of children with special needs had the same needs for child care as did mothers of typically developing children. The decade saw an expansion of policy initiatives around "integration" or "mainstreaming" in child care, as well as the beginnings of specialized training about "children with special needs in child care." Increasingly, community-based child care centres were voluntarily expanding their mission to include children with special needs, and they were often able to hire "special needs workers" who had previously worked in the specialized preschools and were familiar with behavioural techniques, mastery learning, and reinforcement for success. "Pull-out" or "resource time" continued to be seen as the most effective way of teaching skills to children with special needs.

1990 provides a benchmark for mainstream or integrated child care. At that time, the *In-House Resource Teacher model*[3] seemed to be the state of the art. A centre might now have an integrated license (Ontario) or contracted spaces (British Columbia) or, through more informal funding arrangements, the capacity to include a resource teacher (special needs worker, support staff) on staff, in addition to the regular ratio. The centre would then be obligated to enroll a specified number of children with special needs (usually four). Training increased for integrated child care, with resource teacher training programs in Ontario, a post-diploma special needs credential in British Columbia, and variations of these in other provinces. National, provincial, and local child care conferences increasingly included workshops and pre-conference day-long sessions on issues related to child care inclusion. The emphasis in training began to move toward embedding skill development into the natural activities of the centre and into the idea that accommodation and adaptations could make it possible for *all* children to learn within the group. Many therapists had moved from a clinical model of skill development to providing therapy that focused on functional skills in natural settings; the child care centres followed (or even preceded) this change in orientation.

By the middle of the decade, another model of child care inclusion support was expanding rapidly. Sometimes called the *Itinerant Resource Teacher model*,[4] sometimes called the *Resource Consultant model*, this model evolved as an answer to the question of how parents of children with special needs could have the same range of child care

choices that other parents had. Parents of children with special needs would speak about the inconvenience of travel to the integrated child care centre across town, compared to the nearby centre all of their other children had attended. As well, with the fiscal constraints of the mid-decade, policymakers were searching for ways to serve the increasing number of children with special needs whose parents requested enrollment by using the same dollars differently. However, it was obvious that if "the supports follow the child," a different system of inclusion support would have to be developed. The economies of scale of four children with special needs being enrolled in one setting would no longer exist — these four children might be scattered in four different settings. In addition, there was increasing pressure to include children with special needs from waiting lists. Thus, there was an evolution toward the Itinerant Resource Teacher model, providing a range of services including direct service, consultation, modeling, information, equipment loans, in-service training, and provision of contract staff when and where needed, budget permitting. In some jurisdictions, the In-house Resource Teacher model remained or expanded, generally with a focus on centres that regularly enrolled at least four children with special needs.

The Itinerant Resource Teacher or Resource Consultant model thus presumes that most community-based child care programs can include children with special needs if appropriate resource support is provided in the form of child-specific training and support to staff. The nature and duration of assistance (which may include an aide who facilitates individual children's participation) is based on the views of the resource consulting agency, with variable amounts of input from the child care staff, and is limited by the financial and human resources available to resource consulting agencies.

(It should be noted that the evolution to inclusive education followed much the same path over the same period, as did inclusive child care. The education system evolved from exclusion of children with certain levels and types of disability to specialized, self-contained schools for the handicapped, to special education classes within schools, and then to "pull-out" for academic learning, but inclusion for homeroom, gym, art, playground and lunchtime. By the mid-1990s, parents and advocates were no longer willing to see their children ride on "the handicapped bus" to a school outside of their community, regardless of the special skills of the teachers there. *Eaton versus the Brant Board of Education,*[5] a Canadian case that went to the Supreme Court, summarizes the positions very well. As with the role of the special needs worker or resource teacher in child care, the issue of the role of the educational assistant in education also remained contentious.)

Toward the end of the first decade of the new century, it has become clear that the dominant method of providing resource support is now a mixed one. Varying proportions of itinerant support and on-site staffing support are seen among the provinces, and even between and within regions of most provinces.

In Canada, policy development at the national level has been uneven. Yet, even while more 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 Multilateral Framework on Early Childhood (2003), now integrated into ongoing funding within the Canada Social Transfer (CST)

envelope. Each provincial and territorial government is working to implement plans to improve access to high quality early learning and care programs that enhance children's development 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. These efforts come at a time when there is increased visibility of children with Autism and related spectrum disorders, increased awareness of the importance of early intervention for children with speech and language problems, and greater efforts to promote early literacy.

The Nova Scotia government has also 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 2007) commits the province to increasing spaces for children with special needs from about four per cent to eight per cent — an increase of approximately 530 children.[6] As a consequence, there is considerable interest in learning about initiatives such as *PFI-NS* that can provide evidence-based examples of ways to enhance program quality and improve inclusion capacity and inclusion effectiveness that might 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 in 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.

1.2 A SHORT HISTORY OF RESOURCE SUPPORT TO CHILD CARE CENTRES IN NOVA SCOTIA TO INCLUDE CHILDREN WITH SPECIAL NEEDS

In Nova Scotia, there are no policies, legislation, or regulations that assure that parents caring for children with special needs have access to child care. It is up to the individual centre to decide whether or not a child with disabilities will be included. If the centre is agreeable, the government may (budget permitting) provide funding to any licensed non-profit or private centre to support the child with special needs. While there are general guidelines with regard to inclusion, these have had little impact on practice. Nonetheless centres, both private and non-profit, often have been willing to accept children with disabilities (Roeher Institute, 2003).[7]

Public funding of child care in Nova Scotia began in 1972 under the *Canada Assistance Plan,* in compliance with the *Day Nurseries Act* of 1967.[8] Children with exceptionalities are defined in the *Regulations of the Consolidated Daycare Act of 1978*[9] as "child(ren) who ha(ve) a mental, physical, emotional, sensory-motor or learning handicap which, if the full potential of the child is to be realized, requires early intervention to prepare the child for entry into appropriate school placements," and, under its provisions, "The Minister may license a facility to provide a day care program for exceptional children."

Segregated child care centres and preschools were set up in various regions of the province in the early 1970s. The funded "differentials" (funding per child/per day based on costs above "regular" child care or preschool costs) in those segregated centres were budget-based and significantly higher than those in community-based centres that were set on a province-wide basis.

By the mid-1970s, a number of community-based child care centres were including *some* children with some levels and types of special needs through funding from a variety of short-term grants, such as the Local Initiatives Program (LIP), Canada Works, summer student employment programs, Manpower Industrial Training Programs, and the like. Volunteers and students on practicum placements were also utilized to support the attendance of children requiring extra support. It is also clear that many day care centres and nursery schools periodically included *some* children with disabilities without additional staffing, because they felt it was the right thing to do, and that it could and should be done. (In the literature, these children are sometimes referred to as "invisible children" — not counted among those with disabilities enrolled in child care, because they are not connected either to "differential funding" or to formal consultative services.) Within this developing movement for integration, directors of community-based centres who saw the enrolment in early childhood education and care of children with special needs as a *right*, not as a *privilege*, felt frustrated that differential funding could only go to segregated specialized centres, even if children with the same level and types of disabilities were present in their programs.

When the Nova Scotia government accepted the recommendations of the 1979 *Task Force on Day Care*,[10] twelve integrated day care spaces were funded with differentials in one community-based centre as a developmental centre, and five portable integrated day care spaces were made available for use in any non-profit centre in the province. That number was increased by five further spaces under the *1983 Task Force on Day Care*,[11] which also recommended that the need for additional spaces for handicapped (sic) children be reviewed annually, and (that) the number of differentials be increased to meet any increase in need. From 1993 through 2000, 10% of any allocation of additional subsidized spaces was budgeted for children with special needs. A different funding mechanism was developed after that date, and supported child care funding has been provided in a less transparent manner. In addition, the requirement that the funding be used only in non-profit centres ended in 2000, at which time the supported child care funding became portable to any licensed child care program (whether non-profit or commercial).

In 2004-5, 521 supported spaces were funded for children with special needs, of which 85 were attached to developmental centres, and 436 were portable; 130 centres received inclusion support for children with special needs, allowing over 520 of these children to attend. While this allocation provided additional parental choice, it led to unevenness in both inclusion quality and global quality, since neither the centres themselves nor the Supported Child Care Program of Early Childhood Development Services had the capacity to garner appropriate consultative services and appropriately trained personnel or to monitor the effectiveness of the interventions provided to children with special needs across all the programs. A number of provincially-funded inclusion initiatives, including *Partnerships for Inclusion – Nova Scotia*, *Building Blocks* and *Early Language*

and Learning were beginning to raise both global quality and inclusion quality in community child care centres, essential to genuine inclusion.

1.3 TRAINING IN SPECIAL NEEDS AND INCLUSION

In the 1970s and 1980s, most Early Childhood Education training programs in Nova Scotia included very limited offerings in special needs or in inclusion strategies. In the 1990s, all ECE training programs had begun to embed special needs into many of their courses, and usually included at least one course specific to special needs/inclusion in their regular diploma program.

In 1975, Mount St. Vincent University introduced a 2-year certificate in Child Development. By 1979 this had evolved into a four-year degree program with four specializations — Teaching Young Children; Child Care Programs; Administration and Development; and Working with Atypical Children. In 1980, Child Study students could choose specializations from: 1. Developmental Disabilities, 2. Development and Administration of Early Childhood Programs, 3. Teaching Young Children (grades primary to three), and 4. Special Education of Young Children (education program at Acadia University). An independent Department of Child Study was established in 1981, as it had previously been housed in the Education Department. In 1991, the department added a Child and Youth Care specialization for the first time. The name of the degree was changed in 1992 to Bachelor of Applied Arts, Child and Youth Studies. In 1994, admission requirements to all B.Ed. programs were changed in Nova Scotia to require a first degree, thereby requiring Child and Youth Studies students to complete their degree prior to being admitted into a B.Ed. program and eliminating the education specialization.

Today all students in the Child and Youth Studies program are required to take core professional and academic courses that include a birth-through-adulthood emphasis, as well as courses that have content specific to youth, special needs, and early childhood. All students complete at least 500 hours of supervised practicum experiences. Students are also required to complete a special needs placement and 2 half courses in special needs. In addition, special needs topics are embedded into all courses. In 2006 new courses in communication, early intervention, child life and autism were added to the program.

A Master's Degree in Child and Youth Studies has been offered since 1999. Core courses in contemporary social issues, developmental issues, leadership, and programming with a child and youth focus are required of all students. Thesis research is highly individualized.
The Institute for Human Services Education (formerly the Institute for Early Childhood Education and Developmental Services) has offered a two-year diploma in ECE from its inception and added a 3rd year post-basic diploma program in Special Needs in 1987. This program continues, but because of lower enrollments, the Institute is considering offering it on a full-time basis only every other year. The Institute now also offers a customized ECE Inclusive Education certificate on a part-time basis in the evening, as an alternative to the on-site 3rd year Special Needs Diploma, in any area of the province, based on enrollment.

In 1986 the Kingstec branch of the Nova Scotia Community College added an optional one-year post-diploma program to follow the one-year ECE diploma program. The post-diploma program consisted of a two-part focus: working with children with special needs and managing early childhood programs. At that time, according to the instructor, she believed that theirs was the only full-time program focusing on children with special needs, with the exception of what was offered at Mount St. Vincent University as part of their 4-year degree in Child Studies. She felt that there was a very strong need to offer a program for pre-service ECE students who were not pursuing a degree. She approached the principal at the time and he suggested a one-year pilot. That one-year pilot evolved into a relatively small full-time program option. Many students were very disappointed to see its discontinuation in 2000, but when the Early Childhood Studies program became a two-year program there were insufficient faculty to continue offering it. The two-year diploma program includes a 6-hour course on special needs, along with embedded material in other courses.

St. Joseph's College of Early Childhood Education opened in 1970 as St. Joseph's Early Childhood Education Training Program. The one-year diploma program included a course in special needs, right from the beginning. Now called St. Joseph's College of Early Childhood Education (since 1997), the college now provides a two-year diploma program (since 2000). It has promoted the possibility of a post-diploma special needs certificate program, but enrolment has been insufficient to offer it. As of January 2008, the College will offer its 60-hour "Children with Special Needs" course in the evenings, as part of the diploma program, but open to anyone in the community.

Periodic workshops, often facilitated by staff who had worked in segregated preschools for the handicapped and who typically had been trained in Mental Retardation (sic) or as Human Services Workers, began to appear on provincial child care conference agendas in the late 1970s and early1980s, emphasizing such strategies as task analysis and mastery learning. During that period, therapists occasionally made presentations at these workshops, focusing on their professional roles. By the early 1990s, occasional conferences and presentations by inclusion advocates and experts began to replace the earlier special needs sessions, which had tended to focus on pull-out or one-to-one strategies. The newer type of workshop focused on strategies and accommodations for including children with special needs, on including children with specific disabilities, and on benefits of inclusion to all children.

Concerns about inequitable access to ECE training led to a provincial commitment that "Early Childhood workers in rural and remote communities will have the same access to early childhood development programs as people in urban settings, with the development of on-line learning opportunities" (May 2007, *Nova Scotia's Early Learning and Child Care Plan*). It was not clear whether government will offer support to make these opportunities affordable as well as accessible, through scholarships, loan forgiveness, tuition rebates, or differential grants to staff with different levels of training, etc.

1.4 CONSULTATIVE SUPPORT AND IN-CENTRE SUPPORT STAFFING

Until 2002, no formal consultative support for community-based centres enrolling children with disabilities was available. Centres seeking "differentials" for children with special needs were required to submit individual program plans (IPPs) for each such child, and to explain how the additional funding would be used. It was assumed that expertise in IPP design and in child assessment would be accessed from disability organizations, children's treatment programs, etc. The expanding network of early intervention programs across Nova Scotia (*EINS*) often played a role in finding child care programs for their children and in helping families and centres through a transition process. By the early 1990s, some early intervention programs, notably The Progress Centre for Early Intervention in the Halifax Regional Municipality, were playing a more formal transition and coordinating role.

In other regions of the province, some of the other early intervention programs informally provided at least transition consultation, as children left their programs and entered child care or preschool. As early as 1978, for example, the AllKids Early Intervention Program in Cape Breton was providing consultative services, equipment, and half-day staff to centres that agreed to enroll children with special needs. And to some extent therapists, such as occupational therapists, physiotherapists, and speech and language pathologists, also performed some of these functions, but their role was generally more limited to therapy and to IPP meetings. Itinerant resource teachers from the Atlantic Provinces Special Education Authority (for children with visual and auditory disabilities) also provided on-site services and consultation at child care centres and preschools for individual children on their caseload, but their role was often limited to a focus on school readiness.

Unlike Ontario and British Columbia which encouraged the growth of "integrated" centres during the late 1970s and throughout the 1980s by budget-basing a resource teacher (or extra staff person) for every four "eligible" children with disabilities, the Nova Scotia government provided case-by-case differentials to child care centres that enrolled children with disabilities (except for the developmental centres, where case-by-case funding was also provided, but where a designated number of spaces was guaranteed). However these larger centres with pro-integration directors all decided, often unbeknownst to each other, to develop an in-house resource teacher model and to try to keep that person on staff, despite the comings and goings of different children with disabilities.

It should also be noted that *ad hoc* resource teachers have been employed in a number of the larger child care centres across Nova Scotia for at least twenty-five years. In centres where at least four children with disabilities are regularly enrolled, the "resource" position has tended to be filled by a staff person with both experience and training in special needs and inclusion. These centres included, but were not limited to, the Town Daycare Centre, Children's Place in Antigonish, Pictou County Child Care Centre, Dartmouth Day Care, Colchester Community Day Care, Little People's Place in Shelburne, the Yarmouth Boys and Girls Club and Amherst Day Care. The resource coordinator at Town Daycare in Glace Bay has held that position since 1977! Until the development of a wider range of early childhood development services and programs, the

career ladder for these early childhood resource teachers, as well as for other ECEs, had been was very limited. Thus, many of these staff stayed in their positions for fifteen or twenty years, usually keeping inclusion quality quite high.

In 2002, Nova Scotia began to receive funding from the *Early Childhood Development Agreement (ECDA)*. With this support, initiatives such as *Supported Child Care*, the hiring of well-trained ECDOs across the province, and the implementation of several quality enhancement projects with a focus on inclusion were undertaken.

Through encouragement from the *Supported Child Care* program (2002) of the Department of Community Services and its guidelines for inclusive programs, other centres, previously not enrolling children with special needs, now more regularly began to include these children, and developed greater resource capacity — training one staff in special needs, assigning an interested ECE to the position, or hiring staff with the post-basic specialization in special needs, where possible.

Early Childhood Development Officers (ECDOs) with a strong background in early childhood development were hired throughout the province, to address licensing and annual inspections, to consult with centres, and to assist on issues of quality and inclusive child care practices. When a centre meets the criteria for funding under *Supported Child Care*, the local ECDO develops a planning sheet with the centre director, encouraging her to think about all changes necessary to support inclusion. *Supported Child Care* (2007) now funds approximately 130 of these resource positions, enabling ongoing resource staff to do the paperwork and develop the adaptations, the modeling for others, and the extra support required by the child or children with special needs.

As of 2002-2003, several province-wide initiatives, under the leadership of *Supported Child Care* (replacing the *Special Needs Child Care* program), began to offer cost-free, in-service training on inclusion to staff of child care centres. These initiatives, notably *Partnerships for Inclusion-NS, Building Blocks,* and *Early Learning and Language* increased community child care centre quality and their capacity to include children with special needs. The total number of children with special needs enrolled, the number of centres including children with special needs, and the complexity of their needs have increased substantially. If *all* centres were someday going to meet the needs of *all* children, centre staff would need substantial training and consultative assistance to meet the new mandate.

As of December 2007, *Partnerships for Inclusion-NS* is now in its sixth cohort, and has provided 6 months of on-site training, plus "sustainability visits" to approximately 150 child care centres. Evening and weekend workshops that support quality enhancement on topics such as Inclusion, Science and Math, Making Friends, etc., are offered to all previous, as well as current, *PFI* participants — and are often also open to the broader child care community. Offered at no cost to child care staff, outside of child care hours, staff sometimes receive *lieu time*, sometimes out-of-pocket expenses such as travel or babysitting, and often no reimbursement from their centres. *Building Blocks* continues to be offered through a training-the-trainer model in all regions, with departmental staff, therapists, and early interventionists providing the training to interested groups. Most costs are absorbed by the volunteers themselves, and child care staff attend cost-free. Some centres provide *lieu time* for the 16-hour training; others cover out-of-pocket costs

of attendance. Future training through these three initiatives is uncertain, with the Department currently involved in a review of special needs programming and supports.

This report describes the *Partnerships for Inclusion – Nova Scotia (PFI - NS)* initiative, the experiences of the first four cohorts of centres that participated, and the views of the inclusion facilitators who worked with the centres. Data are presented that illustrate the effectiveness of this approach, and lessons are extracted to identify what factors need to be considered in order to ensure that such efforts result in sustained improvements in overall program quality, inclusion quality and inclusion capacity.

End Notes

1 *Brown vs. Board of Education* (1954). See *Oyez Project* at Northwestern University through http://oyez.nwu.edu/cases/cases.

2 Wolfensberger, W. (1972). *The principle of normalization in human services*. Toronto: National Institute on Mental Retardation (now called the Roeher Institute).

3 Irwin, S.H., Lero, D.S. & Brophy, K. (2004). *Inclusion: The next generation in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org. p.224.

4 *ibid.*

5 *Eaton vs. Brant County Board of Education* (1997). See both P.R. de Massy, The Eaton case before the Supreme Court of Canada: A "constructive" reading of the decision, and C.S. Judd, The Eaton and Eldridge Cases: Same but Different? In *entourage* (10) 3/4, (1997).

6 Government of Nova Scotia. *The Early Learning and Child Care Plan.* http://www.gov.ns.ca/coms/families/provider/documents/ELCC_Plan.pdf

7 Roeher Institute. (2003). *Inclusivity of the child care policy environment in Canada: Much work to be done.* ON: Author.

8 Government of Nova Scotia (1967). *Day Nurseries Act*, R.S.N.S. 1967. c. 71. Replaced by *Consolidated Day Care Act*, S.N.S. 1978 c. 6. Available from Web Site: http://www.gov.ns.ca/legislature/ege/legn.htm and http://www.gov.nslca/just/regulations/.

9 Government of Nova Scotia (1978). *Consolidated Day Care Act*, S.N.S. 1978 c. 6. Available from: http://www.gov.ns.ca/legislature/ege/legn.htm and http://www.gov.nslca/just/regulations/

10 Government of Nova Scotia. (1979). *Task force on day care financing report.* Halifax, NS: Author.

11 Government of Nova Scotia (1983). Department of Social Services, *Report of the Task Force on Day Care.* Halifax, NS: Author.

CHAPTER 2: BEGINNINGS: *PARTNERSHIPS FOR INCLUSION - NOVA SCOTIA* (*PFI-NS*)

2.1 IDENTIFYING THE PROBLEM / SEEKING A SOLUTION

Since 1978, an increasing number of child care spaces in Nova Scotia were funded with "differentials" so that they could offer support to children with special needs. Through the next two decades, most of these spaces were assigned to children enrolled in non-profit centres with a fair degree of experience in including children with special needs. This tended to happen mainly because of word-of-mouth suggestions among parents and also because of external agency referrals. It was considered probable that these inclusive centres were of higher quality than were many non-inclusive centres in Nova Scotia, for reasons similar to those cited by Buysee, Wesley, Bryant & Gardner (1999)[1] in "Quality of Early Childhood Programs in Inclusive and Non-inclusive Settings." However, with the new funding arrangements in 2000 through the *Early Childhood Development Agreement*, more spaces began to "follow the child with special needs" to any licensed preschool or child care centre in Nova Scotia — either non-profit or commercial. Unfortunately, there simply were not enough centres of demonstrated quality and inclusion commitment to accommodate all children with special needs at natural proportions. With most centres having neither full time, on-staff resource teachers in addition to ratio nor an adequate supply of ECEs with specialized education or training to prepare them to work with children with special needs, nor a formalized consultation program to the centres, Departmental staff as well as centre staff, parents, and related professionals had reason to be concerned about child care centre quality, as well as inclusion quality — especially as they were now supporting the enrolment of children with special needs in *any* licensed centre.

The problem that was identified in Nova Scotia was common throughout North America. As Palsha and Wesley (1998)[2] state:

> *A significant…barrier to implementing inclusion has been the limited availability of high-quality, community-based early childhood programs… Without careful attention to the way in which aspects of quality such as physical space, materials, and staff are used in the classroom, children with disabilities are less likely to benefit from inclusion. The quality of early care and education has been found to be highly correlated with gains in early language development, cognitive growth, and social competence; …however, a recent large-scale study reported that child care in most centres in the United States was poor to mediocre* (p. 243).

2.1.1 LOOKING AT THE RESEARCH — *PARTNERSHIPS FOR INCLUSION (NORTH CAROLINA)*

The article, "Improving Quality in Early Childhood Environments through On-Site Consultation" (Palsha & Wesley, 1998) sparked consideration about potential solutions to the quality problems that had been identified. In fact, it went back even further than the 2001 discussions in Nova Scotia. In early 1999, Dixie (VanRaalte) Mitchell and Sharon Hope

Irwin had a day-long discussion about the article and its potential relevance to Canadian child care. Dixie then wrote a successful proposal to Child Care Visions, Human Resource Development Canada that led to the project, *Keeping the Door Open: Enhancing and Monitoring the Capacity of Centres to Include Children with Special Needs* (Mitchell, 2001).[3]

2.1.2 *KEEPING THE DOOR OPEN: ENHANCING AND MONITORING THE CAPACITY OF CENTRES TO INCLUDE CHILDREN WITH SPECIAL NEEDS (NEW BRUNSWICK, PRINCE EDWARD ISLAND, SASKATCHEWAN)*

Across provincial borders in New Brunswick and Prince Edward Island (as well as in Saskatchewan), efforts to promote quality and inclusion capacity were being addressed through the project, *Keeping the Door Open: Enhancing and Monitoring the Capacity of Centres to Include Children with Special Needs*. Adapting the project initiated in North Carolina by Patricia Wesley and Sharon Palsha called *Partnerships for Inclusion*, Dixie (VanRaalte) Mitchell designed *Keeping the Door Open* for a Canadian context. Under the sponsorship of the New Brunswick Association for Community Living, the project ran from January 2000-December 2002. At the end of the project, all three provinces — pleased with the results in raising global quality in child care centres — provided continuing funding so that additional centres could be included. These programs, now called *Measuring and Improving Kids' Environments* (*MIKE*) in PEI and *Opening the Door to Quality Childcare and Development* in New Brunswick, continue today.

Word travels quickly in Canada, especially in the Atlantic region. Staff of the Nova Scotia Early Childhood Development Services division heard about *Keeping the Door Open* and felt that it could help address issues of global quality, inclusion quality and inclusion capacity in Nova Scotia child care centres. A proposal for funding provided under the Early Childhood Development Agreement was written and accepted, an Advisory Committee was established, a research and evaluation team was hired (Dr. Sharon Hope Irwin of SpeciaLink and Dr. Donna S. Lero of the University of Guelph), and a program manager and four inclusion facilitators were hired. By December 2002, a 3-day facilitator training was held (with Dixie (VanRaalte) Mitchell and Dr. Sharon Hope Irwin as presenters), centres were informed of the project, and plans were in place.

2.2 GETTING STARTED: *PARTNERSHIPS FOR INCLUSION - NOVA SCOTIA (PFI-NS)*

2.2.1 Administrative and Management Structure

Partnerships for Inclusion-NS is fully funded through a grant by the Government of Nova Scotia, Department of Community Services, Early Childhood Development Services. Early Intervention Nova Scotia (*EINS*) is responsible for project supervision and administration.

RELATIONSHIP TO GOVERNMENT

Partnerships for Inclusion-NS shares with government the names of current centres involved in the project. *PFI-NS* does not share scores, goals or collaborative action plans of individual centres with government staff. Monthly progress reports and financial statements are sent to government, as well as to the direct supervising body — *Early Intervention Nova Scotia* (*EINS*). Both formal and informal contacts are maintained with the Coordinator of Special Needs Policy & Program Development, Early Childhood Development Services, Department of Community Services.

PFI-NS staff are very visible in the centres, generally there once a week, and often cross paths at the centres with Early Childhood Development Officers (ECDOs). Posted centre notices and newsletters often include articles about *PFI-NS* participation, and goals may be posted within the centre acknowledging the progress the centre is making. Thus, any move to secure anonymity of the participating centres would be challenging. There is also a sense that this is unnecessary as both *Partnerships* facilitators and ECDOs work to support centres.

Thus far, there has been a very positive, collaborative relationship between the ECDOs and the *PFI-NS* staff. ECDOs realize that *PFI-NS* works because it is voluntary and confidential; *PFI-NS* staff realize that their roles and those of the ECDOs are complementary and mutually reinforcing. If, in the future, government decides to make participation in *PFI-NS* mandatory for all centres — or even for struggling centres — this arrangement would have to change.

CONFIDENTIALITY

Centres are assured that what is learned in the centres stays within the centres (except, of course, for abuse issues that require mandatory reporting). Centres are also assured that scores and comments used for evaluation and research are confidential, and that data are only used in aggregated form.

Permission is requested to take photos, and centres are assured that such pictures, if used in workshops or training events, will not be identified by name. Permission forms must be signed by parents of all children in the centre. Annual reports, minus direct centre attribution, are shared with the government, *EINS*, and SpeciaLink.

MANAGEMENT STRUCTURE

The *Partnerships for Inclusion-NS* manager reports to the Early Intervention Nova Scotia *(EINS)* executive committee. Regular progress reports and statements of expenses are presented. Various sub-committees, such as Policy, Personnel, Finance and Program are struck on an as-needed basis.

2.2.2 The Process

With the hiring of a program manager and four inclusion facilitators in December 2002, *PFI-NS* began. Its goals were to use training, assessment, consultation and support to:

- improve program quality, and
- enhance child care centres' inclusion capacity and inclusion quality.

The on-site consultation model, as outlined by Palsha and Wesley (1998) with modifications recommended by Dixie (VanRaalte) Mitchell from the *Keeping the Door Open* project, provided an initial template for *Partnerships for Inclusion — Nova Scotia*.

Job descriptions and qualifications were circulated widely in Nova Scotia for a project manager and for inclusion facilitators who would train centre directors and lead teachers in preschool rooms in procedures for assessing program quality and then provide direct support through on-site consultations to enhance program quality and centres' capacities to include children with special needs. Emphasis was placed on front-line experience in child care centres and on familiarity with children with special needs. Staff were to be hired to cover four regions of Nova Scotia — Halifax/South Shore Region; Dartmouth/Valley Region; Antigonish Region; Truro/Northern Region; and Cape Breton Region. Other regions of the province were addressed in latter phases of the project, with one staff moving from Cape Breton to Western Nova Scotia and a francophone facilitator hired in 2007 to work in the Western francophone area.

Three members of the project advisory committee interviewed short-listed candidates for the project manager position. Two members of the advisory committee and the project manager interviewed candidates for the inclusion facilitator positions. *PFI-NS* was able to hire facilitators with strong backgrounds in front-line child care (three had experience as directors); and in special needs (one had twelve years experience as a centre-based resource teacher, while another had ten years experience as an inclusion support staff person in child care and as a classroom assistant in public school); one facilitator had experience in using the *ECERS-R* instrument for training in another province. Although none had certification in adult education, three of the five had extensive experience in providing workshops and informal presentations to the child care field. Three of the staff are university graduates, including one with a degree plus an ECE diploma; one staff has an ECE diploma; one has a teaching certificate plus over 400 recognized workshop and course hours in ECE.

2.3 SELECTION OF CHILD CARE CENTRES

Letters and flyers were sent to all licensed child care centres in Nova Scotia, explaining the *PFI-NS* project and seeking volunteers. Word-of-mouth recruitment by inclusion facilitators, the project manager, and Sharon Hope Irwin brought in additional interested centres.

The criteria included: geography/region; diversity in centre characteristics such as size, rural/urban location; and for-profit/non-profit auspice. Other requirements were that the centre have an appropriate age group for the *ECERS-R*; volunteering for the project; the centre was an inclusive program (if possible, having a child with special needs in the group of the lead educator, or if not, having a child with special needs enrolled in the centre); a history of inclusion in the centre; a full-day program; a minimum of one year in operation; not a developmental centre (meaning a centre that includes 33% or more

children with special needs); and not providing a specialized program, such as Reggio Emilio or Montessori.

For research purposes (assessing changes in inclusion quality), criteria related to having a child with special needs in the observed classroom and having an "inclusion history" in the centre were employed. It was not possible to fully meet these criteria in all centres, however.

Even in Cohort 1, six centres (27%) had no children with special needs in the centre at the start of the project, and 9 (40%) had no child with special needs in the observed classroom. Even where one or two children with special needs were present in the observed classroom at the beginning of the project, in some cases the children with special needs left the classroom before the end of the year. In addition, some centres did not have a "history of inclusion" to draw upon. Using the director's experience in working with children with special needs as a proxy for "inclusion history," three programs (14%) had worked with children with special needs for two years or less. After year 1, successively greater numbers of child care centres with limited or no inclusion history of enrolment of children with special needs participated in the project. "Research" then took a backseat to "development," with an increasing emphasis on building inclusion capacity in centres with few or no children with special needs, rather than the anticipated work of helping centres already including children with special needs improve their inclusion quality (practices and principles.) Another early criterion — full day programs — was also scrapped when many part-day programs requested participation. As a process evaluation, this report captures the ways the *PFI-NS* project adapted to meet the needs of the child care centres that participated. Rather than being structured as a formal evaluation of one specific, standardized treatment/intervention to repeated cohorts of similar centres, this evaluation provides rich information about how an on-site, consultative model can respond to the diverse needs of child care programs that ultimately began the project at different levels of program quality, inclusion quality and inclusion capacity.

In the final analysis, the project manager, in cooperation with inclusion facilitators and some members of the advisory committee, selected centres that met as many criteria as possible, noting that in the less densely populated areas of the province, the total number of potential participating centres was not large. This difficulty pointed up one of the original issues cited by Early Childhood Development Services staff — the need to increase the number of centres that would be willing and able to appropriately include children with special needs.

2.4 TRAINING

Inclusion Facilitators: In December 2002, prior to the inception of the project, a full 3-day session, facilitated by Dixie (VanRaalte) Mitchell with Dr. Sharon Hope Irwin, was held for all five staff, as well as for the provincial Early Childhood Development Officers (ECDOs) and interested central office staff. Two full classroom days of *PFI-NS* and *ECERS-R* training were provided, plus a day for direct centre observation so that participants could obtain adequate inter-rater reliability. A two-hour training session on the inclusion quality and inclusion capacity instruments (the *SpeciaLink Child Care Inclusion Scale*s) was also provided.

Throughout Cohorts 2, 3 and 4, numerous training events were held for the inclusion facilitators. These included at least six sessions with Dr. Sharon Hope Irwin about the *Specialink Child Care Inclusion Scales*, which continued to be developed through May, 2005. The inclusion facilitators acted as "first readers," critiquing phraseology in the *Scales*, and suggesting that *Form A* (see Chapter 3) be reformatted and revised to be compatible with the *ECERS* format. At different points throughout the field testing of the revised *Inclusion Scales*, the inclusion facilitators checked their own reliability and, of course, used the scales in all centres. In addition to the trainings on the *Inclusion Scales*, the inclusion facilitators met at least quarterly to review and critique the project tools and processes. A major event — was held in Autumn 2004 at Oak Island, Nova Scotia, bringing together Dr. Pat Wesley (from North Carolina), Professor Donna Lero (from the University of Guelph) and inclusion consultant managers and staff from New Brunswick, Prince Edward Island, and Newfoundland and Labrador. In 2005, Departmental staff and Early Childhood Development Licensing Officers were offered a 1/2 day training in use of the *Inclusion Scales*, this time with a video tool — "Measuring Inclusion Quality in Child Care Centres."

Consultee and Advisory Committee Training: The 22 centre directors and 22 lead ECEs who volunteered for Cohort 1 were invited to a two-day training session at the Harbourview Holiday Inn in Dartmouth on January 31-February 1, 2003 [facilitated by Dixie (VanRaalte) Mitchell with Sharon Hope Irwin]. All participants were able to attend, with the exception of one who had a medical emergency. (This was quite a feat considering that 52 people traveled from various parts of the province in the middle of winter!) Several members of the Department of Community Services attended parts of this training, a further demonstration of their support for this project. The 13-member Advisory Committee held its first meeting on January 30th, and most members stayed for the training (some of the 13 were double-counted, because they were Departmental staff or were otherwise involved in the Project). In February, Shannon Harrison, one of the inclusion facilitators, traveled to New Waterford to conduct a workshop on the use of the *ECERS-R*. This workshop was offered to meet the needs of the only lead ECE who had been unable to attend the Dartmouth training event. Twenty other staff from participating Cape Breton centres also attended this regional workshop —indicating a high level of interest in the project. The travel, staff replacement, and accommodations were provided at no cost to participants. The *PFI-NS* staff had the opportunity to reinforce their earlier *PFI-NS* and *ECERS-R* training, and to act as facilitators for small groups. Inter-rater reliability sessions were not held during the weekend training, but were scheduled between facilitator and director and facilitator and lead ECE during the Project.

After year 1, consultee training was provided regionally instead of provincially, usually at 2-day retreats, led by at least two inclusion facilitators. Based on the stated desire of centre directors to include all staff, not just those in the target classroom, and on the increasing presentation skills of the inclusion facilitators, this seemed like a cost-effective and popular change to make. Usually these regional trainings — free to all, but with costs of travel and staff replacements covered for participating directors and ECEs — generally attracted between 15 and 75 participants. In autumn 2007, directors and ECEs were trained regionally — quite a jump from the 44 trained provincially in the first year!

2.5 OVERALL PROJECT DESIGN: 3 PHASES AND 10 STEPS

The project was conceptualized as having three phases that corresponded to points of data collection. Following training in the use of the *ECERS-R* as a measure of program quality, Baseline measures were collected prior to, or at the start of an intensive period of consultation and collaborative work with the lead educator in the preschool room in the centre and with the director. During this period the inclusion facilitator worked directly with centre staff to improve program quality, inclusion quality and inclusion capacity in on-site visits every week or two weeks. Measures were repeated at the end of the 5-month on-site consultation phase, and again, approximately 4-5 months later (the end of the sustainability period). The three phases were originally to take place within a 10 month period. In year 1 it became evident that the three phases would need to take place in a 12-14 month period, because sustainability could not be measured during the summer (when some centres closed and others were on a summertime routine), or during September (a period of major adjustment to new children.)

PFI-NS, like the earlier *Keeping the Door Open* project, was designed with 10 steps, not 8 as in the original *PFI* model. Two steps related to the Sustainability period (Step 7 — "Sustainability Period" and Step 8 — "Evaluation after Sustainability") were added as distinct steps in the model. A diagram of the 10 steps that guided project activities is included in Figure 2.1.

2.6 ROLE OF THE INCLUSION FACILITATORS

It was originally anticipated that the inclusion facilitators would visit each of their five centres on a weekly basis during the active consultation phase, staying approximately half a day in each. The project manager was assigned only two centres, because of her other responsibilities. The capacity building phase — Steps 1 through 4 — required this intensity of visitation, but needs varied during the on-site consultation phase. Project logs indicate that *PFI-NS* inclusion facilitators usually made 3 or 4 visits to each centre every month, but sometimes logged as many as 6-8 visits. These visits may have been used for observation, dropping off resources, staff meetings, parent meetings, work parties or in-house workshops.

Figure 2.1 The *Partnerships for Inclusion - Nova Scotia* Model

Partnerships for Inclusion
On-Site Consultation Model

(Adapted from Palsha & Wesley 1998/ van Raalte and Lysack 2001)

Capacity Building

Step 1 - Establish Relationships
On-site consultation model is discussed and a relationship begins between facilitator and centre staff.

Step 2 - Provide Project Training
Training on Environment Rating Scale and additional project components is provided for all staff in participating child care centres.

Step 3 - Administer Scales
Facilitator administers Environment Rating Scale and SpeciaLink Inclusion Scales.

Step 4 - Collaborative Action Plan
Administrator and centre staff meet with faciltator to gain consensus on evaluation. Goals and objectives are identified and a collaborative action plan is developed.

Step 5 - Inclusion Seminar
Inclusion seminar is provided for all staff in participating centres.

Consultation and Support

Step 6 - On-Site Support
Administrator and centre staff work on objectives of collaborative action plan with support and assistance from the facilitator.

Step 7 - Evaluate Changes
Changes are evaluated using Environment Rating Scale and Inclusion Scales. Administrator and centre staff meet with facilitator to develop a collaborative action plan based on this evaluation.

Step 8 - Sustainability Period
Administrator and centre staff work on objectives for a period of time without on-site visits or support from facilitator.

Step 9 - Evaluation After Sustainability
Facilitator reevaluates using Environment Rating Scale and Inclusion Scales.

Step 10 - Identification of Future Needs
Administrator and centre staff meet with facilitator to identify any future needs that the centre may have and develop another collaborative action plan.

It is important to be clear about the role and responsibilities of the inclusion facilitators, their "caseload," and the frequency and nature of their visits, both to appreciate the nature of the intervention as it was delivered and to enable appropriate comparisons to similar programs in other jurisdictions. Depending on the purpose, visits varied in length from one hour to a full day, but most often lasted for a full half-day. Efforts were made to schedule the visits when the lead educator (and sometimes the director) were available and could be freed up from normal duties. Not infrequently, visits occurred at the end of the day or even on a weekend to facilitate changes in room arrangements. Facilitators often provided food during work parties or professional development workshops to support participation of staff in after-hours activities.

In retrospect, the term "inclusion facilitator" may be misleading, as much of the time was not directly focused on providing supports for including children with special needs.[iii] In reality, the major focus and the majority of time and energy was spent working collaboratively with lead preschool educators and centre directors to enable them to change current practices in order to provide more enriched, flexible, child-oriented programming in comfortable and well-organized environments. A basic assumption was that such changes would result in better quality programs, more confident and skilled early childhood practitioners, and greater capacity to include children with special needs. This premise is based on the fact that positive inclusion experiences for children with special needs and their parents require high quality programs that are staffed by committed, sensitive early childhood educators who have the training, resources and support they need to be successful in meeting the needs of all of the children in their centre.[4]

During all four cohorts, attention to inclusion quality (for centres already including children with special needs) and to inclusion capacity (for centres not yet, or only very rarely including special needs) increased as staff became more familiar with the *SpeciaLink Child Care Inclusion Scales* and as the *Scales* were revised to conform to the *ECERS* model. In centres that seemed ready, consultation time was allocated to discuss the relevant items in the *Scales*, sometimes to develop inclusion policies, sometimes to assist with inclusion practices. As of Cohort 4, inclusion facilitators were quite skilled in using Form B of the *Inclusion Scales* — however, the number of centres including children with special needs was lowest in that cohort.

Inclusion facilitators played multiple roles: they were trainers during the technical assistance phase (training directors and staff in procedures for conducting and interpreting the *ECERS-R* and the *SpeciaLink Inclusion Scales*), they were models, they were coaches, and they were confidants. They were active listeners, they were workshop presenters (a major professional development role), they were resource locators, and they were librarians. They often became friends. In large part, they facilitated staff and director engagement in reflective processes and active change. (See Table 2.1.)

[iii] Specific supports that focused directly on inclusion practices occurred, when children with special needs were present in the classroom in which *PFI-NS* interventions were focused, as well as in centres that had children with special needs in other classrooms.

The Professional Development (PD) role of the inclusion facilitators increased throughout the four years of the project. Not only were workshops developed for current *PFI-NS* participants, but previous and potential participants were also invited. Thus, the PD events were a refresher and a recruiting tool, as well as an important aspect of the project.

Table 2.1 Inclusion Facilitators' Multiple Roles

WHAT INCLUSION FACILITATORS DID:	
• Inter-rater assessments of program quality (*ECERS-R*) • Assessments of Inclusion Quality and Inclusion Capacity (*SpeciaLink Scales*) • Collaborative action plans • Regular visits to centres • Discussions, encouragement, suggestions • Joint problem solving • Shared information with staff in other rooms • Participated directly in helping staff change centre environments	• Brought equipment, materials, resources, print information • Modeled specific behaviours; Helped develop specific skills • Mentor, colleague for directors • Took staff to visit other centres • Presented workshops for staff on various topics, centre-wide • Regional workshops • Compiled extensive case notes for evaluations • Ongoing learning and resource sharing; Presentations to other professionals

Each facilitator received $200 per centre to spend during the length of the project. This money was to be used in ways that might make the consultation process a little easier for centres. Inclusion facilitators used this money to buy pizza for a supper meeting if they wanted to meet with staff, or perhaps to take the "lead educator" to lunch if she wanted to meet with her over her lunch break. Funds were used to purchase resource books for centres. Books such as *The Inclusive Classroom* or *Designs for Living and Learning* were given to some centres after inclusion facilitators finished working with them. Money was also used to purchase inexpensive materials to be used in the centres. A trip to the local "Frenchy's" allowed facilitators to pick up items that could be added to the dramatic play area, and also reminded centre staff that useful items could sometimes be obtained at no-cost or low-cost. The facilitators also used their knowledge of a centre's needs to be on the lookout for things that would be particularly useful for that centre. (One facilitator would tell you that she spent the bulk of her money on science materials.)

There has been some discussion about whether or not funds should be given directly to the centres to spend, instead of being spent at the facilitators' discretion. The facilitators recognize that *PFI* in North Carolina gives the money directly to centres. *PFI-NS* facilitators haven't decided to change what they are doing, but there is a valid argument to be made about giving centres control of this resource. At the same time, the facilitators

recognize that in doing so, they would no longer have the option to use the money for a meal to bring staff together for a meeting. Facilitators have also been able to support staff in attending PD events that they might not otherwise access by providing gas money or money for a substitute.

Facilitators worked hard to gain the trust and respect of centre directors and lead teachers in the first, capacity-building phase of the project, and to obtain buy-in and engagement. In particular, initial concerns about being evaluated and judged by an outsider had to be addressed in order to use the initial assessments effectively as a tool for collaborative action planning. Collaborative action planning is a key feature of this model. As is true of most change models, participants must take an active role in committing themselves to specific goals and activities and appreciate the value of doing so (rather than simply acting in compliance with or to please an external agent) if change is to be significant and sustained.

Because of their extensive knowledge and experience in providing high quality, inclusive child care, the inclusion facilitators were often able to anticipate what they could do or provide to help the early childhood educators make positive changes. The first areas selected for collaborative planning often were related to room arrangements or other physical changes that could be made relatively easily, such as changing traffic patterns to enable easier transitions, creating an area with soft cushions and privacy for a place for quiet activities, and organizing materials to make them more easily accessible to the children and staff. Other immediate targets were any changes required to ensure children's health and safety, as well as program aspects with particularly low scores on the *ECERS-R* measure. These early changes often produced visible results and typically were well-received by the staff, the children and their parents, providing positive reinforcement and additional impetus for making changes that required a greater investment of time and/or a willingness to learn and adopt new ways of working with the children.

In the first offering of the *PFI-NS* model, efforts were concentrated on work with the lead educator in one selected room, with the lead educator working to support buy-in and change among other ECEs in the room. One of the early learnings for all *PFI-NS* facilitators, however, was the importance of providing information and support to all staff in the centre, and sometimes to parents and board members as well. Consequently, many of the professional development presentations and workshops that the facilitators provided were open to all centre staff, and sometimes to parents and board members. Project logs confirmed that at least three of the five inclusion facilitators offered significant numbers of these presentations — 2 parent meetings each, 2 board meetings each, and 2 staff meetings each that included focused content on items from the *ECERS-R* (often related to emergent curriculum development, and to activities related to Math and Science). The other two inclusion facilitators did no board or parent meetings, and provided staff training sessions during the day at lunch time or nap time to enable more staff to attend than would otherwise be possible.

One inclusion facilitator conducted a regional *ECERS-R* training session that attracted not only the two lead educators who had missed the earlier provincial training session, but also many staff from the five centres she was working with (both staff from the target

classrooms and other staff). This same facilitator provided a centre-wide *ECERS-R* training session (with assistance from another facilitator) that provided the opportunity for a lead educator from another region to attend.

After the first year, all consultee training was presented regionally by inclusion facilitators, enabling all staff from participating centres to attend. Interviews at the end of the sustainability phase of each cohort indicate significant *diffusion* or *spill-over* effects of the project into other classrooms, in part because of the shared training, and in part because of the visible (and often effective changes) made in the target classrooms. Although many directors commented about their desire to have *PFI-NS* staff work intensely with their other classrooms, they did admit that there had often been changes already.

After four years, it must be noted that all of the original *PFI-NS* inclusion facilitators continued to work in the project, gaining valuable learning opportunities and experiences. Anecdotal information revealed that they have become an extremely effective team and that they shared resources and provided support to each other that was invaluable. Several of them have been invited to present their inclusion-sensitive workshops in other provinces, and the manager co-presented (with Sharon Hope Irwin) at a 2-day training workshop in another province. In addition, the *PFI-NS* coordinator is an invited presenter at many Nova Scotia conferences and in-services, and inclusion facilitators sit on a variety of related task groups and committees, including the ECDI regional collaboration teams, the Early Childhood certification council, the advisory committee for the ECD support centre in Cumberland, the Nova Scotia council for Early Child Development, and national conference planning committees.

End Notes

1 Buysee, V., Wesley, P.W., Bryant, D. & Gardner, D. (1999). Quality of early childhood programs in inclusive and non-inclusive settings. *Exceptional Children, 65,* (3), 301-314.

2 Palsha, S.A. & Wesley, P.W. (1998). Improving quality in early childhood environments through on-site consultation. *Topics in Early Childhood Special Education*, 18:4, 243-253.

3 Mitchell, D.L. (VanRaalte). (2001). *Keeping the door open: Enhancing and monitoring the capacity of centres to include children with special needs*. NB: New Brunswick Association for Community Living.

4 Irwin, S.H., Lero, D.S. & Brophy, K. (2000) *A matter of urgency: Including children with special needs in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org.; Irwin, S.H., Lero, D.S. & Brophy, K. (2004). *Inclusion: The next generation in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org.

CHAPTER 3: METHODS USED TO EVALUATE *PFI-NS* PROCESSES AND OUTCOMES

It is important to collect both process and outcome evaluation data about new initiatives to appreciate what impacts they have and for whom, and how outcomes can be improved by fine-tuning or revising intervention strategies. The data collected for the present study pertain to the first four cohorts of early childhood programs that participated in *Partnerships for Inclusion* in Nova Scotia *(PFI-NS).* Data were analyzed for a total of 98 centres. As of October 2007, Cohort 5 was nearing completion and Cohort 6 centre directors and staff were beginning training and participating in baseline assessments.

While the overall goals and approach used in each cohort were the same, each offering of *PFI-NS* was unique in some respects, as described in Chapter 4. Information examined from each cohort and for all 98 centres considered together provide important information on how *PFI-NS* worked and what effects this method of providing assessment, consultation and supports had on centres and their staff. In particular, data were collected from multiple sources to learn about the extent to which *PFI-NS* had short and longer-term impacts on program quality and on centres' capacities to effectively include children with special needs. *Program quality* refers to observed program quality as assessed by the Early Childhood Environment Rating Scale-Revised (*ECERS-R*); *inclusion quality* is measured in centres including at least one child with special needs during some part of the intervention, as assessed by the *SpeciaLink Inclusion Principles and Practices Scales*. *Inclusion capacity* refers to a centre's readiness and willingness to include children with special needs in the future and is relevant to centres that did not include children with special needs during the 12-month period in which centres participated in the *PFI-NS* project.

3.1 EVALUATION DESIGN

From a scientific perspective, an experimental design that compares centres that are randomly assigned to receive *PFI-NS* support to a control group of centres that does not would offer the strongest test of the effects of the *PFI-NS* intervention. For a variety of reasons however, many training and support initiatives do not use an experimental method for evaluation purposes. More commonly, training and support is offered to a number of centres in a particular locale and measures of program functioning or staff's knowledge or skills are compared before and after training. Often there is no longer-term follow-up, and response rates vary. Attention to the contextual factors in centres or in the community and to provincial policies that may affect centres at the same time, or that might facilitate or impede the capacities of the intervention to have a strong impact, is often lacking.

As McCall and Green (2004) have noted, the use of a randomized control trial design, while seen as desirable, may lead to erroneous conclusions about the effectiveness of interventions in the real world of community-based programs when programs would normally participate voluntarily and be affected by participants' motivation or belief in the service. Moreover, "experimenter-controlled uniform treatment administration insures that we know precisely the nature of the treatment documented to work by the evaluation, but it prohibits tailoring

treatment to the individual needs of participants, which is a major 'best practice of service delivery."[1] These scientists encourage program evaluators to use rigorous research methods that better match real-life circumstances by using the method that best suits the purpose of the study, the specific questions to be asked, the circumstances under which the research is conducted, and the use to which the results will be put.

The evaluation method used to assess the impacts of *PFI-NS* involved a quasi-experimental method (a variation on the common one-group pretest-posttest design) that was enhanced by comparing findings across multiple cohorts. Extensive data were collected about the centres and about program quality and inclusion practices at three points of time:

- at Baseline, before or at the very beginning of the *PFI-NS* assessment and consultation process;
- at the end of the active intervention / support phase; and
- approximately 4-5 months after the active support period ended.

The three points of data collection (generally corresponding to October, May/June, and October/November — and alternatively referred to as Baseline, Time 2, and Time 3) mark the beginning and end of the period of active intervention, followed by a Sustainability period when no active support was provided. Collecting data some time after the active support phase ends is important in order to determine whether impacts are sustained when there is no external agent visiting the centre on a regular basis and staff must follow through on initiatives themselves.

Although there was no control group of centres that did not participate in the project, data from successive cohorts of centres that participated in the *PFI-NS* initiative were analyzed to determine if this approach produces robust results. Comparisons across successive cohorts of centres provide a more rigorous test of the impacts of this initiative and allowed the program time to reach full maturity. Evaluation information (both formal and informal) was used to improve and fine-tune the *PFI-NS* approach and enabled assessment of variations, such as a higher caseload per facilitator in the third offering of the project. Important changes in the delivery of services (from initial centralized training to regional workshops and from an exclusive focus on quality improvement in a single room in the centre to a broader, less exclusive focus) are noted and considered in the analyses of data from individual cohorts.

Strengths of the evaluation approach are evident in the richness of the data collected from multiple sources and the use of well-known instruments to assess program quality and inclusion effectiveness. In addition, interviews were conducted with each centre director and lead educator to obtain their views of the changes that occurred in their centre/room and the factors that contributed to those changes. Reflective reports on each centre were provided by the inclusion facilitators and their observations provided a third window on the changes that occurred in the centres. Inclusion facilitators also provided invaluable insights on the factors that appeared to facilitate or limit desirable changes in the centres, leading to further improvements in successive waves of the project.

3.2 RESEARCH MEASURES

A variety of measures was used to obtain information about the centres, the participating directors and lead educators, and classroom practices. These included questionnaires, formal observational measures of program quality and inclusion principles and practices, telephone interviews with the director and lead educator towards the end of the sustainability period, and facilitators' case notes. As is often the case in an ongoing project, some changes in measures occurred. When changes were introduced, the intent was either to reduce the burden on directors and staff, to obtain more focussed information related to inclusion, or to improve the validity of key constructs. The overall goals and key measures summarized in this evaluation report were consistent across cohorts.

The major changes that were made are the following:

1. The fairly lengthy director and lead educator survey questionnaires used in Cohorts 1 and 2 were replaced by a brief (3 page) centre questionnaire completed by the director for Cohort 3 and later cohorts. The original questionnaires were used in earlier research studies and did not appear to add new knowledge about directors' and educators' attitudes and beliefs. The shorter centre questionnaire and a centre profile completed by the facilitators at Baseline retained key descriptive information about the centre, director, and staff and provided some additional information about each centre's inclusion history and the director's sense of the resources available to support inclusion in her centre. This change also reduced response burden for the director and staff.

2. The *Caregiver Interaction Scale,* an observational measure that yields scores related to sensitivity, harshness and detachment in caregiver-child interactions, was dropped after Cohort 1. Caregiver-child interactions were found to be a strength in most centres and this dimension was already being captured as a subscale in the Early Childhood Environment Rating Scale (*ECERS-R*).

3. Scoring of the *ECERS-R* was improved somewhat during Cohort 3 and in succeeding cohorts by the facilitators gaining access to additional resources, including a symposium with Dr. Pat Wesley from the University of North Carolina in September, 2004. An extended scoring sheet for the *ECERS-R* was also introduced, which the facilitators believe improved consistency and accuracy in scoring. Despite this change, the same measure was used across all cohorts and data regarding program quality and improvements can be summarized for the four cohorts as a total group.

4. One of the most significant changes, introduced in Cohort 3, was the shift to the revised and redeveloped *Specialink Inclusion Principles and Practices Scales*. As described below, while the basic concepts were retained, the newly developed measures (referred to as Form B) utilize specific indicators and a different, more objective means to score the *Principles and Practices Scales*. All *PFI-NS* facilitators had extensive training on the new measures before their adoption. Because Form A and Form B of the *SpeciaLink Inclusion Principles and Practices Scales* do not yield comparable scores, analyses employing these measures are separated for Cohorts 1 and 2 and for Cohorts 3 and 4.

A more detailed description of each of the research measures follows.

3.2.1 Survey Questionnaires from Centre Directors and Lead Educators

Each centre director and lead educator in Cohort 1 and 2 and 8 directors in Cohort 3 who agreed to participate in the *Partnerships for Inclusion - NS (PFI-NS)* project completed extensive survey questionnaires at Baseline. The two questionnaires were originally developed to assess child care directors' and early childhood educators' attitudes and experiences related to inclusion and have been used in two earlier studies [*A Matter of Urgency* (Irwin, Lero & Brophy, 2000)[2] and *Inclusion: The Next Generation* (Irwin, Lero & Brophy, 2004).][3] The director questionnaire also contains questions about centre practices and the resources available to support inclusion.[iv]

In Cohort 3, the long director and lead educator questionnaires were replaced by a shorter questionnaire comprised of 25 questions. This questionnaire was completed by the director at Baseline only. Questions were retained about centre demographics and the director's experience in child care and new questions were added to obtain more information about each centre's inclusion history and the director's views about centre strengths and challenges and the resources available to support inclusion. A brief *Partnerships for Inclusion-Nova Scotia* Centre Profile form was completed by the facilitator at Baseline as well. The Centre Profile form captured information about the director's and lead educator's training, the specific preschool classroom in which efforts were being targeted, and the number of children with identified special needs enrolled in the centre and in each room at baseline.

3.2.2 Measures of Program Quality

The primary measure used to assess program quality and improvements in quality over time was the *Early Childhood Environment Rating Scale-Revised (ECERS-R)* (Harms, Clifford & Cryer, 1998).[4] The *Caregiver Interaction Scale (CIS)* (Arnett, 1989)[5] was used only for the first cohort of centres. Inclusion facilitators were trained in the use of both scales and inter-rater reliability was established as part of training. Directors and lead educators were trained in the use and interpretation of the *ECERS-R.* Efforts to improve quality in centres relied strongly on collaborative action planning following the Baseline and Time 2 assessments. The *ECERS-R* was administered at each data point. Other indicators of quality (ratio and group size) were not assessed, as they are incorporated in provincial licensing requirements and presumably would not evidence much variability. Wages and working conditions of staff, the funding available to centres, and rates of staff turnover were not assessed directly, but are known to affect program quality. Inclusion facilitators noted that these factors did affect the extent to which some centres were able to make and sustain positive changes in program quality, inclusion quality and inclusion capacity, with staff turnover sometimes having a positive effect, but more often slowing progress once initial efforts had already been made.

[iv] Copies of all questionnaires are available from the authors. Copies of the *Specialink Inclusion Principles and Practices Scales – Form B* are available at www.specialinkcanada.org and are included in Appendix B.

The Early Childhood Environment Rating Scale-Revised (ECERS-R)

The *ECERS-R* is the most widely used measure of program quality in North America. Trained observers made detailed ratings on 43 items that yield an overall quality score and seven subscale scores. The seven subscales comprise: (1) space and furnishings; (2) personal care routines; (3) language-reasoning; (4) activities; (5) interactions between children and staff; (6) program structure; and (7) resources and supports for parents and staff. One item specifically assesses provisions for children with disabilities; however a number of other items contain components that must be met for a score of 5 or higher if children with special needs are present. The *ECERS-R* is actually a measure of quality in the specific classroom/playroom in which observations are made. While there may be differences in quality from room to room and for children of different age groups, in practice the observational score obtained from a room is treated as a measure of program or centre quality.

Each observational item in the *ECERS-R* instrument has specific descriptors that are considered in the rating of that item; each item is scored from 1 to 7. The average score obtained across all items is used as the measure of program quality. Average *ECERS-R* scores below 3.0 are indicative of poor or inadequate quality. *ECERS-R* scores between 3.0 and 4.9 indicate minimal or mediocre quality. Scores above 5.0 indicate good quality programs that promote children's development, with scores closer to 7.0 indicating excellent overall quality.

Individual *ECERS-R* items and indicators may be omitted from scoring if they are not relevant. For example, Item 37, *Provisions for Children with Disabilities*, is not scored if there are no children with special needs present in the room when observations are made. The assessment of part-day preschool programs (introduced in Cohort 2) omits items that are not relevant to part-day programs. Nonetheless, average subscale scores and average *ECERS-R* scores can be compared across programs, since the number of items deemed not applicable is usually small.

The *ECERS-R* has been demonstrated to be a reliable and valid measure of program quality in a wide range of studies. Research on the influence of child care quality on children's development consistently confirms that children in high quality programs compared to those in low-quality care have better social skills (Peisner-Feinberg & Burchinal, 1997;[6] Vandell, 1999);[7] fewer problem behaviours (Vandell, 1999);[8] better language skills (Clarke-Stewart, 1999;[9] Peisner-Feinberg & Burchinal, 1997);[10] and higher scores on measures of school readiness.[11] Moreover, the effects of the quality of child care received by children in the preschool years has been demonstrated to affect children's subsequent language and math skills and peer relationships in Grade 2 (Peisner-Feinberg, Burchinal, Clifford, Culkin, Howes, Kagan, Yazejan, Byler, Rustici & Zelazo, 1999).[12] Research in both the U.S. and Canada indicates that centres that evidence higher levels of inclusion quality also score higher on measures of program quality (Buysee, Wesley, Bryant & Gardner, 1999;[13] Irwin, Lero & Brophy, 2004).[14] Indeed, Irwin, Lero & Brophy concluded that high program quality is an essential requirement for inclusion quality.

The Caregiver Interaction Scales

The *Caregiver Interaction Scales (CIS),* used only in Cohort 1, were developed to gather specific information about the affective tone of adult-child interactions in a child care room. The scales assess three specific dimensions of teacher affect. The first is teacher *Sensitivity,* indicating that an early childhood educator behaves in ways that indicates she/he is warm, attentive and engaged. A second dimension is *Harshness,* indicated when teachers are critical, threatening or punitive. The third dimension is *Detachment,* indicated by low levels of interaction with the children and limited involvement. Trained observers rated ECEs in preschool rooms on 26 items, each of which is a specific behaviour. Observers noted whether each behaviour was observed not at all, somewhat, quite a bit, or very much (scored as 1-4). High scores on the Sensitivity subscale and low scores on Harshness and Detachment are desirable. Research indicates that scores obtained on these scales predict children's language development and attachment security (Whitebook, Howes & Phillips, 1990).[15] Higher scores on the *ECERS-R* were significantly and positively correlated with *CIS* Sensitivity ratings and negatively correlated with ratings of teacher Detachment and Harshness in the Canadian *You Bet I Care!* study (Goelman, Doherty, Lero, LaGrange & Tougas, 2000).[16]

Scores obtained on the *Caregiver Interaction Scales* were included in our first evaluation report.[17] ECEs in Cohort 1 centres were observed at Baseline to have average scores indicating high sensitivity and low harshness and detachment, with limited variability in scores. For this reason and because teacher-child interactions are captured in the *ECERS-R* measure, the use of the *CIS* measure was discontinued in later cohorts.

3.2.3 Some Challenges in Assessing Changes in Inclusion Capacity and Inclusion Quality

Initially, the *PFI-NS* project was anticipated to be used in centres that included at least one child with special needs and had some history of providing inclusive care. A decision was made to offer the program to centres that did not currently include children with special needs when centres were being recruited for Cohort 2. This decision was made both because facilitators were finding it more difficult to find centres with children with disabilities and because many centres that could benefit from the project would otherwise be excluded. As well, the Department of Community Services was interested in seeing if *PFI-NS* support could help build inclusion capacity in centres that did not include children with special needs to expand the opportunities for placing children in community programs.

Based on the data available, we noted that 21 of the 77 centres in Cohorts 2, 3 and 4 did not include any identified children with special needs throughout the project (Baseline through Time 3 assessment). The proportion of centres that never included any child with special needs was likely 0% in Cohort 1, 19% (4 centres) in Cohort 2, 19% (6 centres) in

Cohort 3, and 44% (11 centres) in Cohort 4.[v] These data once again confirm *PFI-NS* facilitators' observations that the later cohorts of centres were less likely to have children with special needs – a function of their previous experience or lack thereof, their willingness to include children with special needs at this particular time, and the extent to which parents and community professionals approached the centre as a desirable program in which a child with special needs could benefit. Given the lack of participation of children with special needs in some centres during the project, the effects of *PFI-NS* in these centres would most likely be shown in a change in their *capacity* to include children, rather than in *inclusion quality*, as assessed by the *SpeciaLink Inclusion Principles and Practices Scales.*

As no measure of *inclusion capacity* exists, we decided to use several indicators that might be appropriate for this purpose: reports of changes made in the program that would allow children with varying abilities to participate more easily, reported change in the director's willingness to include children with special needs, and evidence of progress in considering the inclusion principles that would apply in the centre to guide practices. The first two indicators are based on the directors' and lead educators' responses to structured interviews conducted at the end of the Sustainability period. Progress in developing more inclusive principles was based on obtained scores on the *SpeciaLink Inclusion Principles Scale.*

There are three challenges that affected the capacity of our current measures to assess changes in *inclusion quality*. The first is the challenge of defining which children have special needs. We purposefully used the criterion of children with "identified" special needs throughout the project. This criterion is useful, but there were circumstances when a child who had not yet been assessed was participating in a program without this designation, and hence was not "counted" as a child with special needs at that time for assessment purposes. Secondly, there were circumstances when children with special needs moved out of the room that was the target for consultation and assessment, but remained in the centre (or transitioned to school). In these cases, changes that could demonstrably be considered improvements in inclusion practices in the centre were not evident in the in-room *PFI-NS* assessments. Thirdly, we have noted that the *SpeciaLink Inclusion Principles and Practices* measures underwent substantial redesign, including the introduction of a new method of scoring based on specific indicators. The new version of these measures was introduced in Cohort 3 and scoring may not have been as consistent as it likely was in Cohort 4, once the facilitators had more experience with the measures in the field. As well, the highest level scores ("7" or "excellent") in some items in the later version of these two measures require external validation of past or current practice by the director, more than one early childhood educator and, sometimes, a parent. In cases where there has been staff turnover, a new director or early childhood educator or a parent who is new to the centre may not be aware of current principles or practices or be familiar with past experiences. This may make it difficult to achieve a

[v] The data collected in Cohort 1 did not allow this analysis at the centre level, but it appears that all centres in the first cohort had at least one child with special needs enrolled in the centre at some point during the project.

high score on some items in these circumstances. All of these factors need to be considered in interpreting the data.

3.2.4 Measures of Inclusion Quality / Inclusion Capacity

ECERS Item 37 – Provisions for Children with Disabilities

While other items in the *ECERS-R* include indicators that are relevant to the quality of the program and the environment for children with special needs, Item 37 focuses on inclusion specifically. It is used only if there is at least one child with special needs enrolled and present in the classroom when observations are being made. This item is part of the subscale assessing *Program Structure* along with three other items. Item 37 criteria relate to four dimensions of inclusion:

- the extent to which children's needs are formally assessed, staff have information about the assessments, staff follow through with activities and interactions recommended by professionals to meet identified developmental and social goals, and staff contribute to individual assessments and intervention plans;
- the degree to which modifications are made in the environment, program, and schedule to enable children with special needs to participate with other children;
- the degree to which parents are involved in helping to set goals for their child, information is shared between parents and staff, and parents provide feedback on how the program is working; and
- the extent to which children with disabilities participate with other children and are integrated into the group rather than being segregated or excluded. Efforts are also made to carry out professional interventions within the regular activities of the classroom.

These four dimensions are based on indicators that can be observed directly, as well as educators' responses to questions about specific practices. A rating of 3 or lower on Item 37 reflects a situation where assessments are either not done or are not shared with staff in ways that would be useful to meet the needs of the child; only limited modifications in teacher-child interactions, the environment, or program activities have been made to meet the needs of children with disabilities; parents are involved minimally or to some extent in setting goals for the child, but are not extensively involved or provided with information and support; and there is limited involvement of children with disabilities with other children in on-going activities. A rating of 5 or higher indicates that staff are actively involved in programming to meet the child's needs and follow recommendations made by professionals to help children meet specific goals; modifications to activities and the environment have been made so that children with disabilities can participate fully and comfortably with other children; and parents are active partners with the staff and are respected and supported.

The SpeciaLink Inclusion Principles Scale

The *SpeciaLink Inclusion Principles Scale – Form A* (2001) was used in Cohorts 1 and 2 and was replaced by *Form B* for Cohort 3 and later cohorts. *Form A* of the *SpeciaLink Inclusion Principles Scale* is based on five questions 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 inclusion facilitators administered the scale at Baseline and again at Time 2 and Time 3. 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. Each item is scored on a scale of 1 to 5 with a value of 1 indicating that principles are completely undeveloped and a value of 5 indicating that the centre has adopted principles that explicitly support full inclusion and that they are evident in observed practices. While there is some description of what each value means, item scores are not based on specific indicators. The *SpeciaLink Inclusion Principles Scale – Form A* was used in the study, *Inclusion: The Next Generation* (Irwin, Lero & Brophy, 2004) and scores were used as one component in a composite *Index of Inclusion Quality.*

The five items that make up the *SpeciaLink Inclusion Principles Scale – Form A* pertain to the following areas:

1.	The principle of "zero reject"	No *a priori* limits are set that would exclude children with particular levels or types of disabilities.
2.	The principle of naturally occurring proportions	The centre enrols roughly 10-20% of children with special needs, in "natural proportion" to their occurrence within the catchment area of the community.
3.	Hours of attendance	Children with special needs are not limited in their attendance to part time or four days a week, while other children may attend full time.
4.	Full participation	The centre is committed to enabling the full participation of children with special needs in the regular program; pull-out time is limited or avoided when interventions can be done in the room and can involve other children. It is never assumed that any activity cannot be adapted so that every child can participate.
5.	Advocacy for inclusion and maximum feasible parent participation	The centre is committed to reducing barriers to inclusion and promoting accessible high quality child care for all children and parents in the community. It also involves families to the maximum extent feasible, providing child care, transportation, flexible meeting hours, translation, etc., as necessary. "Maximum feasible participation" does not force family participation as a requirement of enrolment, but it demonstrates that every effort is made to make families feel welcomed and valued.

The *SpeciaLink Inclusion Principles Scale – Form B* (2005) was developed in 2004 by Sharon Hope Irwin and was further revised in 2005. *Form B* of both the *Specialink Inclusion Principles* and *Practices Scales* were developed 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. Form B* of the *SpeciaLink Inclusion Principles Scale* consists of six items and 92 specific indicators. The first four items are the same as those described above in *Form A.* The fifth item in *Form A* is split into two discrete items in Form B: Principle 5 – Maximum feasible parent participation at the parent's comfort level and Principle 6 – Leadership, Pro-active strategies and advocacy for high quality, inclusive child care. *PFI-NS* facilitators were trained in the use and scoring of the new scale prior to its 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 if no children with special needs were enrolled at the time.

The SpeciaLink Inclusion Practices Profile

The SpeciaLink Inclusion Practices Profile– Form A was used in Cohorts 1 and 2 and was replaced by *Form B* for Cohort 3 and later cohorts. *Form A* of the *SpeciaLink Inclusion Practices Profile* 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 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. No specific indicators are provided for scoring. The Profile was developed in 1991 as a synthesis of best practices in integrated child care research and literature in a form that could serve as a checklist or benchmark in a study of high quality child care centres. It was used in the study, *Inclusion: The Next Generation* (Irwin, Lero & Brophy, 2004).

Form B of the *SpeciaLink Inclusion Practices Profile* assesses centres on the same 11 practices. It is scored in a fashion similar to the *ECERS-R.* Individual item scores can range from 1-7 and are based on specific indicators that are observed as present or absent. In all, 159 specific indicators are provided. *Form B* of both the *SpeciaLink Inclusion Principles Scale* and the *SpeciaLink Inclusion Practices Scale* are available from SpeciaLink at http://www.specialinkcanada.org.

The 11 items in both *Form A* and *Form B* of the *SpeciaLink Inclusion Practices Profile* cover practices in the following areas:

1.	The physical environment	The degree to which modifications have been made to support inclusion and enhance accessibility
2.	Equipment and materials	The extent to which adaptations have been made and special equipment and materials are available and used in ways that allow children to participate comfortably in the group and that enhance their skills and capabilities
3.	Director's role	The director is actively involved in supporting inclusion; is knowledgeable and enthusiastic
4.	Staff support	The degree of support provided to staff through consultative assistance and flexible/reduced ratios to support them in meeting individual children's needs
5.	Staff training	The number of staff who have some training related to special needs and staff's access to continuing in-service training opportunities
6.	Therapies	The degree of provision of therapeutic intervention provided to children in the centre — and the manner in which it is provided (in a pull-out space or separate clinic and/or within the program); the extent to which staff are involved in goal setting and work collaboratively with parents and therapists
7.	Individual Program Plans (IPPs)	The extent to which IPPs are used to inform programming in the regular group setting, and are developed collaboratively by resource teachers or consultants, staff and parents
8.	Parents of children with special needs	The extent to which parents are involved, receive information and participate in decision making—both related to their own child, and as an advocate for other children at the centre and in the community
9.	Involvement of typically developing children	The extent of interaction between children with special needs and their peers; the extent to which social inter-action is facilitated and children are accepted by others
10.	Board of directors or advisory committee	The centre's board or parent advisory committee promotes and supports inclusion as policy in the centre and as desirable in the wider community
11.	Transition to school	The degree to which the local school or school board, parents and program staff work collaboratively in transition planning and are proactive to support the child's school placement

3.2.5 Qualitative Data

Interviews with Directors and Lead Educators

In order to obtain further information about how *PFI-NS* interventions and supports affected the programs involved, semi-structured telephone interviews were conducted with the participating centre directors and lead educators shortly after the Sustainability period ended by a member of the research and evaluation team. Both directors and teachers were asked what specific changes they made in the classroom as a result of *PFI-NS* that relate to improved quality and about other individual and centre-wide impacts attributable to the project. They were also asked about any changes that pertain to children with special needs and/or inclusion practices that resulted from the project. Interview questions also covered whether any changes resulted from other co-occurring workshops or activities as a check on the validity of interpreting the impacts of *PFI-NS*. Finally, participants were asked what recommendations they had for optimizing *PFI-NS* consultation if the project were to be extended to other centres. Responses to these open-ended questions were coded and summarized for analysis and provided further insight into the experiences of participating child care staff and directors.[vi]

Inclusion Facilitators' Reports

The project manager and inclusion facilitators kept detailed notes and observations about each centre. These notes summarized what inclusion facilitators experienced over time and the changes they observed in individual centres and classroom environments. The inclusion facilitators' reports provided particular insight into the factors that, in their opinion, facilitated positive changes in program quality, as well as factors that were obstacles and barriers to positive change. The facilitators' reports also provided insight into the relational aspects embedded in this type of intervention and support project. Valuable suggestions for future offerings of the *PFI-NS* model to successive cohorts were also obtained.

In summary, data pertinent to evaluating both the *processes* involved in providing training, assessment, collaborative action planning and support to child care programs and to the *outcomes* of the project were obtained from a variety of sources, using both quantitative and qualitative approaches. Considerable information was obtained about the centres at Baseline. Repeated measures of program quality, inclusion quality and inclusion capacity were utilized to assess both short-term and longer-term effects of *PFI-NS*. Interviews with centre directors and lead educators and detailed summaries provided by inclusion facilitators added further rich information about each offering and suggested ways the model could be improved in the future.

[vi] The interview schedules are included in Appendix A to this report.

End Notes

1 McCall, R. B. & Green, B.L. (2004). Beyond the methodological gold standards of behavioral research: Considerations for practice and policy. *Social Policy Report, 18* (11), 1-12.

2 Irwin, S.H., Lero, D.S. & Brophy, K. (2000) *A matter of urgency: Including children with special needs in child care in Canada.* NS: Breton Books. Available from http://www.specialinkcanada.org.

3 Irwin, S.H., Lero, D.S. & Brophy, K. (2004). *Inclusion: The next generation in child care in Canada.* NS: Breton Books. Available from http://www.specialinkcanada.org

4 Harms, T., Clifford, R.M., & Cryer, D. (1998). *Early Childhood Environment Rating Scale - revised edition (ECERS-R).* N.Y.: Teachers College Press, Columbia University.

5 Arnett, J. (1989). Caregivers in day care centers: Does training matter? *Journal of Applied Developmental Psychology 10*: 541-552.

6 Peisner-Feinberg, E.S. & Burchinal, M.R. (1997). "Relations between preschool children's child care experiences and concurrent development: The Cost, Quality and Outcomes Study." *Merrill-Palmer Quarterly, 43*: 49-70.

7 Vandell, D.L. (1999). *Cognitive, linguistic and social consequences of early experience: Child care and social competence: NICHD study.* Paper presented at the American Association for the Advancement of Science meetings, Anaheim, CA. January 21-26.

8 *ibid.*

9 Clarke-Stewart, A. (1999). *How child care relates to children's cognitive and language development: NICHD study.* Paper presented at the American Association for the Advancement of Science meetings. Anaheim, CA. January 21-26.

10 Peisner-Feinberg, E.S. & Burchinal, M.R. (1997). "Relations between preschool children's child care experiences and concurrent development: The Cost, Quality and Outcomes Study." *Merrill-Palmer Quarterly, 43*: 49-70.

11 *ibid.*

12 Peisner-Feinberg, E.S. et al.. (1999). *The children of the cost, quality, and outcomes study go to school: Executive Summary.* Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development.

13 Buysee, V., Wesley, P.W., Bryant, D. & Gardner, D, (1999). Quality of early childhood programs in inclusive and non-inclusive settings. *Exceptional Children, 65,* (3), 301-314.

14 Irwin, S.H., Lero, D.S. & Brophy, K. (2004). *Inclusion: The next generation in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org.

15 Whitebook, M., Howes, C. & Phillips, D. (1990). *Who cares? Child care teachers and quality of care in America*. Final Report of the National Child Care Staffing Study. Oakland, CA: Child Care Employee Project.

16 Goelman, H., Doherty, G., Lero, D.S., LaGrange, A. & Tougas, J. (2000). *You Bet I Care! -- Caring and learning environments: Quality in child care centres across Canada.* ON: University of Guelph: (Centre for Families, Work and Well-Being). Available from Web Site: http://worklifecanada.ca

17 Lero, D. S., Irwin, S. H. & Darisi, T. (2006). *Partnerships for Inclusion- Nova Scotia*: An Evaluation Based on the First Cohort of Child Care Centres. Specialink and the Centre for Families, Work and Well-Being. Available at http://www.specialinkcanada.org/books/PFI_report.pdf

CHAPTER 4: A DESCRIPTION OF PARTICIPATING CENTRES AND STAFF AT BASELINE (TIME 1)

This report is based on data from 98 centres that participated in the first four cohorts or cycles of *PFI-NS*. Data are summarized from 21 centres in each of Cohort 1 and Cohort 2, 31 centres in Cohort 3, and 25 centres in Cohort 4.[vii] In each cohort, centres were distributed among six regions across the province, including the Halifax/South Shore region, the Dartmouth/Valley region, Truro/Northern region, and Antigonish. Cohorts 1 and 2 included some centres from Cape Breton; Cohort 3 included centres from the western region (Yarmouth) and in Cohort 4, several centres from the west near Middleton participated. No Cape Breton centres were included in Cohorts 3 and 4, since an inclusion facilitator moved from Cape Breton to Western Nova Scotia to serve programs in that region.

As described in Chapter 2, the initial criteria for participation were: licensed, full-day programs operating for at least one year, including at least one child with special needs or with a history of inclusion, with no special curriculum or unique mandate. In Cohort 2, the decision was made to allow part-day preschool programs to participate (no more than 25% of a cohort) since they provide care and education to many children in the province and a number of preschool program directors were eager to participate in the project. Moreover, the requirement of enrolling a child with special needs was dropped, since many centres volunteering for PFI did not include any children with special needs.

Centre participation was voluntary, with $200.00 available per centre from the *PFI-NS* facilitators to support staff participation and the purchase of materials and resources for the participating centres. Centres participated for a variety of reasons, often because the director appreciated that the *PFI-NS* project provided a very desirable opportunity -- one that could help move their centre forward to make changes that they felt they were more than ready for, and as a potentially very positive support for child care staff. A number of centres in the later cohorts participated after having heard positive comments about the project from other centre directors; a few were encouraged to participate or were referred by their local early childhood development officer (ECDO).

A lead educator volunteered or was selected by each centre director to participate as well. It is the lead educator's room that was the focus for assessments and quality improvements. In Cohort 1, the director and lead educator participated in the original training related to the *ECERS-R* and the *PFI-NS* model in Halifax. In later cohorts, the director, the lead educator, and other staff participated in regional training sessions on the *ECERS-R*, the *PFI-NS* model, Quality, and Inclusion. Both the director and the lead educator had instrumental roles in encouraging other staff in their centre/room to be involved in change processes. The director and lead educator completed survey questionnaires at Baseline and participated in interviews that typically occurred near or after the Time 3 assessment that marked the end of the Sustainability period. In Cohorts 3

[vii] Six centres that originally started were dropped from analysis: 1 because staff turnover precluded continuing efforts in the preschool room, 1 because the same director and staff were involved in preschools in two locations, 1 centre dropped out of the project, and 3 centres closed during the project.

and 4, Baseline information was obtained only from the director via a shortened questionnaire and the lead educator survey form was dropped.

Table 4.1 provides a summary of the timing of key phases and assessment points for each cycle. In all cases, all points of data collection occurred within a one year period, most often beginning in the fall, with an active consultation phase (punctuated by Baseline and Time 2 assessments) that lasted 4-5 months. The consultation phase was followed by a 4-5 month sustainability period when contact between the facilitator and each centre was limited. The end of the Sustainability phase was marked by the Time 3 assessment; follow-up interviews with the director and lead educator generally occurred after that assessment. Cohort 2 was somewhat unique in being shorter, because project funds initially were only allocated until March 31, 2004. As well, assessment schedules were modified when centres closed for the summer (usually preschools) – resulting in abbreviated cycles for some centres in that cohort.

Table 4.1 Key Phases and Assessment Points for Each Cohort

	Contact, Relationship Building	Baseline Assessment	Active Consultation Phase	Time 2 Assessment	Sustainability Phase	Time 3 Assessment
Cohort 1	January 2003	February 2003	Feb – June 2003	June 2003	June – Oct 2003	October 2003
Cohort 2*	Summer/ Fall 2003	October 2003	Oct 2003 – March 2004	March 2004	April – June/ Sept 2004	June / Sept 2004
Cohort 3	Fall 2004	Sept / Oct 2004	Oct 2004 – May 2005	May 2005	May – Oct 2005	October 2005
Cohort 4	Fall 2005	Sept / Oct 2005	Oct 2005 – May 2006	May 2006	May – Oct 2006	October 2006

***** Cohort 2 was initially scheduled to end March 2004 but was extended; some preschool programs that closed for the summer had earlier Time 2 and Time 3 assessments.

While the centres that participated in *PFI-NS* are not statistically representative of child care programs in Nova Scotia, they are a fairly diverse group in many ways. For evaluation purposes, it is important to describe and appreciate centre and staff characteristics.

4.1 CENTRE CHARACTERISTICS

4.1.1 Centre Type and Auspice

In all cohorts, the vast majority of centres (80%) offered both full-day and part-day programs. Seven of the 98 centres offered only full-day programs; 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.

Table 4.2 Centre Type by Cohort

Type of Program	Cohort 1 (N= 21)	Cohort 2 (N= 21)	Cohort 3 (N= 31)	Cohort 4 (N= 25)
Full day only	2 (10%)	1 (5%)	4 (13%)	0 (0%)
Full and part time	19 (90%)	14 (67%)	24 (77%)	21 (84%)
Part day/ part time only	0 (0%)	6 (29%)	3 (10%)	4 (16%)

Centre directors were asked whether their program is privately owned and operated (commercial) or non-profit. Across all four cohorts, 65 of the 98 centres (66%) were described as non-profit. The majority of the centres in Cohorts 1, 2, and 3 were run as non-profit centres, while a majority of Cohort 4 centres were privately owned.

Table 4.3 Centre Auspice by Cohort

Type of Funding	Cohort 1	Cohort 2	Cohort 3	Cohort 4
Non-profit centre*	14 (67%)	20 (95%) *	21 (67%)	10 (40%)
Private centre	7 (33%)	1 (5%)	10 (33%)	15 (60%)

* Includes 1 parent co-op

In addition, it is fair to point out that the centres in this sample included both individual, stand-alone centres and centres that were affiliated with another organization: a college or university, a military base, or some other community agency. Information about centre affiliation was obtained specifically from 35 centres in Cohorts 3 and 4. Out of that number, almost 75% were stand-alone centres, having no affiliation with another organization or agency.

According to the *PFI-NS* facilitators' case notes, some centres were purpose-built as child care programs, but a considerable number were located in converted homes or in other buildings, such as community centres, many of which are not wheelchair accessible. Accessibility was assessed as one element in the *Specialink Inclusion Practices Scale* and is discussed later in this chapter.

4.1.2 Centre Size, Enrolment, Ages of Children Served

The number of children centres were licensed for ranged from as few as 12 to as many as 153, with a mean of 50 and a median of 46 across all 98 programs. The largest proportion of centres in each cohort and 39% of the total sample of centres were licensed to care for between 26 and 50 children (see Figure 4.1). Preschools were licensed to care for fewer children, but could be in contact with many more children and families if different groups of children attended on different days or in separate morning and afternoon groups. As shown in Table 4.4, there were some differences between cohorts in the proportion of smaller and larger centres based on licensed capacity, with a higher proportion of large centres evident in Cohort 1.

Figure 4.1 Licensed Capacity of Participating Programs

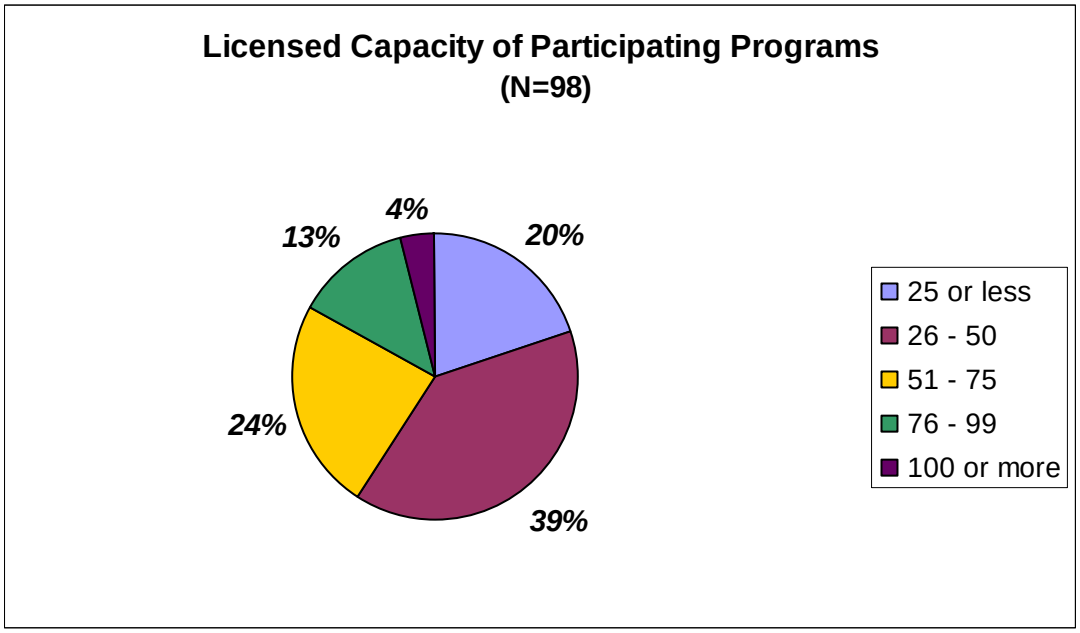


Table 4.4 Licensed Capacity of Participating Programs, by Cohort

Number of Children	Cohort 1	Cohort 2	Cohort 3	Cohort 4
1 - 25	5%	24%	19%	28%
26 - 50	48%	43%	36%	36%
51 - 75	14%	19%	23%	32%
76 - 99	14%	9%	16%	4%
100 or more	19%	5%	6%	0%

Ages of Children Attending Participating Programs

The programs that participated in *PFI-NS* 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. In total, 64% of centres provided care to infants and toddlers younger than 2 years of age. Slightly fewer than half of participating centres (48%) limited their program to children 5 years of age and younger. Fully 52% offered care to school-age children 6 years and older – an important point given the stated lack of special needs supports for school-age children in facilitators' case notes and as reported by centre directors.

There were some interesting distributional differences between the cohorts. Centres in Cohorts 1, 3 and 4 evidenced fairly similar patterns. However, a larger proportion of centres in Cohort 2 provided care only for children between 2.5 – 5 years of age, although almost half enrolled children under 2 years of age.

Table 4.5 Ages of Children Attending Programs, by Cohort

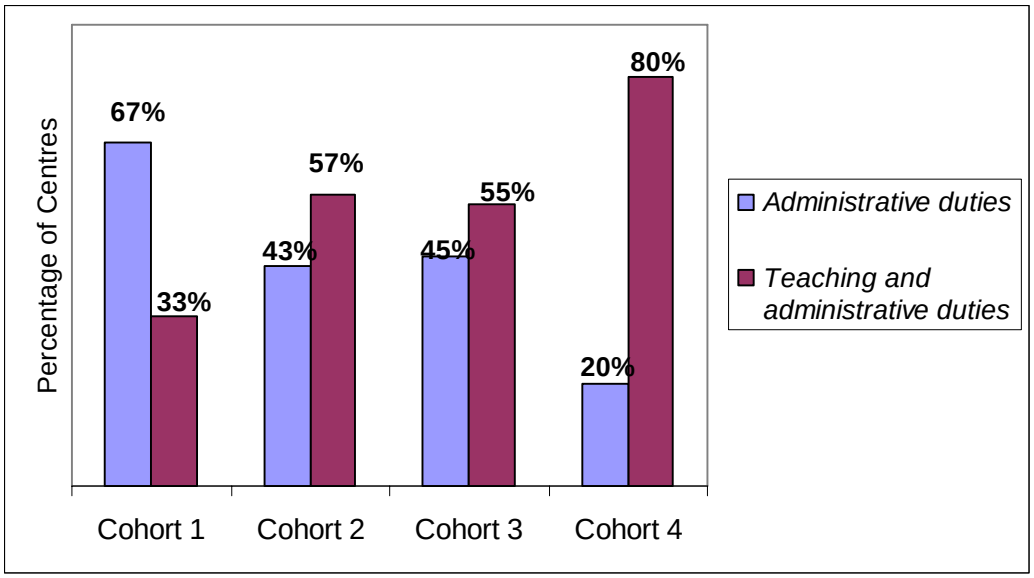
Age of Children	Cohort 1	Cohort 2	Cohort 3	Cohort 4	All Centres
< 2 years	71%	48%	61%	76%	64%
All 5 years and younger	38%	67%	45%	44%	48%
6 years and older	62%	33%	55%	56%	52%

4.2 DIRECTORS

4.2.1 Roles

Directors were asked whether their position entailed administrative duties only or included some teaching responsibilities. Across all cohorts, 43% of directors had only administrative responsibilities, while 57% combined teaching and administrative roles. A greater proportion of directors in Cohort 1 reported performing strictly administrative duties compared to the other three cohorts (see Figure 4.2). In all likelihood, this reflects the fact that one third of the centres that participated in the first cohort were large centres with more than 75 children and a commensurate larger number of staff, as well as more contacts with parents. Similarly, Cohort 4 directors were most likely to have daily teaching responsibilities in addition to their administrative role, which is consistent with the tendency for centres in this cohort to be smaller with fewer staff.

Figure 4.2 Role of Centre Directors, by Cohort



4.2.2 Experience in the Child Care Field

The centre directors were a fairly senior group, with 39% reporting more than 20 years of experience in the child care field. Across all cohorts, directors averaged 18 years of experience in the child care field, with a median of 19 years. Only 6% of directors had 5 years or less experience in the child care field, with another 14% reporting 6-10 years of experience. Directors in Cohort 4 centres had less experience on average than directors in the other three cohorts, with a greater proportion (40%) having 10 years or less experience in the child care field. Directors in Cohort 1 averaged 20 years experience, and directors in Cohorts 2 and 3 averaged 18.5 and 18.6 years of experience, respectively. The average length of experience in the child care field for Cohort 4 directors was 14.2 years.

4.2.3 Directors' Experience in Their Current Position

Centre directors reported being in their present position for an average of 8.8 years (s.d. = 7.69), with a range that went from 6 months to 30 years. In all, almost a third (33%) had been directors in their current centre for three years or less, another third had been in their present position for between 3 and 10 years, and one third had been in their present position for more than 10 years. There was no statistical difference in average time in current position across the four cohorts. Average length ranged from 8.1 years in Cohort 3 to 9.9 years for directors in Cohort 1 centres.

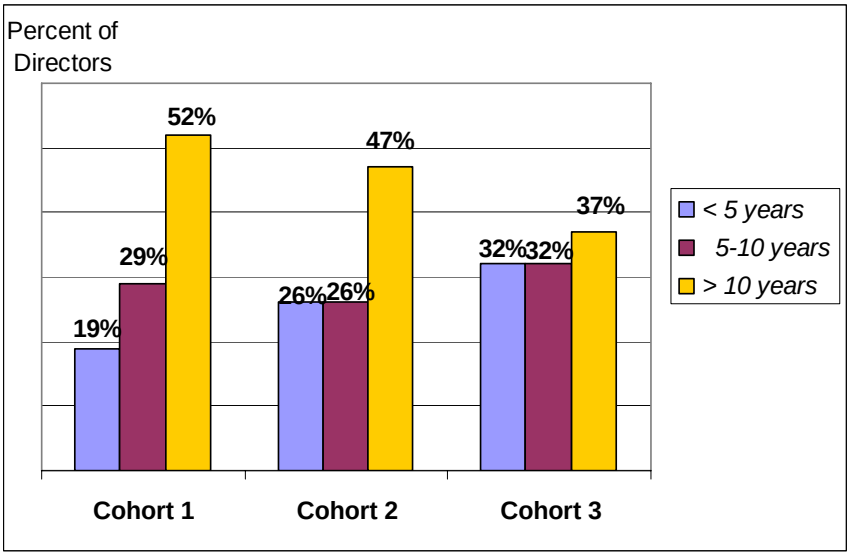
4.2.4 Directors' Educational Background

This sample of directors had a range of educational backgrounds that extended from those with an early childhood equivalency to others with a university degree in Child Studies. The majority of directors in each cohort had a college diploma, with the proportion ranging from 71% and 86% in Cohorts 1 and 2, respectively, to 53% and 56% in Cohorts 3 and 4. Almost all directors who had college diplomas had attended a program in early childhood education or early childhood studies. Twenty-nine percent of directors in Cohorts 1 and 2, 13% of directors in Cohort 3, and 16% of directors in Cohort 4 had university degrees. About one third of the directors who had university degrees also had a college diploma.

4.2.5 Directors' Experience in Working with Children with Special Needs

Information was obtained from all directors in Cohorts 1 and 2 and from 19 directors in Cohort 3 regarding the number of years they had worked with children with special needs. Only four directors had no prior experience with children with special needs; seven directors had 25 or more years' experience in this regard. The average across all directors for whom information was available was 11.5 years with a median of 10 years and a standard deviation of 8.65. There was no statistically significant difference among directors in the three cohorts; however, there was a trend towards directors in Cohort 3 to have had less experience than directors in Cohorts 1 and 2 as shown in Figure 4.3. The average number of years working with children with special needs was 12.4 for directors in Cohort 1, 11.4 for Cohort 2, and 10.5 for directors in Cohort 3.

Figure 4.3 Director's Experience in Work with Children with Special Needs



Data were available from 59 directors (21 in Cohort 1, 19 in Cohort 2 and 19 from Cohort 3). No information was collected from directors in Cohort 4.

4.2.6 Leadership for Inclusion

Previous research (Irwin, Lero & Brophy, 2004) suggests that directors who are inclusion leaders play a particularly important role in articulating a strong commitment to inclusion, modeling positive and accepting behaviours, encouraging staff to be active learners, and marshalling resources to support inclusion effectiveness in their centre. We classify a director as an inclusion leader if she/he has been actively involved in advocating for more support for including children with special needs in child care programs and if she/he has provided any workshops or in-service training related to children with special needs. While the directors in *PFI-NS* centres were generally supportive of inclusion, as measured by their responses on an attitude scale and their agreement with a number of statements that articulate support for inclusive child care, they typically did not display either of the two behaviours that signify inclusion leadership.

As can be seen in Table 4.6, only 14% of directors in Cohort 1, 38% of directors in Cohort 2, and 23% of directors in Cohort 3 were involved in advocacy activities related to inclusion of children with special needs. Furthermore, only 19% of directors in Cohort 1, 14% of directors in Cohort 2, and 32% of directors in Cohort 3 provided any workshops or in-service training to others (their staff or other child care professionals) on topics related to children with special needs. Based on these two criteria we conclude that only six of 67 directors (9%) from whom data were available would be classified as inclusion leaders. Two of the six directors were in Cohort 1 centres; four were in centres in Cohort 3. Further evidence of the extent of inclusion leadership observed in centres is obtained via the *Specialink Inclusion Principles and Practices Scales* and is discussed later in this chapter.

Table 4.6 Directors' Leadership Activities

	Cohort 1	Cohort 2	Cohort 3
Involved in Advocacy Activities			
Yes	14%	38%	23%
No	86%	62%	77%
Provided workshops/in-service training			
Yes	19%	14%	32%
No	81%	86%	68%

Based on data obtained from 67 directors: 21 in Cohort 1, 21 in Cohort 2, and 25 in Cohort 3.

4.3 FRONT-LINE STAFF

4.3.1 Number of Front-line Staff and Their Education

The number of program staff varied considerably among centres, commensurate with the number and ages of children enrolled. Staff numbers ranged from one single front-line early childhood educator (ECE) who worked with the director to 20 teaching staff. The average centre employed 10 early childhood educators in Cohort 1, eight ECEs in Cohort 2, and seven front-line child care staff in Cohort 3. (Comparable information was not available for Cohort 4.) Centres varied widely in the proportion of staff with college-level ECE training (from 14% to 100%). Some centres had more staff who had limited formal background and/or only equivalency training, while other centres benefited from having almost all staff with an ECE diploma or relevant degree. *PFI-NS* facilitators commented that educators who had more formal training often more fully appreciated concepts such as developmentally appropriate practices and had a greater understanding of the child development concepts that underlie an emergent curriculum approach, allowing them to more readily make significant changes to the curriculum and the structure of learning activities than staff who had less formal education.

4.4 LEAD EDUCATORS

A lead educator who worked in a preschool room was identified in each centre. This educator worked intensively with the inclusion facilitator and engaged other staff in the room in the process of making positive changes. In most centres, the same person continued to fulfill this role throughout the project. However, in approximately 15-20% of centres staff turnover and/or changes in staffing patterns resulted in discontinuity in this position. *PFI-NS* facilitators often commented on the fact that turnover in staff, especially in the lead educator position, often affected momentum in making positive changes. This was most noticeable when replacement staff had not participated in the earlier training sessions on quality, *ECERS-R*, the *PFI-NS* model and inclusion.

4.4.1 Lead Educators' Educational Background

The lead educators in participating centres had a range of educational backgrounds that extended from those with little or no post-secondary training to a university degree. Overall, approximately half of lead educators had a diploma and one in six had a degree. The majority of diplomas obtained were in Early Childhood Education or a related field (e.g., child development services). The fact that this proportion of lead teachers had completed post-secondary training in the field of Early Childhood Education is noteworthy.

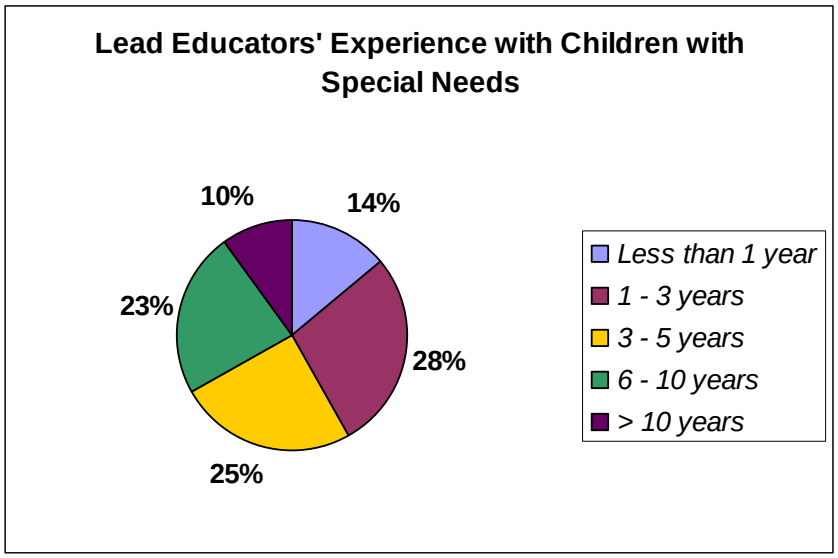
4.4.2 Experience in Child Care

The lead educators in this sample had worked in the child care field for an average of 9.8 years (median = 8.0 years, s.d. = 7.50). More than one quarter of the lead educators (28%) had been working in the child care field for 3 years or less; another 32% had worked in child care for between 3 and 10 years; and 40% had more than 10 years' experience in this field. There was no statistically significant difference in average length of experience among lead educators across cohorts.

4.4.3 Experience Working with Children with Special Needs

The majority of the lead educators in the participating centres had not been working with children with special needs for very long. Data were available for 51 lead educators from centres in Cohorts 1, 2 and 3. These educators had an average of 4.8 years of experience working with children with special needs, with a median of 3.0 years (s.d. = 4.87). As shown in Figure 4.4, only one third of lead educators had more than 5 years' experience working with children with special needs, and 42% had less than three years' experience.

Figure 4.4 Lead Educators' Prior Experience in Work with Children with Special Needs



Based on data from 21 lead educators in Cohort 1, 15 educators in Cohort 2 and 15 educators in Cohort 3.

4.5 PROGRAM QUALITY AT BASELINE

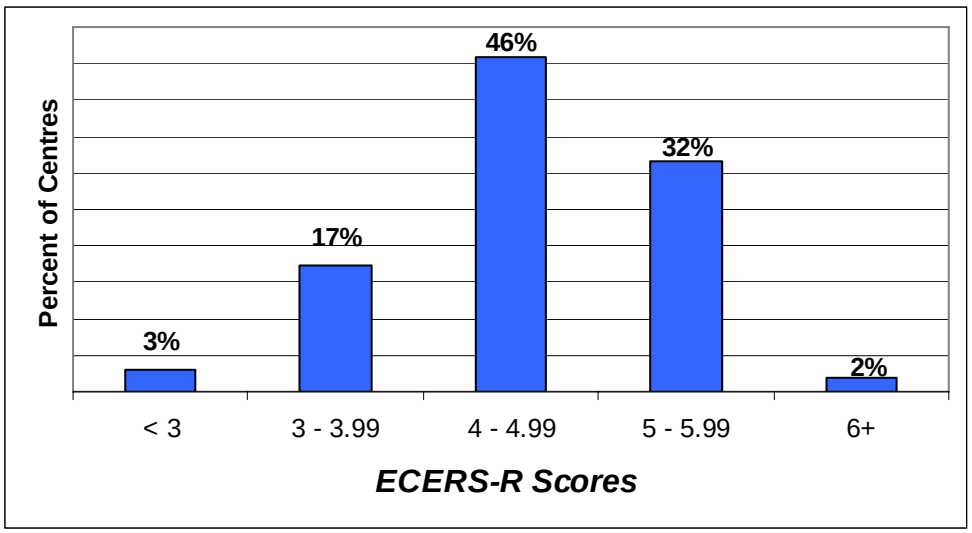
Initially, two measures of program quality were obtained. *The Early Childhood Environment Rating Scale-Revised (ECERS-R)*[2] was used to assess program quality across a number of dimensions. The Baseline *ECERS-R* assessment was also used to ensure that the director (and lead educator) could reliably apply the measure. Baseline observations were used by the inclusion facilitator, director, and lead educator to formulate collaborative action plans to guide and prioritize quality improvements. The *ECERS-R* was administered again at Time 2 and Time 3 to assess change over time. In addition, the inclusion facilitators utilized the *Caregiver Interaction Scales* (*CIS*)[3] to assess the quality and tone of staff-child interactions. The *CIS* was used only at Baseline and only in Cohort 1 centres. Its use was discontinued beginning in Cohort 2; since scores showed little variability and teacher-child interactions were captured as a separate subscale score in the *ECERS-R* measure.

4.5.1 *ECERS-R* Baseline Scores

At Baseline, prior to the active consultation phase, the average scores of the centres in all four participating cohorts were fairly similar on the full *ECERS-R* scale. The average baseline score for all 98 centres was 4.58 (s.d. = 0.77). Centre scores ranged from a low of 2.71 to a high of 6.50 out of 7. The average score for centres participating in the first four cohorts of *PFI-NS* is comparable to the average obtained across 234 centres in seven jurisdictions in the 1998 *You Bet I Care!* study of predictors of quality in Canadian child care centres (Goelman, Doherty, Lero, LaGrange & Tougas, 2000).[4] A score of 4.5 is interpreted as indicative of a mediocre level of quality by Harms, Clifford & Cryer, the developers of the *ECERS-R* assessment procedure. While only three centres scored below 3.0, indicating an inadequate level of program quality, most centres (63%) scored in the minimal to mediocre range (3.0 - 4.9). Based on the criteria used by Harms et al., only one third of the participating centres (34%) had Baseline scores indicative of good to very good overall quality (i.e., a total average *ECERS-R* score of 5.0 or above). The distribution of average *ECERS-R* baseline scores for the full sample is shown in Figure 4.5 and average subscale scores are shown in Figure 4.6 and Table 4.7.

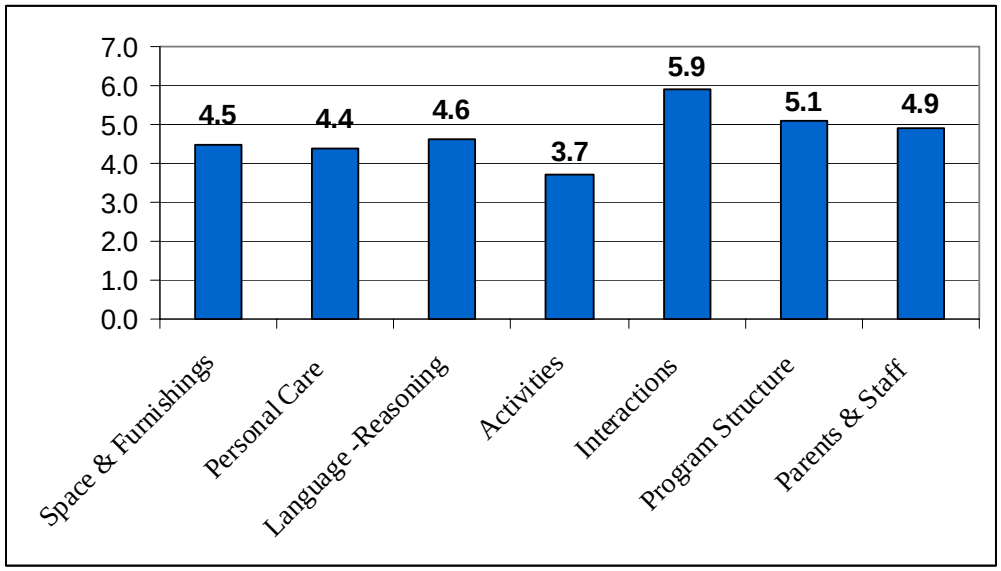
Average scores on *ECERS-R* subscales for all participating centres ranged from a low of 3.72 to a high of 5.94. The subscale with the lowest average score was *Learning Activities*, indicating a need to enhance curriculum activities. The *Interaction* subscale had the highest average score for all four cohorts, indicating that staff in these programs were strongly involved in positive interactions with the children in their care and promoted positive peer interactions among the children.

Figure 4.5 Distribution of Baseline Average *ECERS-R* Scores, All Centres



N = 98 centres

Figure 4.6 Average Baseline Scores on *ECERS-R* Subscales, All Centres



N = 98 centres

Table 4.7 Distribution of Baseline Scores on *ECERS-R* Average Scores and Subscales, All Participating Centres

	Range	Mean Score	Standard Dev.	% Centres < 3.0	% Centres ≥ 5.0
ECERS-R Average	2.71-6.5	4.58	0.77	3.1%	33.7%
Space and Furnishings	1.88-6.3	4.45	0.86	5.1%	28.6%
Personal Care	1.66-7.0	4.40	1.39	22.4%	44.9%
Language-Reasoning	2.50-7.0	4.61	1.09	6.1%	43.9%
Learning Activities	2.00-6.0	3.72	0.88	23.5%	10.2%
Interactions	2.00-7.0	5.94	1.01	2.0%	83.7%
Program Structure	2.33-7.0	5.05	1.32	4.1%	57.1%
Parents and Staff	2.83-7.0	4.90	0.95	2.0%	52.0%

N = 98 centres

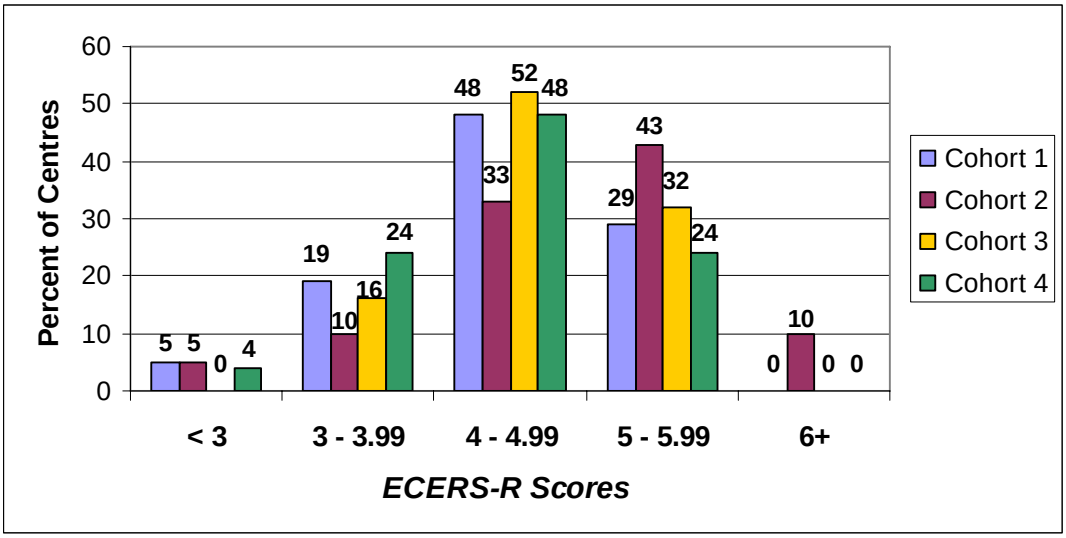
4.5.2 Comparisons of Baseline *ECERS-R* Scores across Cohorts

It is interesting and important to determine whether the cohorts were similar or different at the beginning of the active support and intervention phase. One might anticipate, for example, that directors of centres that were the first to participate in this project in its early offerings might be "keeners" who were more confident about their centre's initial level of program quality. *PFI-NS* facilitators commented that they thought they were seeing more centres in the later cohorts that had lower levels of program quality at baseline. As shown in Figures 4.7 and 4.8, general patterns were similar across the four cohorts, but there were some differences. In all four cohorts, less than 5% of centres (typically only one centre) were assessed as having an inadequate level of quality at Baseline (an average *ECERS-R* score of less than 3.0). In Cohorts 1, 3, and 4 the majority of centres (approximately two thirds) had average baseline *ECERS-R* scores in the mediocre range (3.0-4.99), and roughly one quarter to one third of centres in these cohorts had scores above 5.0, indicative of good quality that supports children's development. In Cohort 2, however, more than half the centres had Baseline *ECERS-R* scores of 5.0 or above, indicative of good or very good quality – considerably more than any other cohort.

Statistical analysis supported the facilitators' observations about lower quality in some of the centres in Cohort 4, as indicated by the proportion of centres with Baseline *ECERS-R* scores below 4.0 in this cohort (28%). As shown in Table 4.8, centres in Cohort 1 had an average *ECERS-R* baseline score of 4.57, centres in Cohort 2 had an average score of 4.92, Cohort 3 centres averaged 4.60, and centres in Cohort 4 had an average baseline score of 4.27. A One-way Analysis of Variance (ANOVA) indicated that the difference between Cohorts 2 and 4 on mean average *ECERS-R* scores was statistically significant. Analysis at the subscale level revealed that there were a number of centres in Cohort 4 with particularly low Baseline scores on subscales measuring *Personal Care, Learning Activities,* and *Provisions for Parents and Staff.* Multiple comparison post hoc tests (Scheffé tests) revealed statistically significant differences between Cohort 4 and all other

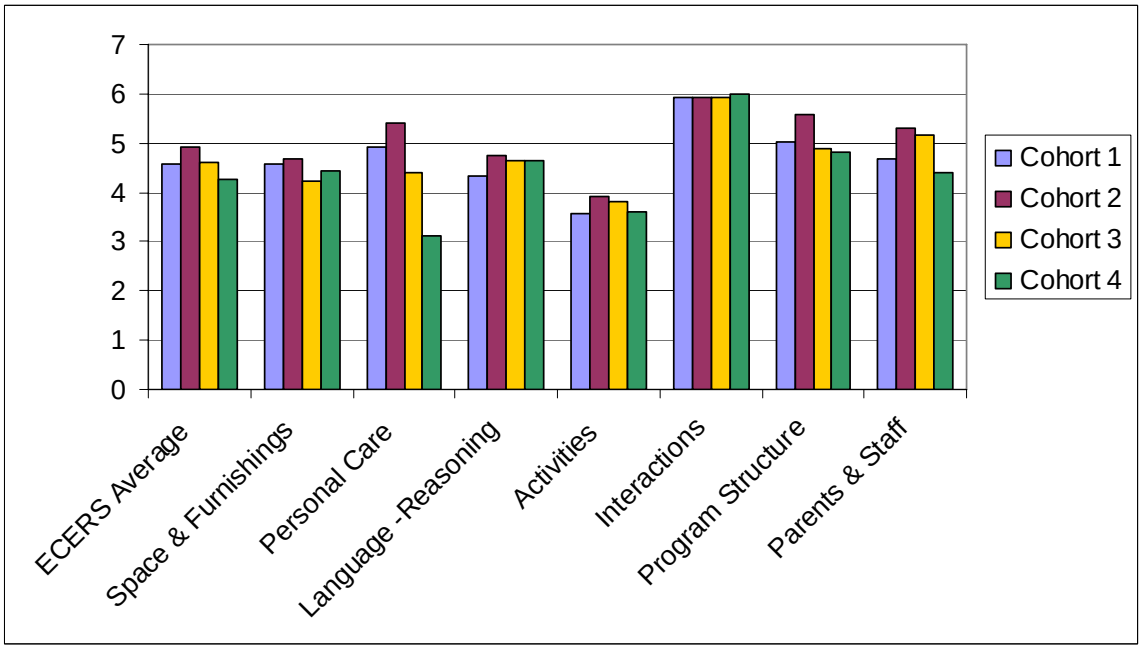
cohorts on *Personal Care*, and a statistically significant difference on *Provisions for Parents and Staff* when Cohort 4 scores were compared to Cohorts 2 and 3.

Figure 4.7 Distribution of Baseline *ECERS-R* Scores, by Cohort



Based on all centres, N=98

Figure 4.8 Distribution of Baseline *ECERS-R* Subscale Scores, by Cohort



Based on all centres, N=98

Table 4.8 Baseline *ECERS-R* Average and Subscale Scores, by Cohort with Statistical Analysis of the Significance between Means

	Cohort 1		Cohort 2		Cohort 3		Cohort 4		F (3,94)	p
	Mean	**s.d**	**Mean**	**s.d.**	**Mean**	**s.d.**	**Mean**	**s.d.**		
ECERS-R Average	4.57	.818	4.92	.822	4.60	.684	4.27	.688	2.905	<.05
Space and Furnishings	4.57	.926	4.68	.833	4.24	.940	4.42	.688	1.291	
Personal Care	4.93	1.128	5.39	1.088	4.39	1.172	3.13	1.149	17.203	<.01
Language-Reasoning	4.33	1.111	4.76	1.236	4.65	1.042	4.66	1.030	0.612	
Learning Activities	3.56	.861	3.92	.964	3.80	.870	3.59	.858	0.887	
Interactions	5.92	1.019	5.91	1.104	5.92	.942	6.00	1.059	0.042	
Program Structure	5.02	1.452	5.59	1.325	4.90	1.147	4.82	1.370	1.311	
Parents and Staff	4.68	1.019	5.31	1.036	5.18	.755	4.40	.793	5.491	<.05

Based on all centres, N=98

4.5.3 *Caregiver Interaction Scale* Scores

The *Caregiver Interaction Scale (CIS)* was used to assess the nature and quality of teacher-child interactions in a classroom with ratings based on the observed frequency of 26 specific behaviours. These behaviours, in turn, are then used to calculate three separate scores that summarize the frequency with which a trained observer sees: a) interactions characteristic of staff who are sensitive, warm, and engaged in interacting with the children; b) interactions that can be described as harsh, punitive or controlling; and c) teacher behaviours that suggest detachment, lack of supervision and lack of involvement in interacting with the children. Each behavioural item is scored from 1 (not observed or rarely observed) to 4 (usual, observed much of the time). High average scores are desirable for items that characterize Sensitivity and low scores are desirable on items that contribute to scores denoting Harshness and Detachment.

Observations of educators in the preschool classrooms in Cohort 1 centres at baseline revealed high scores on the Sensitivity items (average of 3.4 out of 4) and low scores on Harshness and Detachment (1.1 and 1.3, respectively), with little variability across centres. These scores mirror the high scores on the *ECERS-R* subscale, *Interactions*, suggesting that one of the strengths of the programs is the quality and positive tone of teacher-child interactions. Given these findings it was decided not to continue using the *CIS* in later cohorts.

4.6 INCLUSION CAPACITY AND INDICATORS OF INCLUSION QUALITY AT BASELINE

The centres that volunteered to be in the first four cohorts in the *Partnerships for Inclusion - Nova Scotia* project ranged from centres that had little or only sporadic experience in including children with disabilities to one centre that was recognized as a leader in the province with more than 25 years of experience as an inclusive centre. Similarly, directors and lead teachers varied in the amount of experience they have had with children with special needs, and centres had different histories and different degrees of contact with professionals and agencies to support their efforts. What most centres, directors and staff had in common was a willingness to extend their capacity to include children with special needs fully and comfortably in their programs, provided there are sufficient supports available for this purpose.

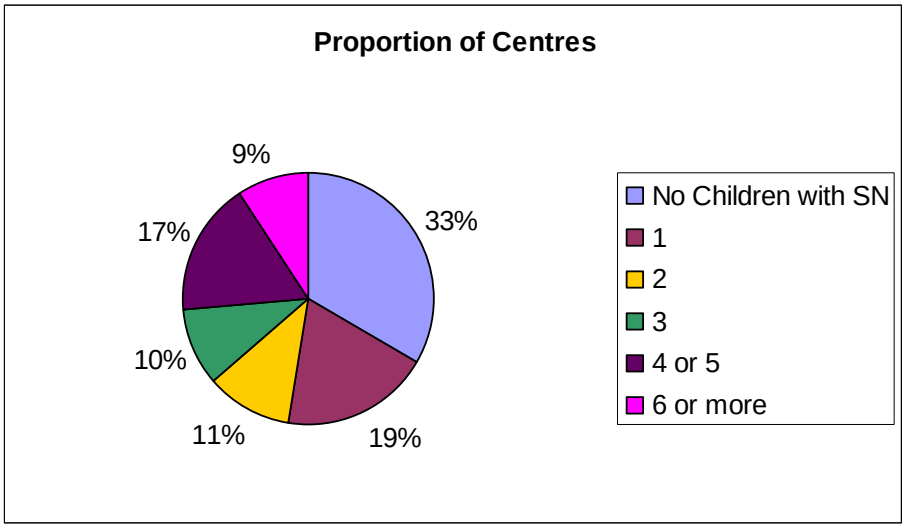
In this section of the report, we provide a portrait of centres' enrollments of children with special needs at baseline, their inclusion history, and directors' and staff's attitudes, beliefs, and practices related to inclusion. Information is also provided from directors in the later cohorts regarding what they see as their current strengths and challenges in meeting the needs of children with a range of disabilities in their centres. The section concludes with a presentation of centres' obtained scores on the *Specialink Inclusion Principles and Practices Scales.*

4.6.1 Enrolment of Children with Special Needs at Baseline

Information obtained by the inclusion facilitators from centre directors indicated that two thirds of the participating 98 centres (66 or 67.3%) had at least one child with identified special needs enrolled at Baseline. In addition, almost a quarter of the centre directors indicated that there was at least one child present who had not yet been assessed whom they thought had special needs.[viii] As well, 38 directors out of 57 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 (see Figure 4.9). When asked if the number of children with special needs that were currently enrolled was typical for their centre, 43% of directors said that they presently had fewer children with special needs than usual, 37% said the number was typical for them, and 21% said that they had more children with special needs than usual.

Figure 4.9 Proportion of Centres, by Number of Children with Identified Special Needs at Baseline



Based on all centres, N = 98

In total, 220 children with *identified* special needs were participating in 66 programs at Baseline. These numbers pertain to children enrolled in the centre, not necessarily in the classroom in which the *PFI-NS* interventions were targeted, and include school-age children in some cases. (At the time this report was written, some centre directors were

[viii] Some children were on waiting lists for assessments or were being observed by Early Interventionists at home prior to a referral for assessment. In a few cases, staff were encouraging parents to recognize the need to have their child assessed. Children who have special needs, but who have not been assessed are not eligible for SCC funding and the centres have no additional resources to support them during this time.

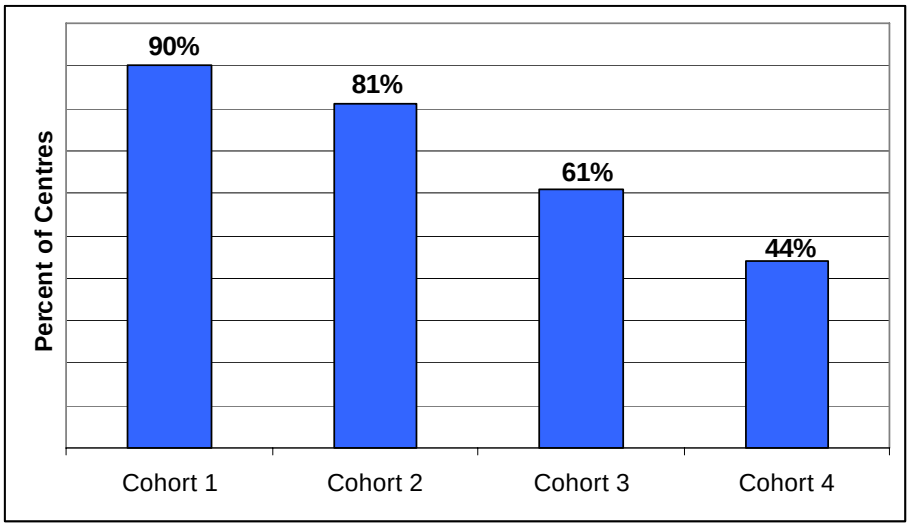
unaware that the there was financial support available to support the inclusion of school-age children with special needs.)

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 developmental 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.

Supported Child Care (*SCC*) funding may be allocated to support the inclusion of specific children or be based on the centre's need for additional staffing support. Thus, for example, a centre with 4 or 5 children with special needs might have a single resource support staff, whereas another centre might have two support staff, depending on the centre's needs and the children's levels and types of needs. *SCC* funding was being received in 41 centres at the beginning of the consultation and support phase.

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. The data summarized in Figure 4.10 and Table 4.9 support 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 inclusion history and centre resources, whether parents and community professionals perceive a particular centre as a desirable and positive program for a child with particular 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.

Figure 4.10 Proportion of Centres with Identified Children with Special Needs Enrolled at Baseline across Cohorts



Based on all centres, N=98

Table 4.9 Proportion of Centres in Each Cohort by Number of Children with Identified Special Needs Enrolled at Baseline across Cohorts

Number of Children with Special Needs Enrolled	Cohort 1	Cohort 2	Cohort 3	Cohort 4
None	10%	19%	37%	56%
1	24%	29%	17%	12%
2	14%	10%	10%	12%
3 or 4	24%	14%	20%	16%
5 or more	28%	29%	17%	4%

Based on all centres, N=98

4.6.2 Centres' History of Including Children with Special Needs

Information about each centre's history of including children with special needs was collected through the longer director and lead educator questionnaires that referred to experiences in the previous six years, and from the shorter director questionnaires that were used midway through Cohort 3 and in Cohort 4. In the latter case, questions were asked about how long the centre had included children with special needs and whether inclusion occurs on a regular, continuing basis or only occasionally. Approximately half of the directors who replied from centres in Cohorts 3 and 4 indicated that their centre had "always" been inclusive and included children on a regular basis; while the remainder only included children on an occasional basis, if at all. Indeed, the data and the written comments from Cohort 4 directors indicated that many of these centres had a more limited history of inclusion, responding only if a child with special needs turned up in the queue of incoming children. There was little indication that these centres conveyed a willingness to include children with special needs to parents and community professionals or that early interventionists and physicians were referring children to the programs for developmental stimulation and social interactions.

Centre directors were asked if they had turned down children with special needs from their centre in the past three years. Of 88 directors who replied, 22 (25%) indicated that they had turned away one or more children with special needs. Ten of the directors who had refused a child with special needs were in centres in Cohort 1, two were in Cohort 2, three were in Cohort 3, and seven were in Cohort 4. The most common reasons given for turning down a child with special needs were:

- Already had maximum number of children with special needs for our centre (9)
- Child would have required 1:1 supervision; staff allocation (7)
- Physical access not suitable (6)
- Child too aggressive (5)
- No funding to support including this child (4), and
- Staff not trained or loss of resource teacher (4).

This diverse set of reasons for refusing to enroll a child with special needs suggests that while some centres already had as many children with special needs as they felt they

could handle or could receive support for, others lacked the staff or funding resources to include children, especially children who would require greater staff supervision and attention. Physical access was also an issue in some centres.

4.6.3 Resources Available to Support Inclusion

Information was obtained at several points that provided insight into the resources and supports available to centres to support their inclusion efforts. At Baseline, half of the 66 centres that had at least one identified child with special needs had a resource teacher or program assistant (aide) available to support inclusion. Directors in Cohort 1 and 2 were more likely to say they had a resource teacher or aide to assist them than centres in Cohorts 3 and 4. Seventy-four percent of centres in Cohort 1 with children with special needs had a resource teacher or aide. The comparable proportions were 59% in Cohort 2 centres, 42% in Cohort 3, and 9% in Cohort 4. The differential allocation of resource teachers across the cohorts only partly reflects the number of children with special needs enrolled at Baseline. It also reflects the severity of a child's disability, whether the child requires 1:1 supervision, and whether SCC funding has been allocated for that child. We note here that when directors refer to having an in-house resource teacher, it appears that in some centres this refers to an in-house resource teacher with specific training in inclusion hired above ratio. In other centres, directors appeared to be referring to program assistants who had varying levels of education and experience and who were there primarily to support the inclusion of a particular child.

Directors also indicated whether they had access to a range of other resources to support inclusion. As shown in Table 4.10, across the cohorts, centres were most likely to have access to Speech and Language Therapists and from Early Interventionists and the Progress Centre.

Table 4.10 Resources Available to Centres to Support Inclusion

Type of Support Available	Number of Centres
Speech & Language Therapist	27
EI, Infant Development / Progress Centre	23
Physiotherapist / Occupational Therapist	19
Equipment from various sources	18
Parents of children with special needs	10
Pediatrician	8
Psychologist, Mental Health	8
Volunteers, students	6
Early Child Development Officer	4
Community Service Workers	4

The nature and extent of support varied depending on children's and staff needs and the availability of support in the geographic area. Centres with few or no children with special needs or a very limited history of inclusion have fewer ties to community resources. Further information about the extent of these professionals' and agencies' involvement would be helpful.

4.6.4 Directors' and Lead Educators' Attitudes and Beliefs about Inclusion

All directors and lead educators in Cohorts 1 and 2 and two thirds of the directors and lead educators in Cohort 3 responded to a lengthy scale that assessed their attitudes to inclusion and another set of items that tapped their beliefs about inclusion as part of the questionnaires they completed prior to Baseline observations. Both groups indicated the extent to which they felt children with specific conditions should be included in community-based early childhood programs using a 5 point Likert scale where 1 = strongly disagree and 5 = strongly agree. Across 30 items describing different conditions, Cohort 1 directors had an average score of 4.33, Cohort 2 directors had an average score of 4.16, and Cohort 3 directors had an average score of 4.14. The lead educators in Cohort 1 had an average score of 4.23, the lead educators in Cohort 2 had an average score of 4.20, and the lead educators in Cohort 3 had an average score of 4.18. Thus, as per previous Canadian studies (Irwin, Lero & Brophy, 2000; Irwin, Lero & Brophy, 2004), directors and lead educators were quite supportive of including children with a wide range of conditions in community-based child care programs, as long as appropriate resources are provided to support inclusion.

There were, however, six circumstances in which directors and lead educators were more frequently uncertain or in disagreement about whether a child with that particular characteristic should be enrolled in a regular program. These items received a mean rating lower than 4.0 (equivalent to Agree). Directors and staff were more reserved in their agreement that children should be included when:

- access is unsuitable,
- a child is uncontrollably aggressive or cannot recognize danger,
- a child requires intensive individual instruction,
- a child is HIV Positive, or
- children need assistance with a catheter or an artificial bowel and parents are not available to help the staff.

Both directors and lead educators were supportive of inclusion principles, based on their agreement with a series of statements as illustrated in Tables 4.11 and 4.12; however both groups also expressed some uncertainty or ambivalence about whether it is better to have some child care programs accept children with special needs (with specialized resources) than try to have all child care programs be inclusive. Previous experience in using these measures suggests that ambivalence in response to this statement is an indicator of how much support is available to enable and sustain inclusive programs, as well as the amount of experience individuals have working with children with a wider range of special needs in an effective way (Irwin, Lero & Brophy, 2000; 2004).

We also note here that the lowest scores in this set of statements relate to directors' beliefs about how well early childhood educators' training has prepared them to work with children with special needs to support inclusion. As in our previous research, early childhood educators were also very supportive about inclusion in principle, but were also ambivalent about whether inclusion is best done in some programs with more resources

or in all programs and about the extent to which ECEs are prepared adequately for this challenge. Staff willingness without sufficient training and additional resources can lead to difficult and stressful experiences that can ultimately discourage early childhood educators from including all but the "easy to include" children with disabilities in their programs.

Table 4.11 Directors' Beliefs About Inclusion (Mean Ratings)

Inclusion Statements	Cohort 1	Cohort 2	Cohort 3
1. Day care programs should accept all children, regardless of their individual needs.	3.76	3.38	3.91
2. Legislation should be passed to ensure disabled children and their parents have full access to child care programs.	4.43	3.90	4.59
3. Having children with special needs in most child care centres puts too much pressure on the staff.	3.50	3.48	3.50
4. Having children with special needs in child care benefits the non-disabled children.	4.52	4.33	4.36
5. Most child care programs would be willing to include children with special needs, if adequate resources were available.	4.62	4.33	4.32
6. It would be better to have some child care programs accept children with special needs (with specialized resources) than try to have all child care programs be inclusive.	3.62	3.62	3.50
7. Training for early childhood educators has provided them with a good background to support inclusion.	3.05	2.95	3.23
Average score	3.91	3.71	3.92

Ratings: 1 = strongly disagree, 3 = uncertain, and 5 = strongly agree, with items 3 and 6 reverse coded.
Based on 63 centres

Table 4.12 Lead Educators' Beliefs About Inclusion (Mean Ratings)

Inclusion Statements	Cohort 1	Cohort 2	Cohort 3
1. Day care programs should accept all children, regardless of their individual needs.	3.81	4.10	4.17
2. Legislation should be passed to ensure disabled children and their parents have full access to child care programs.	4.52	4.25	4.39
3. Having children with special needs in most child care centres puts too much pressure on the staff.	3.62	3.40	3.43
4. Having children with special needs in child care benefits the non-disabled children.	4.76	4.45	4.65
5. Most child care programs would be willing to include children with special needs, if adequate resources were available.	4.24	4.20	4.39
6. It would be better to have some child care programs accept children with special needs (with specialized resources) than try to have all child care programs be inclusive.	3.24	3.40	3.14
7. Training for early childhood educators has provided them with a good background to support inclusion.	3.57	2.35	3.45
Average score	3.97	3.74	3.96

Ratings: 1 = strongly disagree, 3 = uncertain, and 5 = strongly agree, with items 3 and 6 reverse coded.
Based on 62 centres

4.6.5 Directors' Reflections on Their Centre's Inclusion Capacity at Baseline

Directors' Perceptions of Inclusion Capacity or Effectiveness in Including Children with Special Needs

In their Baseline questionnaires, the majority of centre directors reported that their centre had become more inclusive or effective in their practices in including children in the previous six years. Almost 68% of directors in Cohort 1 centres, 71% of centre directors in Cohort 2, and 56% of directors in Cohort 3 from whom information was available felt that their centre had become more inclusive or more effective in including children during that time in the previous 10 years.

Those directors who thought their centre had become more inclusive or more effective were asked what factors had enabled their progress. Directors' most common responses were: stronger support for inclusion amongst centre staff (32), additional personnel, such as resource teachers and additional staff (30), assistance from other professionals or services (29), additional training for the director and her staff (26) and accumulated experience in working with children who have special needs (24).

Directors' Perceptions of Barriers to Inclusion

When asked what, if anything, has been a barrier or a factor that had limited their centre's capacities to integrate children with special needs effectively, the majority of directors in each cohort (42 out of 85 directors who responded) identified inadequate funding to support inclusion as a major frustrator. Other factors that were seen to limit centres' capacities were: the general level of support for/provincial funding of child care programs in the province (36), staff who were not adequately trained to meet children's needs (32), and the stress caused by additional workload and time demands for centre staff (28). Two other factors that were identified were limited support or assistance from other professionals or health-related services in the community (17) and limited or insufficient involvement of resource teachers or support workers (11).

Directors' Perceptions of Their Centre's Baseline Capacities, Strengths, and Challenges Related to Inclusion

Half of the directors in Cohort 3 and 20 of the 25 directors in Cohort 4 centres provided information about their perceptions of their centre's current effectiveness and their views about centre strengths and challenges. Directors were asked to indicate, "How well do you feel your centre and staff are currently doing in providing inclusive child care in your community?" using a scale of 1-10. Scores ranged from 3 to 10 and averaged 6.8 (s.d. =1.84). The average rating provided by Cohort 3 directors was 7.1 and the average rating of Cohort 4 directors was 6.5. The difference in mean ratings between centres in Cohorts 3 and 4 was not statistically significant.

Directors were asked to describe what they felt were the strengths of their program in providing care and education for children with special needs.[ix] The most common responses to this open-ended question were:

- Staff are credentialed, willing, work well together as a team (24),
- We are committed to treating all children equally (8),
- Experience (providing skills, and more confidence) (6), and
- Our overall program quality, developmentally appropriate practice (5).

Only two or three directors spontaneously indicated that a strength was their link with other programs such as early interventionists or *PFI-NS,* or their contact with community support programs or professionals. The fact that directors attribute so much of their strength to their staff is impressive, and confirms a general sense that having staff with appropriate skills and attitudes who are committed to inclusion and who benefit from positive experiences is an important foundation on which to build.

The same directors were asked to describe what they felt were the "challenges or difficulties they were currently experiencing or aspects they would like to change." Their responses were as follows:

- Facility, structural aspects (7),
- Lack of funding (6),

[ix] More than one strength and more than one challenge was permitted.

- Staff / lack of staff (5),
- Lack of access to/ work with professionals (5),
- Enabling staff to attend training; lack of information about training (4), and
- Lack of information about resources, services (3).

Directors' Views of Additional Supports That Would Help

The 37 directors who replied to the short form of the director's questionnaire (16 from Cohort 3 and 21 from Cohort 4) were asked to indicate "What additional supports, resources or training would assist you/your staff to provide high quality inclusive care?" The most common responses were:

- Workshops; more training for staff (23)
- Additional funding (14)
- More staff (8)

Some of the comments below convey directors' desires to enable staff to receive more training, to have additional staff available to support inclusion, and to have assessments and funding in place as soon as children enter the program.

> *"Funding for additional training for special needs staff and regular staff… When a workshop is being offered, it would be nice to have funds available to send staff to it."*
>
> *"Resources closer to our own community"*
>
> *"Full-day support staff when needed"*
>
> *"Special education-trained staff"*
>
> *"Process to identify children is slow... Funding for equipment and staff to assist children with special needs"*

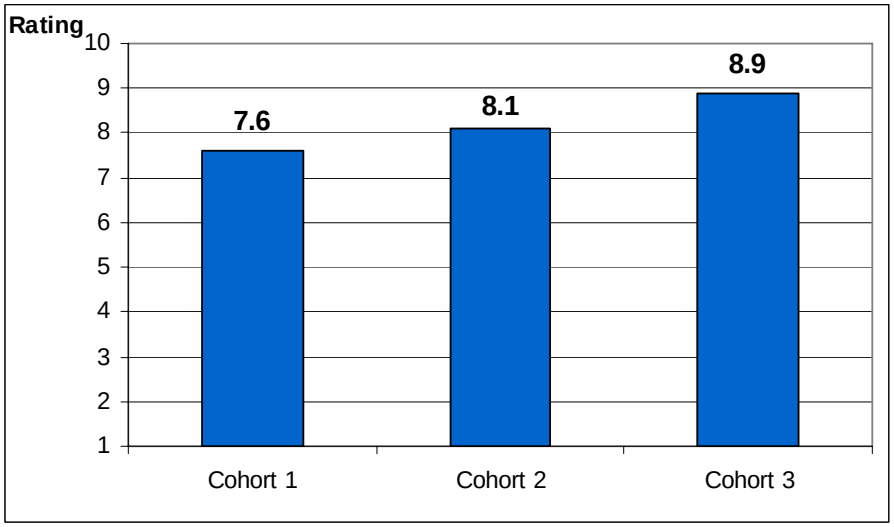
4.6.6 Lead Educators' Reflections and Experience with Inclusion at Baseline

Experiences with Inclusion

More than half of the lead educators in the first three cohorts reported working with one or more children who had an identified disability or chronic health problem at the baseline assessment. Sixty-seven percent of the lead educators in Cohort 1, 55% of lead educators in Cohort 2, and 55% of lead educators in Cohort 3 reported working with a child or children with special needs. Half of the lead educators who were not working with any children with special needs at Baseline reported having worked directly with a child with special needs in the previous two years.

Lead educators with current or recent experience in working with children with special needs were asked in questionnaires how successful they felt they had been and what had been helpful and/or problematic. Overall, lead educators reported that they believed they had been quite successful in including children with special needs in their program. In terms of their perceived level of success, lead educators' ratings on a 10-point scale (where 1 was "not at all successful" and 10 was "great!") ranged from 3 to 10 and averaged 8.1.

Figure 4.11 Lead Educators' Ratings of Their Success at Including Children with Special Needs at Baseline



Based on responses of 46 lead educators: 17 from Cohort 1, 15 from Cohort 2 and 14 from Cohort 3.

The lead educators with experience in working with children who have special needs in all three cohorts indicated that the resources/supports that were most helpful were:

- training and workshops (31)
- empathy and understanding from other centre staff (30)
- support from external resource consultants/ early interventionists (27)
- visits from therapists (25)
- extra support workers/in-house resource teaches (24)
- parents of the children with special needs (21)
- specialized equipment/materials (18)
- modification of the program schedule (15)
- newsletters and other print materials (14)
- child-specific training (9)
- extra release time for planning (9)
- volunteers (5), and
- modification of the physical space (4).

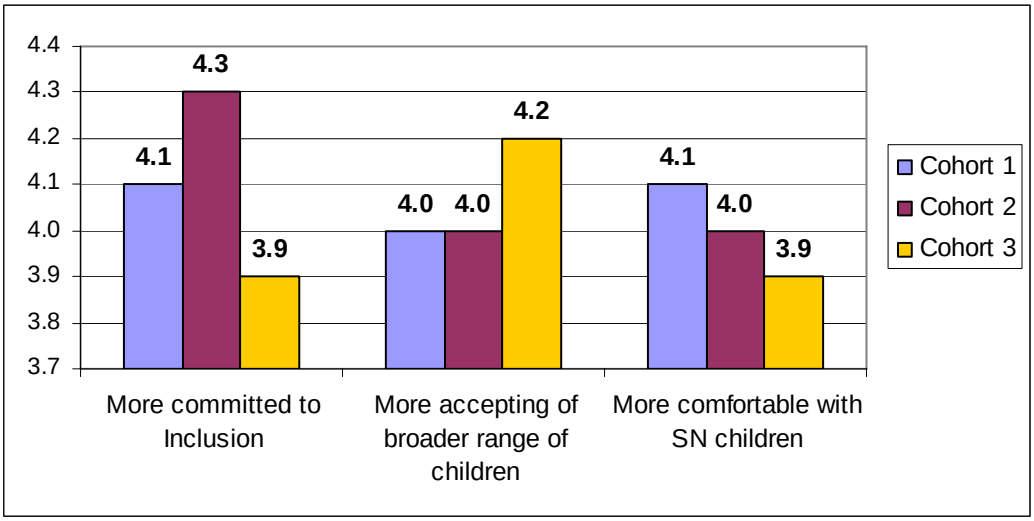
When asked what they had found most frustrating or problematic in their work with children who have special needs, lead educators cited issues involved in working with individual children; lack of training or support; limitations in the centre's space, equipment, or capacity to provide time for them to plan or consult with others; and difficulties experienced by or with parents. In descending order, the issues ECEs found most problematic were:

- Being unable to communicate with a child / finding it difficult to engage (24)
- Feeling pulled by the needs of other children in the centre (22)
- Difficulty with the child's behaviour (22)
- Their own lack of knowledge or training (20)
- Lack of time to plan or consult (17)
- Feeling stressed (14)
- Lack of a support worker (13)
- Parents being unable or unwilling to follow through (14) or parents who are stressed and unsupported (10), and
- Lack of equipment or adequate space (11)

Change Experienced in the Previous Six Years

Most lead educators reported that, in the past six years, they had become more committed to inclusion, as well as more comfortable working with children who have special needs. As well, they reported that generally they were more accepting of a broader range of children being included in their program. Lead educators' comments in the educator questionnaire administered in Cohort 1 and 2 and in some centres in Cohort 3 emphasized both their commitment to inclusion and the benefits of experience in working with children with special needs. When asked if, over the last six years, they had become more or less committed to the principle of inclusion, more or less accepting of a broader range of children with disabilities, and more or less comfortable working with children with special needs on a scale of 1 to 5, the overwhelming majority of lead educators reported having becoming more committed, more accepting and more comfortable. Those who said there had been no change in their view often commented that they were already committed to inclusion and comfortable. As shown in Figure 4.12, there were some minor differences in responses across cohorts, but none that were statistically significant.

Figure 4.11 Lead Educators' Views and Attitudes



Based on responses of 46 lead educators: 17 from Cohort 1, 15 from Cohort 2 and 14 from Cohort 3 on a scale of 1 to 5.

4.7 OBSERVATIONS AND SCORES RELATED TO INCLUSION CAPACITY AND INCLUSION QUALITY OBTAINED AT BASELINE

One or more children with special needs were enrolled in 12 Cohort 1 classrooms, 13 Cohort 2 classrooms, 14 Cohort 3 classrooms, and 5 Cohort 4 classrooms in which lead teachers were active participants in *PFI-NS*. In these cases, the inclusion facilitator was able to make detailed observations about inclusion practices and work with the lead educator and other staff in the classroom to support the child's participation and development. In other cases, changes made to enhance program quality were seen to be useful in building the capacity to include children with special needs more effectively at a later time.

Three measures were used to assess inclusion quality, as described in Chapter 3. The first, *ECERS-R Item 37* is a specific item that assesses provisions for children with disabilities. It was scored only if a child with special needs was enrolled and present in the target classroom at the Baseline assessment. *The SpeciaLink Inclusion Practices and Principles* measures were obtained for all centres, as they provide information that is useful for measuring inclusion capacity and inclusion quality at the centre level.

4.7.1 Scores on *ECERS-R Item 37: Provisions for Children with Disabilities*

The average score obtained for the classrooms that included a child with special needs at Baseline on this multifaceted item was 5.5 (s.d. = 1.81) with individual scores that ranged from 1 to 7 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, two 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.

The degree of variation among the classrooms was expected. 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.

Table 4.13 Scores on *ECERS-R* Item 37 across Cohorts at Baseline

	Cohort 1	Cohort 2	Cohort 3	Cohort 4	All Centres
Number of centres scoring < 3	4	2	0	1	7
Number of centres scoring 4-5	0	2	3	1	6
Number of centres scoring 6-7	8	9	11	3	31
ECERS-R Item 37 Average Score	4.9	5.5	6.1	5.4	5.5

Based on observations of 44 classrooms: 12 in Cohort 1, 13 in Cohort 2, 14 in Cohort 3, and 5 in Cohort 4. Scores ranged from 1 to 7. Note that no classroom received a score of 3.

4.7.2 Scores on the *SpeciaLink Inclusion Practices Profile*

The *SpeciaLink Inclusion Practices Profile* is designed to assess 11 specific practices related to inclusion. In *Form A*, used in Cohorts 1 and 2, each item is scored on a scale from 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. In *Form B*, used in Cohorts 3 and 4, specific indicators are assessed for each item. In *Form B* item scores can range from 1 to 7. Because the two versions are different, the data are presented separately for centres in Cohorts 1 and 2 and for centres in Cohorts 3 and 4. Scores were obtained for each participating centre and reflect practices and resources in the centre as a whole. The data presented in Table 4.14 reflect scores in centres that included at least one child with special needs at the Baseline assessment. [x]

Centres in Cohorts 1 and 2 that included one or more children with special needs had an average score of 3.50 out of 5 on the *SpeciaLink Inclusion Practices Profile,* with item scores that ranged from 2.44 (*The Physical Environment*) to 4.61 (*Involvement of Typical Children*). The average *Inclusion Practices Profile* score was 3.34 for centres in Cohort 1 and 3.66 for centres in Cohort 2. Centres in Cohort 1 had five items with average ratings below 3.0 (see Table 4.14), indicating room for improvement. Centres in Cohort 2 had only one item with an average rating below 3.0. Cohort 2 centres had significantly higher

[x] Centres that did not include any children with special needs could not demonstrate many of the inclusion practices in this measure. For this reason, it is more accurate to separate data for centres that did and did not include children with special needs. Of the 42 centres in Cohorts 1 and 2, 36 (19 of the 21centres in Cohort 1 and 17 of the 21 centres in Cohort 2) included at least one child with identified special needs at Baseline.

scores on three practice items: *Equipment and materials, Involvement of Parents of Children with Special Needs,* and *Support from the Board of Directors or Similar Unit*.

Table 4.14 Average Scores on Items from the *SpeciaLink Inclusion Practices Profile* at Baseline for Centres in Cohorts 1 and 2 that Included A Child with Special Needs

	Cohort 1	Cohort 2	All Centres
1. Physical Environment and Special Needs	2.58	2.29	2.44
2. Equipment and Materials	2.42	4.12 *	3.22
3. Director and Inclusion	4.37	4.75	4.54
4. Staff Support	3.79	3.88	3.83
5. Staff Training	3.26	3.06	3.17
6. Therapies	3.05	3.53	3.28
7. Individual Program Plans	2.95	3.75	3.31
8. Parents of Children with Special Needs	2.89	3.71 *	3.28
9. Involvement of Typical Children	4.68	4.53	4.61
10. Board of Directors	2.73	3.69 *	3.23
11. Preparing for the Transition to School	4.00	3.25	3.66
Overall *SpeciaLink Inclusion Practices Profile* Score	3.34	3.66	3.50

Scored out of 5. Based on 19 centres in Cohort 1 and 17 centres in Cohort 2.

* Statistically significant differences in scores between Cohorts 1 and 2 ($p<.05$)

Centres in Cohorts 1 and 2 that did not include any children with special needs at the Baseline assessment had an average score of 2.75 out of 5 on the *SpeciaLink Inclusion Practices Profile.* While some centres had an accessible environment, materials that lent themselves to children with different ability levels and directors who were supportive of inclusion, those resources were not being put to use to include children with special needs at the beginning of the project.

As shown in Table 4.15, the average score on the *SpeciaLink Inclusion Practices Profile, Form B* at Baseline was 2.89 out of 7 for centres in Cohorts 3 and 4 that included at least one identified child with special needs at the Baseline assessment.[xi] The average *Inclusion Practices Profile* score was 2.99 for centres in Cohort 3 and 2.72 for centres in Cohort 4. Items that had the highest ratings for Cohort 3 centres were *The Nature of Therapeutic Interventions, The Use of Individual Program Plans,* and *Facilitation of the Transition to School* (4.18, 4.06, and 4.00, respectively). The highest item score for centres in Cohort 4 was *The Involvement of Typical Children* (4.36), the only item that received a score above 4.0 for this cohort. There were no statistically significant differences between centres in Cohort 3 and Cohort 4 in mean *Inclusion Practices* scores or in item scores. Both groups had particularly low average scores on three Practice items: *Physical Environment and Special Needs, Equipment and Materials* and *Support from the Board of Directors or Similar Unit*.

[xi] Of the 56 centres in Cohorts 3 and 4, 30 (19 of the 31 centres in Cohort 3 and 11 of the 25 centres in Cohort 4) included at least one child with identified special needs at Baseline.

Table 4.15 Average Scores on Items from the *SpeciaLink Inclusion Practices Profile* at Baseline for Centres in Cohort 3 and Cohort 4 that Included A Child with Special Needs

	Cohort 3	Cohort 4	All Centres
1. Physical Environment and Special Needs	2.11	2.18	2.13
2. Equipment and Materials	1.28	1.27	1.28
3. Director and Inclusion	2.74	2.09	2.50
4. Staff Support	3.50	2.27	3.03
5. Staff Training	3.53	3.00	3.33
6. Therapies	4.18	3.36	3.86
7. Individual Program Plans	4.06	2.91	3.61
8. Parents of Children with Special Needs	3.12	3.73	3.36
9. Involvement of Typical Children	3.50	4.36	3.85
10. Board of Directors	1.79	1.45	1.67
11. Preparing for the Transition to School	4.00	3.00	3.62
Overall *SpeciaLink Inclusion Practices Profile* Score	2.99	2.72	2.89

Scored out of 7. Based on 19 centres in Cohort 3 and 11 centres in Cohort 4.

Centres in Cohorts 3 and 4 that did not include children with special needs at the Baseline assessment had average scores of 1.91 and 1.98 out of 7, respectively, on the *SpeciaLink Inclusion Practices Profile.*

4.7.3 Scores on the *SpeciaLink Inclusion Principles Scale*

The *SpeciaLink Inclusion Principles Scale* used for Cohorts 1 and 2 (*Form A*) is based on five questions 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. Score values reflect the director's replies, tempered by the inclusion facilitator's own opinion if she observes instances when practice appeared to diverge from the principles espoused by directors. Each item is scored on a scale from 1 to 5 with a value of 1 indicating that principles are completely undeveloped and a value of 5 indicating that the centre has adopted principles that explicitly support full inclusion and are evident in observed practices.

As can be seen in Table 4.16, average Baseline scores on the *SpeciaLink Inclusion Principles Scale* for centres in Cohorts 1 and 2 that included at least one identified child with special needs were 3.71 out of 5 and 3.78 out of 5, respectively. These average scores suggest that most of these centres can be considered to be close to incorporating their experiences, their knowledge and their commitment into their policies. Average scale scores for the two cohorts were very similar; there were no statistically significant differences between the cohorts on any of the items. Centres that did not include any children with special needs had considerably lower scores (an average overall score of 2.57 with item scores that ranged from 2.17 to 2.83).

Table 4.16 Average Scores on Items from the *SpeciaLink Inclusion Principles Scale* at Baseline for Centres in Cohort 1 and Cohort 2 that Included a Child with Special Needs

	Cohort 1	Cohort 2	All Centres
1. Principle of Zero-Reject	3.53	3.69	3.60
2. Principle of Naturally Occurring Proportions	3.53	3.50	3.51
3. Principle re: Hours of Attendance	3.89	3.88	3.89
4. Principle of Full Participation	4.06	4.13	4.09
5. Principle of Advocacy and Maximum Feasible Parent Participation	3.63	3.69	3.66
Overall *SpeciaLink Inclusion Principles Scale* Score	3.71	3.78	3.74

Items were scored from 1-5. Based on 19 centres in Cohort 1and 16 centres in Cohort 2

Table 4.17 summarizes the average scores obtained on the S*pecialink Inclusion Principles Scale* for centres in Cohorts 3 and 4 that included at least one identified child with special needs at Baseline. Among centres that included children with special needs, the average score was 3.35 out of 7 with items ranging from 2.50 (*Leadership, Proactive Strategies*) to 3.93 (*Principle of Zero Reject*). There were no statistically significant differences in scores between centres in Cohorts 3 and 4. The average *Inclusion Principles* score was 2.54 among centres that did not include any children with special needs at Baseline, with item scores ranging from a low of 1.58 (*Leadership, Proactive Strategies*) to 3.26 for the principle referring to *Hours of Attendance*.

Table 4.17 Average Scores on Items from the *SpeciaLink Inclusion Principles Scale* at Baseline for Centres in Cohorts 3 and 4 that Included a Child with Special Needs

	Cohort 3	Cohort 4	All Centres
1. Principle of Zero-Reject	4.21	3.45	3.93
2. Principle of Naturally Occurring Proportions	3.58	3.00	3.37
3. Principle re: Hours of Attendance	3.63	4.00	3.77
4. Principle of Full Participation	3.05	3.09	3.07
5. Principle of Advocacy and Maximum Feasible Parent Participation	3.26	3.45	3.33
6. Principle re: Leadership, Pro-active Strategies, and Advocacy for High Quality Inclusive Child Care	2.68	2.18	2.50
Overall *SpeciaLink Inclusion Principles Scale* Score	3.43	3.20	3.35

Items were scored from 1-7. Based on 19 centres in Cohort 3 and 11 centres in Cohort 4.

4.8 SUMMARY OF CENTRES' INCLUSION CAPACITY AND INCLUSION QUALITY AT BASELINE

One way to summarize the status of the participating centres 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),[4] we developed an Inclusion Quality Index that effectively differentiated centres that demonstrated high, moderate and low levels of inclusion quality. Centres that demonstrated high inclusion quality in that study had scores of 7 on Item 37 of the *ECERS-R*, 4.3 or above on the *SpeciaLink Inclusion Practices Profile (Form A)*, and 4.1 or above on the *SpeciaLink Inclusion Principles Scale (Form A).* Centres that had low demonstrated inclusion quality had scores of 3.9 or below on the *ECERS-R*, 3.0 or below on the *SpeciaLink Inclusion Practices Profile*, and 2.8 or below on the *SpeciaLink Inclusion Principles Scale.* 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.

Because the psychometric properties of *Form B* of these two instruments have not yet been established in a way that would justify specific cutoff points for a similar analysis, our capacity to estimate the proportion of centres in Cohort 3 and 4 that could be considered to evidence high and low inclusion quality is more limited. However, if we were to 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 are available would be considered to demonstrate high inclusion quality.

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 have very limited experience with inclusion on a regular basis, which suggests that they lack the opportunity to benefit from ongoing experience and effective partnerships with agencies and therapists in the community. Most centres had 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 to ensure that children with special needs have the opportunity to participate in programs that will be of benefit to them and that staff will have the knowledge, skills, and support to help them provide that opportunity on a continuing basis. 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.

END NOTES

1 Harms, T., Clifford, R.M., & Cryer, D. (1998). *Early Childhood Environment Rating Scale - revised edition (ECERS-R).* N.Y.: Teachers College Press, Columbia University.

2 Arnett, J. (1989). Caregivers in day care centers: Does training matter? *Journal of Applied Developmental Psychology 10*: 541-552.

3 Goelman, H., Doherty, G., Lero, D.S., LaGrange, A. & Tougas, J. (2000). *You Bet I Care! -- Caring and learning environments: Quality in child care centres across Canada.* ON: University of Guelph: (Centre for Families, Work and Well-Being). Available from Web Site: http://worklifecanada.ca

4 Irwin, S.H., Lero, D.S. & Brophy, K. (2000) *A Matter of urgency: Including children with special needs in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org.; Irwin, S.H., Lero, D.S. & Brophy, K. (2004). *Inclusion: The next generation in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org.

CHAPTER 5: ASSESSING THE IMMEDIATE AND LONGER-TERM EFFECTS OF *PFI-NS*

This chapter provides clear evidence of the positive effects of the *PFI-NS* model of assessment, collaborative action planning, and direct support on program quality, inclusion capacity, and inclusion quality. Improvements in *program quality* were reflected in changes in *ECERS-R* scores and in the changes made to the environment, to activities, and to teacher-child interactions reported by directors and lead educators. Improvements in program quality contribute to increased inclusion capacity, especially when programs become more flexible and child-centred, and staff become more knowledgeable and skilled, enabling children with different abilities to participate more easily. *Improved inclusion capacity* was assessed primarily among centres that did not include children with special needs, and was observed in changes in staff attitudes, the adoption of principles that support inclusion, and potentially in changes to the physical environment and in staff training that would enable children with special needs to be able to attend successfully. Changes in *inclusion quality* were reflected in changes in inclusion practices – observed or reported changes in the physical environment and in the use of specialized equipment or materials; changes in the director's and the staff's involvement in supporting inclusion; changes in educators' knowledge and interactions with children with special needs; improved use of individual program plans; more engagement of typically developing children in interactions with children with special needs; more positive and productive relationships with professionals and resource consultants; more support for parents of children with special needs; and more active involvement in preparing children with special needs for the transition to school. Improvements in inclusion capacity and inclusion quality were reflected primarily in changes in scores on the *SpeciaLink Inclusion Principles and Inclusion Practices Scales.*

Analyses in this chapter are based on scores obtained from repeated administrations of both the *ECERS-R* measure of program quality and the *SpeciaLink Inclusion Principles and Inclusion Practices* scales at three points in time: Baseline, the end of the active consultation period (Time 2), and after a sustainability period of 4-5 months (Time 3). Interviews with the director and lead preschool educator in each centre provided their perspectives on changes that had occurred as a result of *PFI-NS*. In addition, inclusion facilitators' detailed case notes throughout the project offered insights about the changes made in programs, in educators' attitudes and positive involvement, and in the observed benefits for children attending the programs. These notes also provided understanding about the factors that enabled positive changes to occur and the factors that frustrated or impeded positive changes.

5.1 IMPACTS ON MEASURED PROGRAM QUALITY

5.1.1 Improvements in *ECERS-R* Scores from Baseline to Time 2

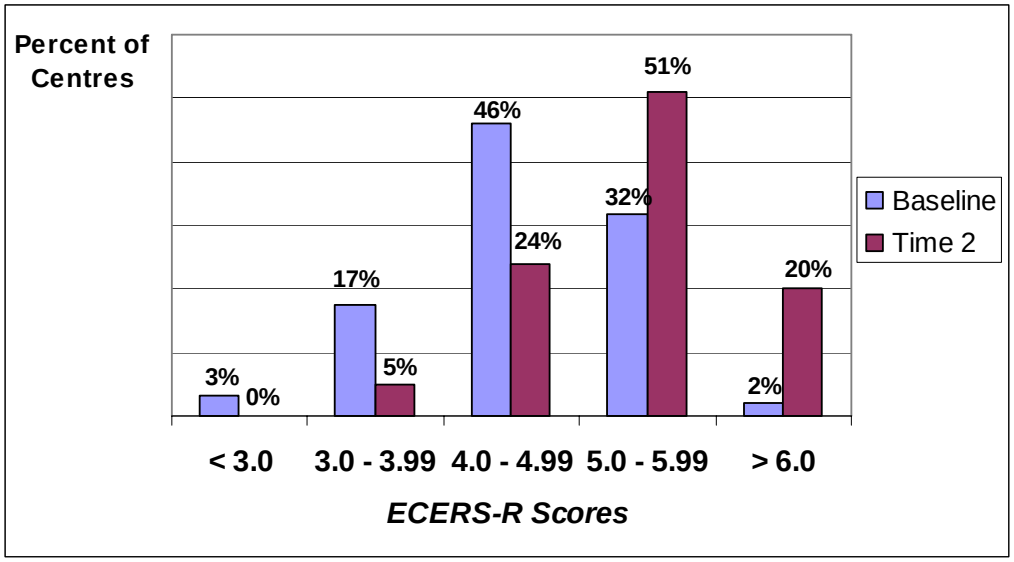
Scores on the *ECERS-R* measure of program quality were obtained for all 98 centres at Baseline, Time 2 and Time 3. The average *ECERS-R* score obtained in the participating classrooms was 5.35 at Time 2 compared to 4.58 at Baseline, a difference that was highly

significant statistically (t = 14.935, p<.001). At Time 2, *ECERS-R* scores ranged from 3.57 to 6.55 out of a maximum of 7.0, with a standard deviation of 0.67, while Baseline scores had ranged from a low of 2.71 to a high of 6.50 with a standard deviation of 0.77.

At Baseline, 20 centres (20.4%) had overall *ECERS-R* scores in the minimal (3.0-3.99) or inadequate range (below 3.0). Only one third of the centres (33.6%) had scores of 5.0 or above, the cut-off that indicates good overall quality. By 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 after the Baseline assessment. Figure 5.1 shows the proportion of individual centres at each level of quality at Baseline and at Time 2, the end of the active intervention period.

In all, 45 of the 98 individual classrooms evidenced an improvement on their overall *ECERS-R* score of .50-.99 and an additional 33 centres recorded an increase of 1.0 or more. One in seven classrooms evidenced no improvement between the Baseline and Time 2 assessments (a difference score of .25 or less). The fact that the large majority of centres showed 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.

Figure 5.1 Distribution of *ECERS-R* Scores at Baseline and Time 2



Based on all centres, N=98

Table 5.1 provides information on changes observed on the seven *ECERS-R* subscales between Baseline and Time 2 for all 98 centres participating in the first four cohorts of *PFI-NS.* Prior to intervention, average scores on 5 of the 7 subscales were in the mediocre range and scores on only two subscales (*Interactions* and *Program Structure*) had an average that indicated good quality. At Time 2, all but one subscale average *(Activities)* exceeded 5.0,

indicating that good, development-enhancing practices and experiences were being observed.

Table 5.1 *ECERS-R* Scores Before and After Consultation (Baseline and Time 2)

Category	Baseline Score M	Baseline Score Range	Time 2 Score M	Time 2 Score Range	Comparison Mean Significance Difference	Comparison (p)
Total ECERS-R Score	4.6	2.7 - 6.5	5.4	3.6 - 6.6	.775	.000
Space and Furnishings	4.5	1.9 - 6.3	5.4	2.8 – 7.0	.937	.000
Personal Care	4.4	1.4 - 7.0	5.3	2.2 - 7.0	.885	.000
Language - Reasoning	4.6	2.5 - 7.0	5.3	2.5 - 7.0	.737	.000
Activities	3.7	2.0 - 6.0	4.7	2.4 - 6.7	.996	.000
Interactions	5.9	2.0 - 7.0	6.3	2.6 - 7.0	.368	.000
Program Structure	5.1	2.3 – 7.0	5.9	3.3 - 7.0	.851	.000
Parents and Staff	4.9	2.8 – 7.0	5.2	3.6 - 7.0	.339	.000

Based on all centres, N=98

Statistical comparisons of differences between Baseline and Time 2 on *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, it is important to underscore what Kontos (1996)[1] and Campbell and Milbourne (2005)[2] refer to as "observable changes" in program quality — changes that result in a classroom's overall score moving from one quality category to another (i.e., a change from inadequate to adequate care or adequate to good quality care *or* when both pre-and post-test scores are in the good quality category but there is a mean score difference of at least 1 full point, such as a change from 5.25 to 6.40). Based on these criteria, 45 of the 98 participating *PFI-NS* classrooms (46%) demonstrated an "observable change" in program quality between Baseline and Time 2, the end of the active intervention period. (Forty-one of the 45 classrooms changed quality categories, while four made observable improvements within the good quality range.)

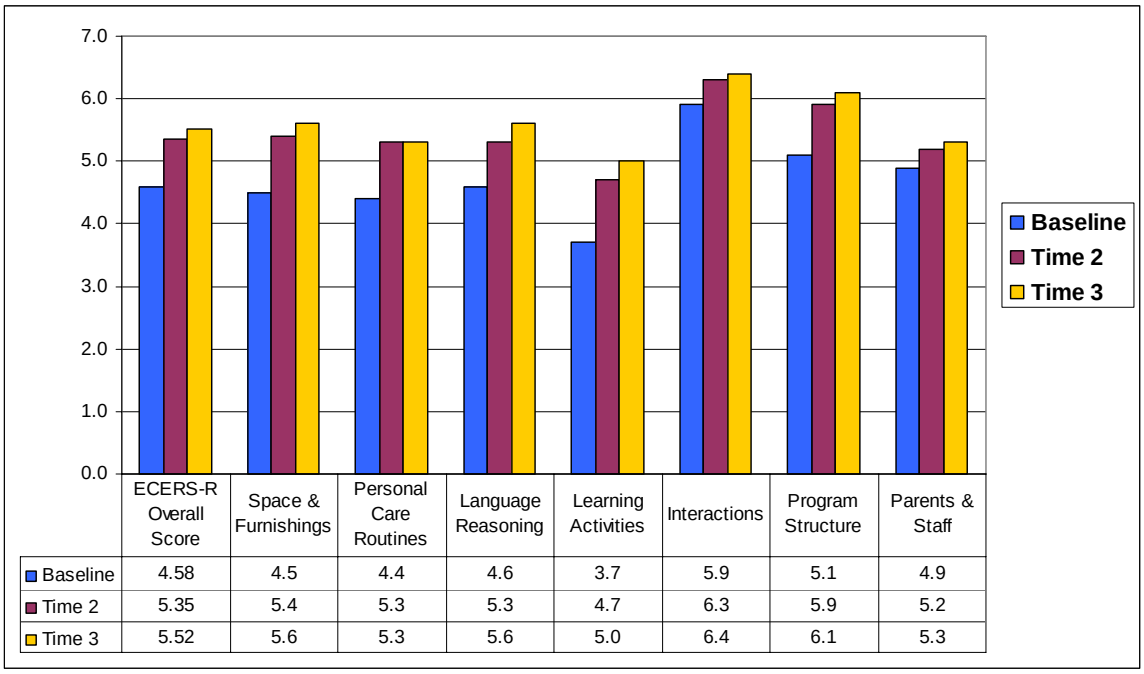
5.1.2 Improvements Maintained and Continuing: *ECERS-R* Scores from Time 2 to Time 3

PFI-NS facilitators provided full reports to the centres following the Time 2 assessment and once again engaged the director and lead educator in collaborative action planning to encourage further improvements; however they did not make regular visits during the sustainability period, which typically covered a 4-5 month period from June to October/November. As well as providing an opportunity to test whether the centres maintained or improved their scores, these months were used to visit centres in earlier cohorts, to make contact with centres that might participate in the next successive cohort, to complete data records and to provide specific professional development workshops that couldn't be scheduled for centres during the support period. The facilitators also had the opportunity to participate in project retreats to liaise with researchers including Dr.

Sharon Hope Irwin, Dr. Donna Lero, and Dr. Pat Wesley from the University of North Carolina at Chapel Hill, to learn about similar projects in neighbouring provinces, and to share resources and experiences.

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 ($t = 3.865$, $p < .001$), 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, with a standard deviation of 0.82. 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. Figure 5.2 shows scores on the *ECERS-R* subscales and overall scale at Baseline, the end of the active intervention period (Time 2), and following the 4-5 month sustainability phase (Time 3).

Figure 5.2 Average *ECERS-R* Scores at Baseline, Time 2 and Time 3 in *PFI-NS* Preschool Rooms



	ECERS-R Overall Score	Space & Furnishings	Personal Care Routines	Language Reasoning	Learning Activities	Interactions	Program Structure	Parents & Staff
Baseline	4.58	4.5	4.4	4.6	3.7	5.9	5.1	4.9
Time 2	5.35	5.4	5.3	5.3	4.7	6.3	5.9	5.2
Time 3	5.52	5.6	5.3	5.6	5.0	6.4	6.1	5.3

Based on all centres, N=98

Average change scores were computed comparing Time 2 to Time 3 scores for the overall average score on the *ECERS-R* and for each subscale. The average change in the overall *ECERS-R* score between Time 2 and Time 3 was 0.16. Subscale change scores ranged from .04 for the *Parents & Staff* subscale to .92 for the *Personal Care Routines* subscale. Analysis of variance comparisons revealed that the difference between Time 2 and Time 3 scores was statistically significant for four subscales: *Space and Furnishings, Language-Reasoning, Activities,* and *Program Structure*.

Comparisons between Baseline scores and those obtained at Time 3 are of interest, given the continuing improvement evident in many centres during the Sustainability period. Comparisons of Baseline and Time 3 scores for the overall *ECERS-R* average score and the seven subscale scores were all statistically significant at p<.001. Moreover, by the end of Time 3, the proportion of centres with ratings indicating a good, very good, or excellent level of program quality that enhances children's development (5.0 or above) had increased from 33% at Baseline to 82% by the end of the Sustainability period.

Observable differences in program quality between Baseline and Time 2 assessments, based on the criteria set out by Kontos (1996) and Campbell & Milbourne (2005) had been evident in 45 of the 98 classrooms. During the Sustainability period, four classrooms' scores slipped somewhat; but 15 centres improved to the point of being able to be counted as having demonstrated an "observable improvement" in program quality compared to their status at Baseline. Consequently, by the end of their cycle in *PFI-NS*, 57 classrooms (58%) evidenced an observable improvement in program quality.

5.1.3 Differences in Quality Improvement across Cohorts

Analyses of the total sample of participating centres provide an overall view of the effects of the *PFI-NS* model. An analysis of differences between cohorts is useful in order to determine if the model was equally successful for each cohort, which is particularly important given the observed differences in overall quality between them at Baseline. As noted in Chapter 4, Cohort 2 had the highest proportion of centres scoring 5.0 or above (good quality) on the *ECERS-R* at Baseline, while Cohort 4 centres included a high proportion with scores in the minimal and mediocre ranges of program quality.

Improvements in ECERS-R Scores from Baseline to Time 2

Average scores on the *ECERS-R* measure of program quality at Baseline and Time 2 are shown in Table 5.2 for each cohort. No cohort had an average *ECERS-R* score above 5.0 at Baseline, while *ECERS-R* scores were above 5.0 at the Time 2 assessment for all four cohorts. All four cohorts also showed an improvement between Baseline scores and Time 2 scores that was highly significant statistically (p<.001).

Table 5.2 *ECERS-R* Average Scores Before and After Consultation, by Cohort

	Baseline		**Time 2**				
	Mean Score	s.d.	Mean Score	s.d.	Average Difference	*t* value	*p*
Cohort 1	4.57	.818	5.49	.628	.926	8.68	.000
Cohort 2	4.92	.822	5.43	.664	.514	5.03	.000
Cohort 3	4.60	.684	5.44	.654	.840	8.58	.000
Cohort 4	4.27	.688	5.06	.674	.787	8.28	.000

Table 5.3 provides information on the distribution of average *ECERS-R* scores at Baseline and at Time 2 for each cohort. The proportion of classrooms with an average *ECERS-R*

quality score of 5.0 or above increased from 29% to 81% in Cohort 1, from 53% to 71% in Cohort 2, from 32% to 78% in Cohort 3, and from 24% to 56% in Cohort 4.

Table 5.3 Distribution of ECERS-R Average Scores at Baseline and at Time 2 Assessments, by Cohort

	Cohort 1		Cohort 2		Cohort 3		Cohort 4	
***ECERS-R* Score**	**Baseline**	**Time 2**	**Baseline**	**Time 2**	**Baseline**	**Time 2**	**Baseline**	**Time 2**
< 3.0	5%	0%	5%	0%	0%	0%	4%	0%
3.0 – 3.99	19%	0%	10%	5%	16%	6%	24%	8%
4.0 – 4.99	48%	19%	33%	24%	52%	16%	48%	36%
5.0 – 5.99	29%	57%	43%	52%	32%	52%	24%	44%
6.0 – 7.00	0%	24%	10%	19%	0%	26%	0%	12%

Finally, the number of centres that demonstrated an observable improvement in quality using the criteria described earlier was compared across cohorts. The proportion of centres in each cohort that demonstrated an observable improvement in quality at Time 2 over their Baseline score was 67% in Cohort 1, 24% in Cohort 2, 48% in Cohort 3, and 44% in Cohort 4.

Analyses of improvements by cohort on *ECERS-R* subscale scores were also conducted. When comparing Time 2 to Baseline scores for Cohort 1, all subscales demonstrated an increase that was statistically significant at the .001 level, with average improvements of +.50 or more on all subscales, except for *Interactions*, on which the average score was already quite high at the Baseline assessment. Among Cohort 2 classrooms, there were statistically significant improvements on all subscales except *Parents & Staff*, which had high scores at Baseline. Average improvements were calculated at .50 or greater on the *Space and Furnishings*, *Language-Reasoning* and *Activities* subscales. Cohort 3 classrooms demonstrated statistically significant improvements on all subscales with average increases generally exceeding .75, with the exception of a small average increase on the subscale that focuses on provisions for *Parents & Staff*. Finally, Cohort 4 classrooms evidenced statistically significant improvements on all subscales exception *Interactions*, and average increases that exceeded .50 (often .80 or above) on most subscales with the exception of *Parents & Staff* and *Interactions.*

In summary, there is clear indication of strong quality improvements at the end of the active consultation period in each cohort. Classrooms with lower initial scores had a greater opportunity to show a numerical improvement; however, the evidence of statistically significant improvements in Cohort 2 centres indicates that the *PFI-NS* model also benefits classrooms with higher scores at Baseline.

Improvements in the Sustainability Phase

As was evident in the total sample of participating centres, analyses indicated that the substantial gains made between the Baseline and Time 2 assessments were generally maintained or enhanced throughout the Sustainability period for each cohort. Table 5.4 presents average scores on the *ECERS-R* measure at Baseline, Time 2, and Time 3 for each

cohort. The average score was higher at the end of the Sustainability phase than at the end of Time 2 for each cohort; however differences between scores obtained at Time 2 and Time 3 were not statistically significant.

Table 5.4 Average *ECERS-R* Scores at Baseline, Time 2 and Time 3, by Cohort

	Baseline		Time 2		Time 3	
	Mean Score	s.d.	Mean Score	s.d.	Mean Score	s.d.
Cohort 1	4.57	.818	5.49	.628	5.60	.488
Cohort 2	4.92	.822	5.43	.664	5.76	.591
Cohort 3	4.60	.684	5.44	.654	5.54	.664
Cohort 4	4.27	.688	5.06	.674	5.21	.925

In comparison to Time 2 assessments, the proportion of classrooms with average *ECERS-R* scores at or exceeding 5.0 at Time 3 remained constant at 81% in Cohort 1, increased from 71% to 90% in Cohort 2, increased from 78% to 87% in Cohort 3, and remained constant at 56% in Cohort 4. When observable differences are considered, using the criteria set out by Kontos (1996) and Campbell & Milbourne (2005), we note that observable improvements in overall *ECERS-R* scores were evident in 13 centres in Cohort 1, 11 centres in Cohort 2, 18 centres in Cohort 3, and 15 centres in Cohort 4 (62%, 52%, 58% and 60%, respectively) by the end of their cycle in *PFI-NS*.

In summary, the analyses in this section support the finding of considerable improvement in quality scores in each cohort of participating centres, with the most dramatic improvements noted during the active consultation phase, and continuing improvements in some cases when centres were provided the opportunity to work on collaborative action plans on their own for a period of 4-5 months.

5.2 DIRECTORS' AND EDUCATORS' ACCOUNTS OF THE CHANGES MADE TO ENHANCE PROGRAM QUALITY

Centre directors and lead educators participated in semi-structured telephone interviews to obtain their views of how the *PFI-NS* interventions and supports affected their program. They were prompted to discuss changes relating to each of the *ECERS-R* subscales that were directly attributable to participation in *PFI-NS* and to provide more details about the nature of the changes that were made. In addition, the interviews provided directors and staff with an opportunity to comment on what had enabled or frustrated improvements, what benefits they felt children were deriving, and whether the changes had an impact on their capacity to include children with special needs. The following section summarizes the information obtained about changes in each aspect covered by the *ECERS-R* measure.

Space and Furnishings: 78% of the directors reported having made changes in space and furnishings as a result of *PFI-NS.* The most common and visible changes resulted from rearrangement of the classroom. Directors noted that an improved layout enhanced children's participation and experience. For example, activity centres become better defined

and more accessible, quiet areas were made available, and displays were made more child-related. In addition, one third of the directors purchased or received new materials or equipment that enriched the environment, enhancing learning activities and helping to make the centre a more attractive and pleasant environment for children and staff. Better organization of the environment and labelling of materials also facilitated children's interactions and made it easier for staff and children to easily find and access materials for play and learning. One or two centres were actually in the process of moving or expanding during the project and used the understandings gained from their *PFI-NS* experience to help organize and arrange their new space.

Two thirds of the lead educators reported improvements in space and furnishings: 45% described the development of a soft, quiet play area; 50% of educators reported changes to the classroom layout and better organization of materials through the addition of shelves and labels; 30% reported acquisition of equipment and materials; 13% reported greater use of child-related displays, and almost 40% reported better organization and enhancements of specific activity areas, particularly nature and science, dramatic play, and blocks and accessories.

Personal Care Routines: 65% of the directors commented on changes made in personal care routines. Almost 60% indicated that changes to snack and meal times enabled the children to become more involved in helping and commented that there was more interaction between staff and children at meal times that made them more pleasant and facilitated conversations. As well, 35% of directors reported that staff and children learned to be more aware of and consistent about personal care routines, and made improvements to hand washing and toileting procedures. Other changes included changing space or staff practices related to nap and rest times and having staff more consistently respond to children and parents at arrival and departures. Almost one in seven directors who commented noted that some of the changes they would have liked to make (including making space more accessible to children with special needs) could not be done because of building constraints or the size and layout of rooms.

Similarly, 68% of lead educators reported positive changes in personal care routines, the most common being improvements in snack and mealtimes (65%) and hand washing and hygiene routines (35%). Children were said to be more involved in helping, and it was reported that staff sit and interact with children more. Some educators commented that these changes have been very successful and that the children enjoy these times. Other changes included increased interaction between staff and parents during arrival and departure times.

Language and Reasoning: 71% of directors reported changes related to language and reasoning – most commonly in increased staff awareness of the importance of promoting language and reasoning in the children. Directors commented on having observed staff increasing their use of open-ended questions and having extended conversations with the children. As well, 28% of directors reported improvements to book areas. In particular, books were said to be more accessible to children, were rotated more often, were more varied in content and reflected greater diversity, and were more suitable to children's developmental stage.

Almost 80% of lead educators commented on specific changes made to promote more language, problem solving and reasoning: 53% of lead educators specifically reported on changes in staff interactions with children that included more open-ended questions and deeper conversations with individual children. Educators reported having gained an increased awareness of the need to expand language and reasoning. Staff also reported that they became more encouraging of children's problem solving and interactions with other children. Thirty percent of the educators reported improved access to books with more varied themes, reflecting greater awareness of diversity and multiculturalism; more visible use of writing activities by children and labelling for them; and more time reading to and with the children.

Activities: The majority of directors (84%) reported development and expansion of different activity centres. In particular, changes most frequently noted related to the dramatic play area; art, science and nature activities; and music and movement. As well, 24% of directors commented that staff had more ideas for activities that were more creative, child-initiated and inclusive, in keeping with inclusion facilitators' encouragement of an emergent curriculum approach.

Change in learning activities was very evident to early childhood educators. Eighty-eight percent of lead educators described change in this area, many of them reporting on two or three changes made as a result of the *PFI-NS* intervention. Improvements were made in a variety of areas – most commonly related to science and nature activities, dramatic play, arts and crafts, and curriculum programming. More materials were added, and some teachers said they developed more ideas for engaging the children. As well, many lead educators commented that art activities allowed children to be more creative and were less teacher-directed; 47% reported that activities had been improved by the addition of more equipment, toys and games.

Interactions: Half of the directors reported few changes to interactions, many noting that staff were already strong in this area. Changes that were mentioned included improved staff-child interaction and child-peer interactions. Twenty-eight percent of directors noted that staff initiated more interactions with the children and were more encouraging of children's communication; several commented that staff seemed more involved in their work and that interactions among staff were also improved. As well, 21% of directors observed that the children had improved peer interactions, were more cooperative, and were using language and skills to resolve conflicts, rather than hitting or taking things from others. Five directors spontaneously commented that that workshops and *ECERS-R* assessments had been instrumental in supporting improvements in this area.

Even though this had been an area of assessed strength at Baseline, 73% of lead educators described improvements related to social interactions. Fully 50% reported improvements in staff-child interactions in that teachers initiated more interactions, and were more focused on listening to and playing with children. Several commented that children with special needs were included more fully as a result. Thirty-two percent of lead educators reported that changes in interaction patterns resulted in children more often engaging effectively in conflict resolution, and that they were less confrontational, and were more cooperative with each other. In addition, almost 20% of lead educators commented that there was increased

awareness and cooperation among staff, which had positive effects on them and on the children.

Program Structure: 63% of directors commented that schedules were better planned and were more flexible, and that there were smoother transitions between activities; 22% reported that the program structure had changed to enable more choices for children. In many programs, these changes reflected adoption or partial adoption of an emergent curriculum approach, less focus on routines, and less use of themes and pre-arranged, prescriptive activities that were not based on the children's interests.

Similarly, 72% of lead educators reported changes in the program with regard to scheduling and structure, resulting in greater flexibility and smoother transitions between activities. Programs were said to have become more age-appropriate, to offer more choices to children, and to allow more time for small groups. Eighteen percent of lead educators spontaneously reported that their programs were more inclusive of children with special needs.

Parents and Staff: 60% of directors reported there was greater support for staff, including professional development, the addition of a staff room, breaks, and better, and more consistent evaluation procedures, although there is room for more improvement in these areas. Fully half of the interviewed directors noted that parents received more communication from the centre, have greater access to information and resources, have participated in workshops, and that communication between staff and parents has improved considerably. Several commented that parents are more satisfied and involved with the centre and appreciate the changes that have occurred as a result of the *PFI-NS* project.

Fewer lead educators (41%) reported that changes had been made to allow for more professional development, evaluations, planning time or staff breaks. One third noted the changes that were made to improve parent involvement and access to centre information. These lead educators reported that, as a consequence, there was greater communication between staff and parents.

Overall comments about the training and about making changes relating to the *ECERS-R* included:

> *"As a director, the ECERS has helped me with long-range planning and with justifying what I am doing."*
>
> *"Our biggest surprise after an ECERS was conducted was the small things — and then once making a few minor changes, we improved our score greatly! After getting over the initial intimidation of having an 'outsider' evaluate 'your' program, the rest was easy to hear and to change and our centre greatly benefited from the experience." (Director)*
>
> *"Doing the ECERS in our room has made us more aware of how your classroom is set up, and the importance of both rotation and consistency, which has a direct result on the children." (Lead Educator)*
>
> *"ECERS training has given me the opportunity to learn more about what my room has to offer, but also about my own personal limits and expectations. This project gave me the challenge I needed to get out of the rut that I feared I was falling into." (Lead Educator)*

While some child care professionals may have reservations about the focus on the *ECERS-R* scale and an emphasis on score improvement, these quotes indicate that the use of a quantitative tool with clear indicators of what improvements result in higher scores can be an effective means to promote quality in a range of areas. Moreover, engaging staff in setting goals, learning about emergent curriculum approaches, responding to individual staff needs, and providing both information and encouragement complemented and diffused the emphasis on scores alone.

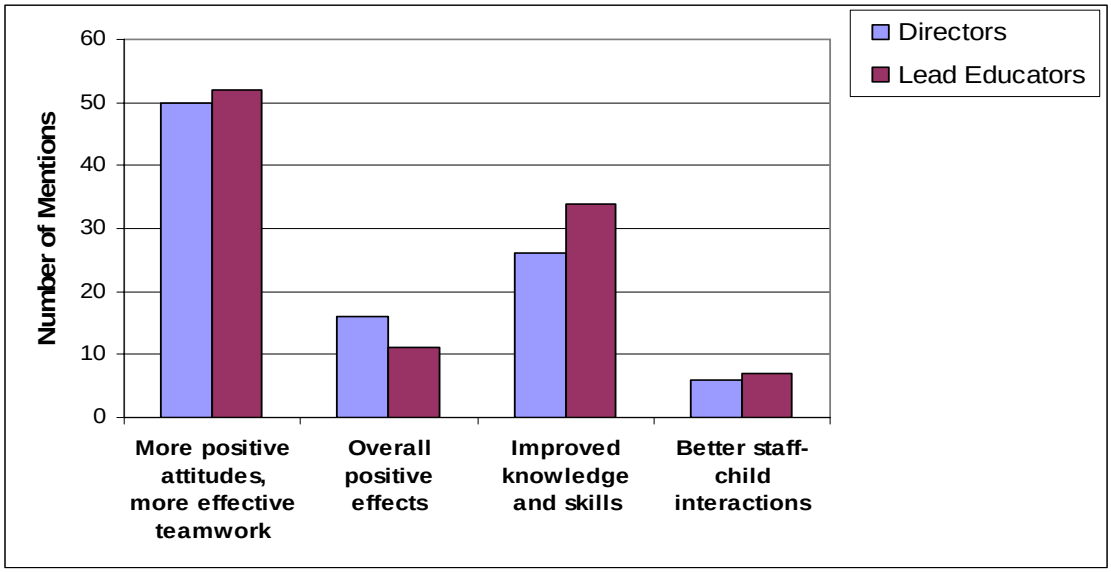
The inclusion facilitators also noted many successes in centres' efforts to improve the quality of their environments that correspond to the directors' and lead educators' observations about the changes they made. In particular, facilitators noted improvements in program activities and the efforts directors and educators made to improve the curriculum with well-designed and well-organized activity areas and the adoption of a more child-centered curriculum approach. Facilitators also noted the efforts made to improve room arrangements and how these enhanced children's participation.
Both the centre staff and the facilitators observed that it was easiest for directors and educators to effect change initially by purchasing new materials and equipment. Facilitators also observed that it was easier for centres to improve their scores in areas that had low scores at Baseline and was more difficult when centres started out with high scores. Nevertheless, facilitators commended the efforts centres and ECEs made to improve the quality of their programs and the successes that were evident across most centres.

5.3 CREATING REFLECTIVE PRACTITIONERS: IMPACTS OF *PFI-NS* ON STAFF KNOWLEDGE AND ENGAGEMENT

5.3.1 Directors' Observations

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.* When asked directly about effects on the staff, almost all reported that they had observed positive effects (see Figure 5.3). 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. Directors reported that a major effect on staff was a change in their attitudes and focus. 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.

Figure 5.3 Directors' and Lead Educators' Comments on the Effects of *PFI-NS* on Staff



N = 84 directors and 85 lead educators

About a quarter of the directors discussed improvements to management-related issues in this section of the 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.

Directors' comments about the impacts of *PFI-NS* on staff included:

> *"It has challenged them; they are more aware of what quality means. They can now define activities such as science and math more accurately and understand what materials they need and how to use them."*
>
> *"I think that the staff are more conscious of how they are doing with their job, making sure that they've looked at it to see what kind of program they have. It's much better."*
>
> *"Staff that have been here for a long time, they are realizing that they don't know it all. The ECERS training helped them want to improve and change with the times."*
>
> *"Our program seemed blocked and ECERS came at the right time. … PFI really helped [staff] to see why I wanted things done differently."*

5.3.2 Lead Educators' Observations

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.

Lead educators made the following comments:

> *"I'm growing as a professional and a team leader."*
>
> *"When I finished school, I was full of ideas, but couldn't make changes on my own. PFI has been a good eye-opener and a good reinforcer. Staff meetings are held as a result of PFI and are valuable."*

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."*
>
> *"My practice has changed. I now plan from the children's interests. I am more on the floor with them, talking to them and listening."*

5.4 CHANGES TO INCLUSION CAPACITY, PRINCIPLES AND PRACTICES

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 to the environment, adaptive equipment, additional training and resources, and support from community-based professionals are required to ensure that children with special needs can benefit fully in early childhood programs 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.[xii] Centres in the latter

[xii] 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.

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).[xiii]

Given the differences between the first two cohorts and the latter two – in particular, the fact that almost all centres in Cohorts 1 and 2 enrolled at least one child with special needs in their centre, while 30% of centres in Cohorts 3 and 4 did not have any children with special needs enrolled during the *PFI-NS* project – as well as the fact that the revised forms of the *SpeciaLink Inclusion Principles and Practices Scales* were used in Cohorts 3 and 4 – we present our quantitative analyses of changes in inclusion capacity, principles and practices in three parts. First we present an analysis of changes in scores on *Item 37* from the *ECERS-R* measure. *ECERS-R Item 37 - Provisions for Children with Disabilities* is only scored if at least one child with special needs is enrolled and present in the target classroom at the time of assessment. Secondly, we consider changes in scores on the *Inclusion Principles* and *Inclusion Practices Scales* (*Form A*) for centres in Cohorts 1 and 2. In the following section, we analyze changes on the *Inclusion Principles* and *Inclusion Practices Scales* (*Form B*) in centres in Cohorts 3 and 4. In each of these sections we present data separately for centres that did and did not include children with special needs during the project in order to assess potential changes in inclusion capacity and inclusion quality (inclusion practices).

5.4.1 Changes to Scores on *ECERS-R Item 37* — Provisions for Children with Disabilities

In total, 71 of the 98 preschool classrooms that were the focus of the *PFI-NS* project had at least one child with special needs attending during the 10-11 month period when *ECERS-R* observations were made; however only 29 rooms had a child with special needs at all three data points (7 in Cohort 1, 9 in Cohort 2, 10 in Cohort 3 and only 3 in Cohort 4).

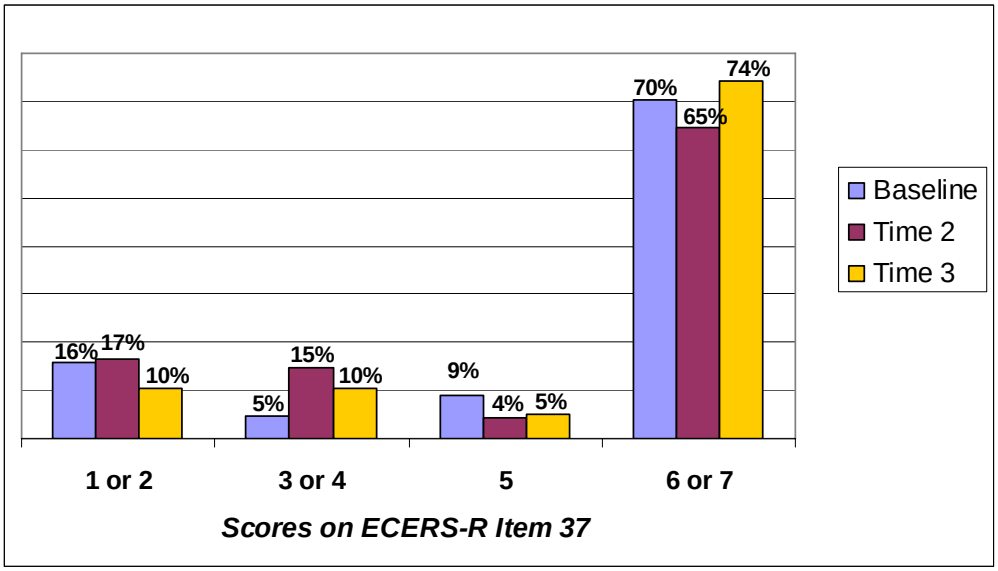
Facilitators' records show that if there were children with special needs in the participating classroom, in some cases they may not have present at each observation. In fact, even when assessments were made at all three time points, it is possible that a different child or children could have been present on different occasions. For these reasons, it is difficult to conclude that scores on *Item 37* represent changes in how staff worked with the same child or children over time. Different children can present different challenges – challenges that can take some

[xiii] Data collection during the first offering of PFI-NS does not permit an estimate of the number of centres that included no children with special needs during the project; however centres were selected based on the criterion that they did include children with special needs or had a history of doing so on a regular basis. *At most,* 2 of the 21 centres might have been in this category, but we have elected to treat all centres in Cohort 1 as centres that included children with special needs in the centre during the project period.

time to adapt to. As well, one can occasionally attribute improvement in *ECERS-R* scores to the absence of a child with special needs at one of the observations.

Figure 5.4 shows the number of classrooms at each level on Item 37 of the *ECERS-R* measure at Baseline, the end of the active intervention period (Time 2), and after the sustainability period. At Baseline, the average score for 44 preschool classrooms on *Item 37* was 5.5, with seven classrooms scoring in the inadequate range (1 or 2), two classrooms scoring in the mediocre range of 3 or 4, and 35 classrooms scoring in the good, very good, or excellent range (5, 6 or 7). At Time 2, the average score for 48 classrooms was 5.4. Thirty-nine classrooms had scores on *Item 37* at Time 3, the end of the sustainability period. At that time, the average score for these classrooms was 6.0, indicating very good to excellent provisions for children with special needs. Overall, it is heartening to note that the majority of classrooms with children with special needs present were observed to be evidencing practices that support those children with scores of 6 or 7 at each assessment point.

Figure 5.4 Distribution of Classrooms on *ECERS-R Item 37* Scores at Baseline, Time 2 and Time 3



Based on 44 classrooms at Baseline, 48 classrooms at Time 2, 39 classrooms at Time 3
* Scores do not necessarily pertain to the same classrooms across data points.

Table 5.5 shows the average scores centres received on *Item 37* of the *ECERS-R* measure in each cohort at Baseline, the end of the intervention period (Time 2), and after the sustainability period (Time 3) for those classrooms that included a child with special needs.

Table 5.5 Average *ECERS-R Item 37* Scores at Baseline, Time 2 and Time 3 across Cohorts of Centres

	Baseline		Time 2		Time 3	
	Mean	s.d.	Mean	s.d.	Mean	s.d.
Cohort 1	4.9	2.39	5.5	1.81	6.1	0.95
Cohort 2	5.8	2.13	5.7	1.95	4.8	2.82
Cohort 3	6.0	1.60	6.5	1.08	6.0	1.87
Cohort 4	5.4	2.07	5.9	1.68	5.1	2.41
All Centres	5.5	1.81	5.4	2.08	6.0	1.74

Based on 44 classrooms at Baseline, 48 classrooms at Time 2, and 39 classrooms at Time 3
* Scores do not necessarily pertain to the same classrooms across data points.

There were no statistically significant differences between average scores obtained on *ECERS-R Item 37 a*t Baseline and Time 2, Time 2 and Time 3, or Baseline and Time 3, nor were there differences within any individual cohort. Although no statistically significant differences were found across time, for Cohort 1, the mean score increased considerably from Time 1 to Time 2 to Time 3. Interestingly, the mean scores decreased across time for Cohort 2.

Scores on *ECERS-R Item 37* were available for 39 preschool rooms 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.

5.4.2 Changes Related to Inclusion Principles and Practices in Centres in Cohorts 1 and 2

Changes in Inclusion Principles among Centres in Cohorts 1 and 2

The *SpeciaLink Inclusion Principles Scale-Form A* was used for centres in Cohorts 1 and 2 at Baseline, Time 2, and Time 3. Each of the five items was scored by the *PFI-NS* inclusion facilitators on the basis of the director's replies and collateral information obtained by the facilitator through her own observations. Scores for each item were assessed on a scale of 1 to 5 where 1 = "They are just beginning or are unaware of the issue"; 2 = "They have taken the 'Heart Step'– signifying involvement in an emotional way, without having moved to policy formation; 3 = "They are using concepts that obviously came from other people or organizations" 4 = "They are incorporating their own experiences, their knowledge and their

commitment into their policies" and 5 = "They are close to ideal in understanding and implementation of the principle".

The average score obtained at Baseline on the *SpeciaLink Inclusion Principles Scale* for all centres in Cohorts 1 and 2 was 3.57 (out of a maximum of 5.0), 3.73 at the end of the active consultation phase, and 3.73 at the end of the sustainability period. However, these averages mask the differences between centres that included children with special needs during the *PFI-NS* project and those that did not.

Changes in Inclusion Principles among Centres in Cohorts 1 and 2 that Did and Did Not Include Children with Special Needs during the PFI-NS project

Separate analyses were conducted to determine whether centres that included children with special needs and those that did not do so differed in average scores on the *Inclusion Principles* measure and/or in the degree of change experienced while participating in the *PFI-NS* project. Only four centres in Cohort 2 (10% of all centres in Cohorts 1 and 2 combined) did not include at least one child with identified special needs over the course of the project. Changes in *Inclusion Principles* scores for the latter group might reflect some improvement in this aspect of inclusion capacity (changes in programming, the physical environment, staff training, and director's and staff's attitudes being others). Given the small number of centres that did not include children with special needs, results for this group should be interpreted with some caution. Table 5.6 and Table 5.7 summarize scores obtained on the *SpeciaLink Inclusion Principles Scale* for the two groups of centres separately.

Compared to centres that did not include children with special needs, the centres that included at least one child with special needs had higher scores on the overall *SpeciaLink Inclusion Principles Scale* and on each item, both at Baseline and at Time 3, the end of the Sustainability period. Centres that included children with special needs had average scores of 3.67 at Baseline, 3.78 at Time 2 and 3.79 at Time 3. Approximately 50 percent of the centres in this group had average *Inclusion Principles Scale* scores of 4.0 or above at each assessment, indicating that some centres – most likely those that had considerable experience in including children with special needs in their program – were close to the maximum score that could be obtained on this measure.

Table 5.6 Average Scores on Items from the *SpeciaLink Inclusion Principles Scale – Form A* at Baseline, Time 2 and Time 3 for Centres in Cohorts 1 and 2 that Included Children with Special Needs

***SpeciaLink Inclusion Principles Scale* Scores and Item Scores**	**Baseline**		**Time 2**		**Time 3**	
	M	**s.d.**	**M**	**s.d.**	**M**	**s.d.**
Average *SpeciaLink Inclusion Principles Scale* Score	3.67	1.01	3.78	0.94	3.79	0.82
1. The principle of zero reject	3.54	1.04	3.65	0.98	3.59	1.04
2. The principle of naturally occurring proportions	3.43	1.14	3.70	1.02	3.51	1.07
3. Hours of attendance	3.86	1.16	3.97	1.04	4.08	1.01
4. Full participation	4.00	1.12	3.92	1.12	4.08	0.81
5. Advocacy for inclusion and maximum feasible parent participation	3.54	1.39	3.78	1.29	3.67	1.24

N = 37 centres, 20 from Cohort 1 and 17 from Cohort 2. (Data from 1 centre was incomplete)

The average change in overall *Inclusion Principles* scores between Baseline and Time 2 assessments was +.17. Although there was a slight decline of -.05 between Time 2 and Time 3, there was a resulting overall average increase of +.13 between Baseline and Time 3 scores. Paired Samples t-tests indicated no significant difference between Baseline and Time 3 scores on the overall *Inclusion Principles Scale* or on any individual item.

Centres that did not include any children with special needs had average *Inclusion Principles Scale* scores of 2.65 at Baseline, 3.13 at Time 2 and 3.07 at Time 3. There was an average change of +.53 between Baseline and Time 2 assessments, and a slight decline between Time 2 and Time 3, resulting in an average improvement of +.47 in overall *Inclusion Principles Scale* scores. Given the very small number of centres in this group, no statistical tests were performed, but the results do suggest some modest improvements in inclusion capacity, particularly in improvements related to overall *Inclusion Principles Scale* scores and the principles of *Hours of Attendance* and *Full Participation.*

Table 5.7 Average Scores on Items from the *SpeciaLink Inclusion Principles Scale – Form A* at Baseline, Time 2 and Time 3 for Centres in Cohorts 1 and 2 that Did Not Include Children with Special Needs

***SpeciaLink Inclusion Principles Scale* Scores and Item Scores**	**Baseline**		**Time 2**		**Time 3**	
	M	s.d.	M	s.d.	M	s.d.
Average *SpeciaLink Inclusion Principles Scale* Score	2.65	1.73	3.13	1.80	3.07	1.74
1. The principle of zero reject	2.75	1.71	2.67	2.08	2.67	2.08
2. The principle of naturally occurring proportions	2.75	1.71	3.33	1.53	3.00	1.73
3. Hours of attendance	2.50	1.73	2.67	2.08	3.33	1.53
4. Full participation	2.75	1.71	3.67	1.53	3.67	1.53
5. Advocacy for inclusion and maximum feasible parent participation	2.50	1.92	3.33	2.08	2.67	2.08

N = 4 centres at Baseline, 3 centres for Time 2 and Time 3 due to missing data. All centres from Cohort 2.

Changes in Inclusion Practices

The *SpeciaLink Inclusion Practices Profile -Form A* was used for centres in Cohorts 1 and 2 at Baseline, Time 2, and Time 3. Each of the 11 items was scored by the *PFI-NS* inclusion facilitators on the basis of the director's replies and collateral information obtained by the facilitator through her own observations. Scores for each item were assessed on a scale of 1 to 5 where 1 = The centre is just beginning or is unaware of the issue; 2 = "They have taken the 'Heart Step'– signifying involvement in an emotional way, without having moved to policy formation; 3 = Practices suggest a diagnostic, clinical step; 4 = A transition approach, with some characteristics of 3, 4, and 5; and 5 = Fully inclusive child care – the ideal to reach for.

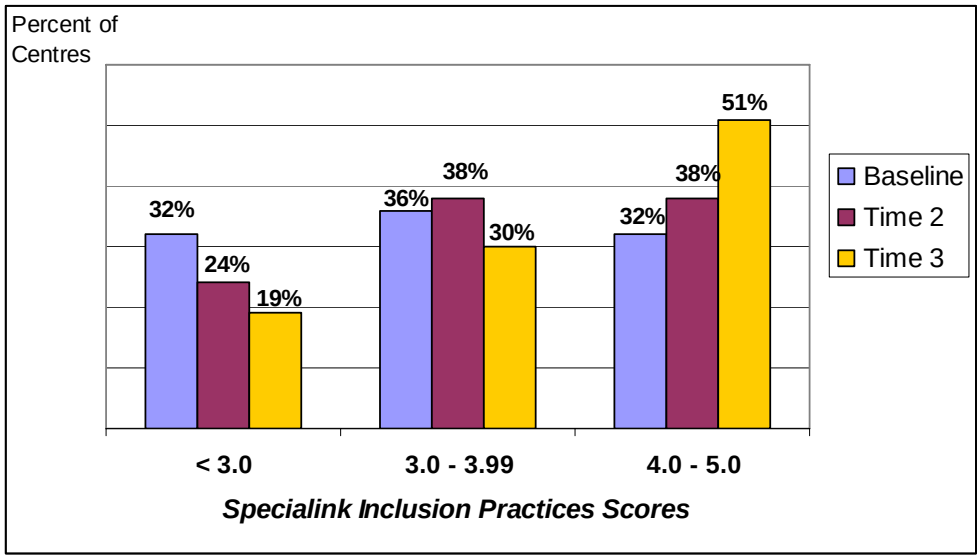
Changes in Inclusion Practices among Centres in Cohorts 1 and 2 that Did and Did Not Include Children with Special Needs during the PFI-NS project

Table 5.8 provides information about *Inclusion Practices* scores obtained at each assessment for centres in Cohorts 1 and 2 that included at least one identified children with special needs during their involvement in *PFI-NS.*

Centres that included children with special needs during the course of the *PFI-NS* project had average scores on the *SpeciaLink Inclusion Practices Profile* of 3.45 at Baseline, 3.51 at Time 2, and 3.71 at Time 3. Evidence of some improvements in inclusion quality was more noticeable at the end of the Sustainability period. Change scores between Baseline and Time 3 averaged +0.24. As shown in Figure 5.5, over the course of the project there was a steady increase in the proportion of centres that achieved an overall score on the *SpeciaLink Inclusion Practices Scale* of 4.0 or higher (31% at Baseline compared to 50% at Time 3) and a corresponding decrease in the proportion of centres with *Inclusion Practices* scores of less than 3.0 (36% at Baseline compared to 23% at Time 3). Forty percent of centres' scores improved by at least .50 between Baseline and the end of the sustainability period (Time 3).

Statistical analyses revealed significant improvements between Baseline and Time 3 scores in inclusion practices related to the *Use of Therapies, Planning and Implementation of Individual Program Plans,* and *Support and Involvement of Parents of Children with Special Needs,* and marginally significant improvements in overall *Inclusion Practices Profile* scores and in *Staff Training* (see Table 5.8).

Figure 5.5 Distribution of *Specialink Inclusion Practices* Scores at Baseline, Time 2 and Time 3 for Centres in Cohorts 1 and 2 that Included Children with Special Needs



N= 38 centres at Baseline, 37 centres at Time 2 and Time 3

Table 5.8 Average Scores on Items from the *SpeciaLink Inclusion Practices Profile* at Baseline for Cohorts 1 and 2 and Statistical Comparisons of Baseline and Time 3 Scores in Centres that Included Children with Special Needs

	Baseline		Time 2		Time 3		t	p
	M	s.d.	M	s.d.	M	s.d.	Statistic	
Overall *SpeciaLink Inclusion Practices Profile* Score	3.45	0.78	3.51	0.83	3.71	0.86	1.867	.07
1. Physical Environment and Special Needs: The degree to which modifications have been made to support inclusion and enhancement accessibility.	2.42	0.95	2.38	1.19	2.58	1.20	0.892	NS
2. Equipment and Materials: The extent to which adaptations have been made and special equipment and materials are used to support inclusion	3.24	1.76	3.07	1.76	3.53	1.86	0.316	NS
3. Director and Inclusion: The director is actively involved in supporting inclusion, is knowledgeable and enthusiastic.	4.46	0.84	4.30	0.91	4.57	0.69	0.552	NS
4. Staff Support: The degree of support provided to staff through consultative assistance and flexible/reduced ratios to help them meet children's needs.	3.74	1.27	3.70	1.39	3.97	1.38	0.903	NS
5. Staff Training: The number of staff who have some training related to special needs and staff's access to continuing in-service training opportunities.	3.16	1.21	3.35	1.14	3.47	1.32	1.974	.06
6. Therapies: The degree of provision of therapeutic intervention to children in the centre and the manner in which it is provided (in a pull-out space or separate clinic and/or within the program); the extent to which staff are involved in goal setting and work collaboratively with parents and therapists.	3.26	1.11	3.54	1.30	3.79	1.34	2.627	.02
7. Individual Program Plans: The extent to which IPPs inform programming in the regular group setting, and are developed collaboratively.	3.22	1.72	3.67	1.69	3.85	1.62	2.722	.01
8. Parents of Children with Special Needs: The extent to which parents are involved, receive information and participate in decision making – both related to their own child, and as an advocate for other children at the centre and in the community.	3.21	1.07	3.38	1.16	3.76	1.10	2.772	.01
9. Involvement of Typical Children: The extent of interaction between children with special needs and their peers; the extent to which social interaction is facilitated and children are accepted by others.	4.55	1.03	4.70	0.85	4.91	0.29	1.486	NS
10. Board of Directors: The centre's board or parent advisory committee promotes and supports inclusion as policy in the centre and as desirable in the wider community.	3.15	1.33	2.85	1.20	3.98	1.29	0.941	NS
11. Preparing for the Transition to School: The degree to which the local school or school board, parents and program staff work collaboratively in transition planning and are proactive to support the child's school placement.	3.59	1.61	3.68	1.50	3.71	1.61	0.317	NS

N = 35 for most analyses

Compared to centres that included children with special needs, the four centres in Cohorts 1 and 2 that did not include any children with special needs during the *PFI-NS* project had lower scores on the overall *SpeciaLink Inclusion Practices Profile* at Baseline, Time 2, and Time 3. Average *Inclusion Practices s*cores were 2.85 at Baseline, 2.74 at Time 2, and 3.28 at Time 3. Interestingly, there appeared to be marked improvements in Time 3 scores on practices related to *The Physical Environment, The Director's Involvement and Support for Inclusion,* and *Support from the Board of Directors*; however these observations must be qualified because of the small sample size, which also precluded running meaningful statistical analyses.

Summary of Changes in Inclusion Principles and Inclusion Practices for Centres in Cohorts 1 and 2

The results suggest that centres that have considerable experience with inclusion scored fairly highly on the *SpeciaLink Inclusion Principles* measure at Baseline. While small improvements were noted, there were no statistically significant differences observed between Baseline scores that averaged 3.7 out of 5 and scores assessed at the end of the Sustainability period (average of 3.8). No significant differences were observed with respect to individual items either.

In contrast, centres in Cohorts 1 and 2 that included children with special needs evidenced improvements on several aspects of inclusion quality that were most noticeable between the Time 2 assessment and the end of the Sustainability period (Time 3). Average *Inclusion Practices* scores for these centres increased from 3.45 at Baseline to 3.71 at Time 3. As well, the proportion of centres that had overall *Inclusion Practices* scores of 4.0 or higher increased from 31% at Baseline to 50% at Time 3. Statistically significant improvements in scores were noted on three practice items: *The Use of Therapies, Planning and Implementation of Individual Program Plans,* and *Support and Involvement of Parents of Children with Special Needs.* Improvements were almost significant on average *Inclusion Practices s*cores and on the practices items pertaining to *Staff Training.*

These changes suggest that centres in Cohorts 1 and 2 that included children with special needs demonstrated improved inclusion quality during the time they participated in the project. As described in a later section in this chapter, the quantitative changes in scores were accompanied by directors and lead educators crediting *PFI-NS* with providing training and support to staff to help them become more knowledgeable, confident and comfortable in working with children with special needs. Changes in room arrangements, organization, and more flexible programming; changed patterns in staff-child interactions; more staff becoming involved in helping children with special needs participate in group activities; and more involvement and/or more effective partnerships with external professionals also contributed to more effective practices in including children with special needs.

Because there were very few centres in Cohorts 1 and 2 that did not include any children with special needs during the *PFI-NS* project, any conclusions about changes in inclusion capacity and inclusion quality based on the data must be considered with caution. Nonetheless, there is some suggestion of improvements in the development of inclusion

principles related to two of the five principles that comprise the *SpeciaLink Inclusion Principles Scale*, as well as some improvements in selected areas assessed by the *SpeciaLink Inclusion Practices Profile* – specifically *The Physical Environment, the Director's Involvement and Support for Inclusion,* and *Support from the Board of Directors* – all of which are important elements in increasing inclusion capacity.

5.4.3 Changes Related to Inclusion Principles and Practices in Centres in Cohorts 3 and 4

Changes in Inclusion Principles

The *SpeciaLink Inclusion Principles Scale-Form B* was used for centres in Cohorts 3 and 4. This form included 6 items, the last two resulting from dividing Principle 5 in *Form A* into two separate principles: *Encouraging maximum feasible parent participation at the parent's comfort level* and *Leadership, Pro-active strategies and advocacy for high quality, inclusive child care*. Scoring of each item employed a scale of 1-7 with specific indicators provided for each item which observers recorded as present or absent (yes or no). This version of the *SpeciaLink Inclusion Principles Scale* was constructed to be similar to the *ECERS-R* in its approach and in the scoring procedures for each item. The developer of the scale (Dr. Sharon Hope Irwin) suggests that an item score below 3 is inadequate, a score of 3-4.99 is minimal or mediocre, a score of 5 or 6 is good to very good, and 7 is excellent or ideal. The average score obtained by all centres in Cohorts 3 and 4 on Form B of the *SpeciaLink Inclusion Principles Scale* was 3.00 out of a maximum of 7 at Baseline, 3.19 at the end of the active consultation phase, and 3.24 at the end of the sustainability period. A total of 17 centres out of the 56 that participated in Cohorts 3 and 4 (30%) did not include any children with identified special needs during the time they were participating in the *PFI-NS* project (19% of centres in Cohort 3 and 44% of centres in Cohort 4). Consequently analyses were performed separately for centres that did and did not include children with special needs.

Changes in Inclusion Principles among Centres in Cohorts 3 and 4 that Did and Did Not Enrol Children with Special Needs during the PFI-NS Project

As noted earlier, we would not expect to see changes in inclusion quality (as evident in most *Inclusion Practices* items) when children with special needs are not enrolled. Changes in inclusion capacity may be evident in these centres, however, if directors and staff engage in a process of thoughtfully considering how principles would apply in their centre in the future and anticipate what changes would need to be undertaken to help prepare them to include all children and provide appropriate support to staff.

Table 5.9 provides information about *Inclusion Principles* scores at Baseline and at the end of the Sustainability period for centres in Cohorts 3 and 4 that did and did not include children with special needs.[xiv] Average Baseline *Inclusion Principl*es Scores were 3.16 and 2.6 out of 7, respectively, for centres that did and did not include any children with special needs. Statistical

[xiv] Analyses in this section pertain mostly to 15 centres that did not include any children with special needs and to 38 - 39 centres that included a child at some time during the project. Listwise deletions were applied when at least half of the item scores were missing from any assessment.

comparisons indicated that centres that enrolled children with special needs had marginally higher average scores on the full *Inclusion Principles* measure at Baseline ($p < .07$), and had statistically significantly higher scores on two specific principles: Item 1, *The Principle of Zero Reject* ($p<.05$) and Item 6, *The Principle of Leadership and Proactive Strategies* ($p<.001$).

Average change scores were calculated that compared each group's overall average *Inclusion Principles* scores at Baseline and at Time 3. There was an average improvement of +33 points for centres that included children with special needs, but only .09 points for centres that did not include children with special needs during the *PFI-NS* project. (The difference in average change scores was not statistically significant.)

Table 5.9 *SpeciaLink Inclusion Principles* Scores at Baseline and Time 3 for Centres With and Without Children with Special Needs in Cohorts 3 and 4

	Baseline		Time 3		t	p
	M	s.d.	M	s.d.	Statistic	
Centres with Children with Special Needs						
Average *SpeciaLink Inclusion Principles* Scores	3.16	1.05	3.46	1.15	-2.311	.03
Item 1 The principle of zero reject	3.72	1.28	4.05	1.49	-1.596	NS
Item 2 The principle of naturally occurring proportions	2.95	1.41	3.26	1.43	-1.525	NS
Item 3 Hours of attendance	3.58	1.39	3.85	1.79	-1.737	.10
Item 4 Full participation	2.97	1.24	3.62	1.41	-3.936	.01
Item 5 Advocacy for quality care	3.19	1.47	3.54	1.41	-1.861	.08
Item 6 Leadership, proactive strategies	2.44	1.25	2.41	1.37	0.167	NS
Centres with No Children with Special Needs						
Average *SpeciaLink Inclusion Principles Scale* Scores	2.60	0.73	2.69	0.88	-0.705	NS
Item 1 The principle of zero reject	3.00	0.84	3.13	1.06	-0.619	**NS**
Item 2 The principle of naturally occurring proportions	2.53	0.83	2.47	0.92	0.435	**NS**
Item 3 Hours of attendance	3.47	1.41	3.47	1.41	0.000	**NS**
Item 4 Full participation	2.40	1.06	3.00	1.36	-2.201	**.05**
Item 5 Advocacy for quality care	3.07	1.07	2.73	1.34	1.385	**NS**
Item 6 Leadership, proactive strategies	1.20	0.56	1.33	0.72	-0.807	NS

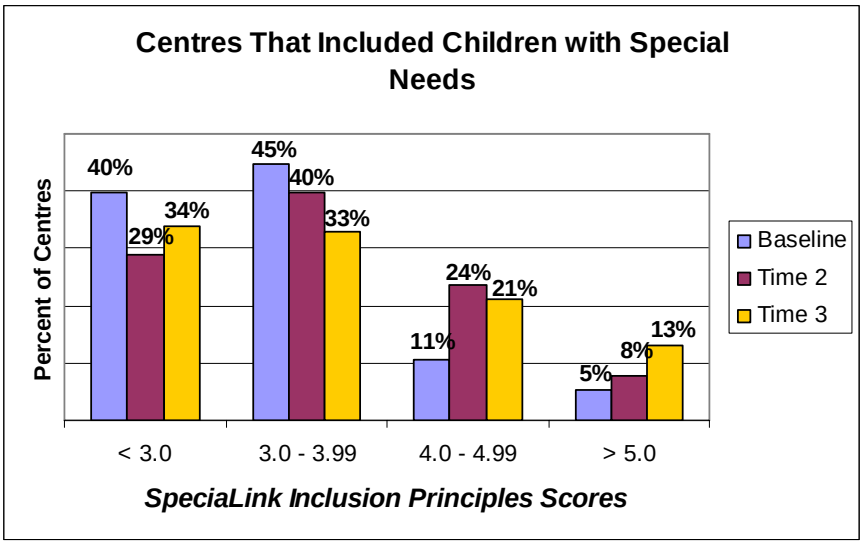
N for analyses varied from 38 to 39 for centres with children with special needs and from 13-15 for centres without children with special needs from due to missing data.

As illustrated in Table 5.9, centres that did not enroll children with special needs in Cohorts 3 and 4 evidenced only one statistically significant change – improvement on scores on the principle related to *Full Participation of Children with Special Needs*. Centres that included children with special needs evidenced statistically significant improvements on the full *Inclusion Principles* scale and on the item that focuses on *Full Participation*, as well as marginally significant improvements ($p<.10$) on item 3 (*Hours of Attendance*) and item 5 (*Advocacy for Quality Care for Children with Special Needs*).

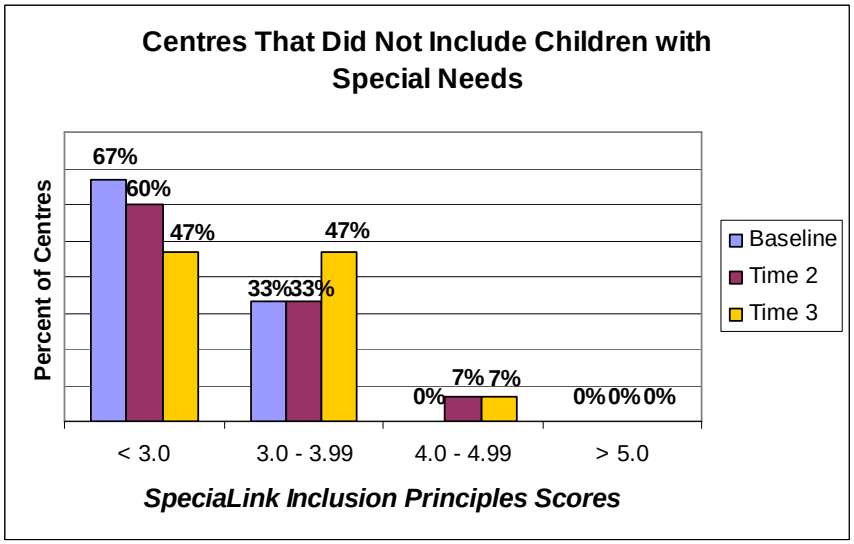
By the end of the project, comparisons of Time 3 *Inclusion Principles* scores still clearly favoured centres that enrolled children with special needs. Scores were significantly

higher on the average *Inclusion Principles* measure and for Items 1, 2 and 6, and were marginally higher (p< .09) for principle 5 (*Advocacy for inclusive, high quality care*). Figure 5.6 shows the distribution of centres in both of these groups across assessments based on their average scores on the *SpeciaLink Inclusion Principles Scale.* By the end of the Sustainability phase, more than one third of centres that included children with special needs had scores of 4.0 or higher, including 13% with scores indicating good inclusion quality (5.0 or higher). By contrast, very few centres (7%) that did not include children with special needs had scores above 4.0, since higher scores require that children with special needs be included in ways that have positive effects on them, as evidenced by high quality inclusive, practices and committed directors and staff.

Figure 5.6 Distribution of *Specialink Inclusion Practices* Scores at Baseline, Time 2 and Time 3 for Centres in Cohorts 3 and 4 that Did and Did Not Include Children with Special Needs



N = 39 centres



N = 15 centres

Changes in Inclusion Practices

Table 5.10 provides similar information pertaining to scores on the *SpeciaLink Inclusion Practices Profile* and illustrates the fact that centres in Cohorts 3 and 4 that had no children enrolled throughout the project tended to have significantly lower *SpeciaLink Inclusion Practices* scores at Baseline, but markedly lower scores at Time 3. As hypothesized, these centres were unable to demonstrate any real improvement in inclusion quality. By contrast, those centres that had children with special needs enrolled at some point in the year evidenced statistically significant improvements in average *Inclusion Practices* scores and on three Practice items: *Equipment and Materials*; the *Director's Support for Inclusion*, and the effective use of *Individual Program Plans.*

Table 5.10 *SpeciaLink Inclusion Practices* Scores at Baseline and Time 3 for Centres With and Without Children with Special Needs in Cohorts 3 and 4

	Baseline Scores		**Time 3 Scores**		**t**	**p**
	M	s.d.	M	s.d.	**Statistic**	
Centres with Children with Special Needs						
Average *SpeciaLink Inclusion Practices Scale* Scores	2.76	0.95	3.15	1.20	3.692	.001
Item 1 Physical Environment	1.97	1.33	2.49	1.65	1.897	.07
Item 2 Equipment, Materials	1.24	0.50	1.54	0.72	2.044	.05
Item 3 Director & Inclusion	2.29	1.35	2.74	1.53	2.347	.03
Item 4 Staff Support	2.86	1.80	3.26	2.02	1.934	.07
Item 5 Staff training re: Inclusion	3.21	1.73	3.41	1.73	0.738	NS
Item 6 Therapies	3.56	1.97	3.89	2.23	1.996	.06
Item 7 Individual Program Plans	3.39	2.26	4.24	2.26	2.961	.01
Item 8 Parents of Children w SN	3.16	2.33	3.58	2.32	1.601	NS
Item 9 Involvement Typical Children	3.80	1.65	4.14	1.97	1.934	.07
Item 10 Board of Directors	1.76	1.10	1.97	1.13	1.276	NS
Item 11 Transition Planning for School	3.37	2.40	3.66	2.34	1.601	NS
Centres with No Children with Special Needs						
Average *SpeciaLink Inclusion Practices Scale* Scores	1.90	0.40	1.95	0.60	0.401	NS
Item 1 Physical Environment	1.67	1.50	1.80	1.52	1.000	NS
Item 2 Equipment, Materials	1.14	0.36	1.27	0.59	1.000	NS
Item 3 Director & Inclusion	1.67	0.72	1.87	0.83	1.000	NS
Item 4 Staff Support	1.14	0.36	1.50	0.86	1.587	NS
Item 5 Staff training re: Inclusion	2.60	1.64	2.67	1.63	0.367	NS
Item 6 Therapies	2.08	1.38	2.36	1.82	0.732	NS
Item 7 Individual Program Plans	2.23	1.48	2.07	1.69	0.433	NS
Item 8 Parents of Children w SN	1.38	0.65	1.50	0.86	0.519	NS
Item 9 Involvement Typical Children	3.31	1.84	2.64	1.60	0.940	NS
Item 10 Board of Directors	1.27	0.70	1.27	0.70	0.0010	NS
Item 11 Transition Planning for School	2.62	1.81	2.71	1.94	1.000	NS

N for analyses varied from 13-15 for centres without children with special needs and from 30 to 39 for centres with children with special needs due to missing data.

Marginal improvements were also noted with respect to *Physical environment, Staff support,* and *Involvement of typical children.* Although the absolute values of scores on the revised *SpeciaLink Inclusion Practices* measure were still below what would be a desired level, we believe these analyses reflect a truer assessment of the effects of the *PFI-NS* project than analyses that include centres that have no children with special needs enrolled throughout the project.

Summary of Comparisons Between Centres that Did and Did Not Include Children with Special Needs in Cohorts 3 and 4

In summary, comparisons between centres in Cohorts 3 and 4 that included children with special needs during the project and those that did not indicated the following:

- At the Baseline assessment, centres that included children with special needs had marginally higher average *Inclusion Principles* scores and significantly higher scores on items that reflect the *principle of zero reject* and the principle of providing *leadership and proactive strategies* as key to supporting inclusion.

- During the project, centres that did not include children with special needs made limited improvement on their *Inclusion Principles* scores, demonstrating a significant improvement on only 1 item, the *Principle of Full Participation.* Centres that did include children with special needs evidenced significantly higher scores at the end of the project on the overall *Inclusion Principles* measure and on the item related to the *Principle of full participation,* as well as marginally higher scores on two of the other principles.

- As anticipated, centres that did not include children with special needs evidenced no improvement on measures of *Inclusion Practices,* while centres that did include children evidenced significantly higher scores on the overall *Practices* measure and improved scores on 7 of the 11 practice items.

These findings suggest that centres in Cohorts 3 and 4 that did not include children with special needs evidenced little quantitative evidence of enhanced inclusion capacity, as assessed by changes on the *Inclusion Principles* measure. Some clearly did feel that they were on the way to feeling more prepared to accept children with special needs based on comments from the director and lead educators, partly as a result of changes made to make their program more flexible and developmentally appropriate for all children. It should be remembered that centres in Cohorts 3 and 4 had lower *ECERS-R* quality scores at the beginning of the project than centres in the earlier cohorts. Several centres were also facing major staffing and enrolment challenges that were of paramount concern to them. Consequently, it appears that initial efforts were focussed mostly on improving overall quality. We speculate that it would take somewhat longer than the 10-12 months available in the *PFI-NS* cycle to help these centres improve both overall quality and improve inclusion capacity to a measurable level.

5.4.4 Beyond the Numbers: Changes in Staff Attitudes, Resources and Interactions with Children with Special Needs

Based on the interviews conducted, about 71% of the directors and two thirds of the lead educators said that they and their centre had become more accepting of including a broader range of children with special needs. (Twenty percent of directors commented their centre had always been inclusive of all children, as did 31% of lead educators.)

When asked, "What allowed you to be more accepting of a broader range of children with special needs?" 46 directors and 37 lead educators (71-74% who replied) stated that increased staff awareness and knowledge of inclusion principles supported greater inclusion. They believed that *PFI-NS* training contributed to staff becoming more knowledgeable, willing, confident, and comfortable in working with children who have special needs.

Sixteen directors reported that they had increased their ability to locate and use external resources, which allowed greater acceptance of children with special needs. Changes made to the layout and organization of space helped to create a more accessible classroom environment. A few (8) directors indicated that participation in *PFI-NS* was a specific catalyst for change in that it raised awareness of the limitations of the centre and the need for growth. As well, increased access to funding helped some centres become more accepting and more inclusive of children with special needs.

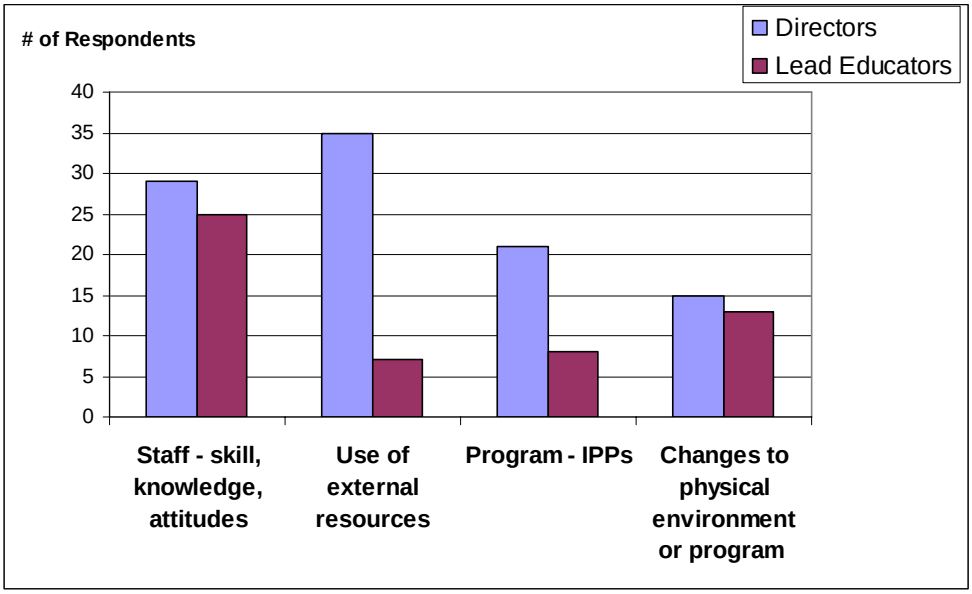
Directors and lead educators were also asked, "What are you doing with the children with special needs now that you did not do until recently?" As shown in Figure 5.6, the primary changes or new practices mentioned were:

- Accessing more external resources to support inclusion, being more involved with professionals and working in partnership with them to support the development of children with special needs
- Changed patterns in staff-child interactions – specifically, staff were observed to have increased their time and interactions with children who have special needs, to put greater effort into communication, and to make greater efforts to include children with special needs in ongoing activities.
- Greater and more consistent use of individual program plans (IPPs – also referred to as Routine Based Programs), reflective of more effective inclusion. Directors and lead educators reported gaining more experience in implementing IPPs, or using a new format, and getting more staff input into IPP development.
- Directors and educators also commented on changes to the physical environment and/or the program that provided more flexibility, used space better, organized the materials and made transitions easier. Several commented that the program is now designed to allow all children to participate regardless of their ability/disability.
- Lead educators were most likely to speak about changes in their own awareness and understandings, their use of new interaction techniques and changes made to the program that benefit all children, e.g., changes in routines, schedules, etc.

Several commented on the fact that they were more effective in helping children with special needs participate effectively in small group activities, thus promoting more interaction among the children.

- Lead educators also commented that they now had more interactions with outside professionals.

Figure 5.7 Reported Changes that Support Greater Inclusion



Based on responses from 82 directors and 74 lead educators

Comments about the impact of *PFI-NS* on inclusion:

> *"We always integrated them the best we could. Now we are more aware of the resources that are available to us. We are doing more with IPPs, with meeting with the child's support staff. We are more aware; it's been very good."* (Director)

> *"We definitely made a lot of changes… Invited the professionals in, became part of the team, often had meetings at the centre with parents, professionals, teaching staff, and me — so that they could observe the child in his classroom setting. This was also more efficient for us in terms of covering for staff….Very enabling for staff."* (Director)

> *"I'm more confident and better prepared." (Lead Educator)*

> *"Experience with children with special needs and meeting with the physiotherapist and OT have opened my eyes about how to help children. I'm not timid anymore." (Lead Educator)*

> *"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)*

"There is more understanding of their situation and how we can help them and their parents. I'm more involved with them, feeling more confident that I can help." (Lead Educator)

5.4.5 Changes Made to Support Inclusion: Facilitators' Observations

Centres ranged in their prior experience of including children with special needs from those centres that had little or only sporadic prior experience including children with disabilities to one centre that was recognized as a leader in the province with more than 25 years as an inclusive centre. Facilitators' comments regarding centres' histories of including children with special needs reflect this range of experience. Facilitators commended those centres with successful and fully inclusive practices at project Baseline. For example, one facilitator commented:

"Inclusion of children with special needs was not an issue at this centre. They will accept all children regardless of their level of needs and will find the resources and supports. … Children with special needs are fully integrated into the classrooms and, in some cases, have aides to help them succeed in the class. There is a strong commitment to inclusion at this centre. The director has many connections within the community."

However, inclusion facilitators also recorded concerns regarding some centres' practices and policies. During initial observations, facilitators noted that while some centres did have a history of including children with special needs, these centres did not have fully inclusive practices. Their concerns included:

- The inaccessibility of older, two-story buildings and basement locations -- In one case, a child with special needs was placed with younger children because the floor with the age-appropriate classroom was inaccessible to the child's wheelchair;
- The policy of one centre that limited enrolment to children who are mobile because of the Board of Directors' concern about liability in case of injury;
- The number of centres that had made no efforts to include children with special needs. They had no policy (other than first come-first served) and provided no evidence to prospective parents or professionals that they were receptive to including children with special needs;.
- The demands on staff with multiple responsibilities, such as resource teachers and special needs program coordinators who also take on other responsibilities, such as being a substitute for other staff or having supervisory responsibilities;
- Concerns about the limited formal training in ECE that was noticed among many newer staff, and the fact that supported child care workers or special needs workers often also had very little training specific to inclusion;
- Staff anxiety and inexperience in working with children who have special needs – particularly when no additional staff or support workers are allocated to the centre; and

- Children with special needs who are pulled out of the classroom to work with a resource teacher. This was a frequent concern at Baseline assessments in centres that accepted children with special needs, yet were not fully inclusive – a practice that dramatically decreased in many centres.

Inclusion facilitators commented:

> *"Staff try, but they are not always aware of the particular needs. They intervene in interactions with other children and engage in pull-outs."*
>
> *"Taking part in more workshops focussing on inclusion could help prepare [staff] and reduce their anxiety about their abilities in this direction."*
>
> *"It must also be noted that integrating children with special needs holds its own set of challenges. … When a centre agrees to include a child with identified special needs into their program, they make certain commitments… [And] many of the staff have little training or experience with regards to the specific needs of the children with whom they work."*

Over the course of the intervention, facilitators made recommendations on how centres could improve in their inclusion of children with special needs. In each case, although centres did not always achieve the goal of full inclusion, facilitators observed that a number of centres overcame some of their particular barriers and challenges and improved their practices over time. Similar to directors' and educators' reports of changes they had made to become more inclusive, facilitators noted:

- fewer pull-outs... In centres where this was a concern, staff were able to achieve greater success including children with special needs in activities and interactions with other children;
- greater effort at including children with their peer groups;
- greater confidence among some staff—training and workshops provided staff with knowledge and skills that helped them to develop more confidence in working with children who have special needs;
- better communication with parents;
- better use of external resources, and more centres benefiting from complementary initiatives such as Building Blocks;
- room rearrangements and additions; and
- some centres receiving child care support funding and/or resource personnel to support their efforts.

Facilitators' comments about the process of centres becoming more inclusive included:

> *"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 child supported 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 could handle this child with more confidence."*
>
> *"The staff became more aware of issues concerning child care and inclusion. While the centre had a history of inclusion, they are now moving into developing their own ideas and principles rather than following an example set by someone else. The children in the room who are part of the special needs program at the centre are now receiving more specific programming and goals and objectives are set. Parents are now more involved in the decision-making process."*
>
> *"Throughout the process, inclusion was at the forefront of discussion. As a result of many conversations, the centre was able to become more involved with an Early Intervention worker visiting the centre and staff were able to develop strong connections with the parents of children with special needs. All of these changes allowed the centre to include all stakeholders in decision making. The centre staff also became more confident in talking with parents if they had a concern about their child and made them aware of resources."*
>
> *"Involvement of Typical Children – This is the biggest change by far. The resource teacher had told me at the outset of the project that most staff 'deferred' to her all the time and waited for her intervention with any of the children with special needs. The scales and our conversations gave her the validation to be able to talk with the staff and change the way the team worked. Now all staff are involved in the activities and interventions planned for all children with special needs. Consequently, there is a lot more social interaction between children with special needs and typically developing children."*

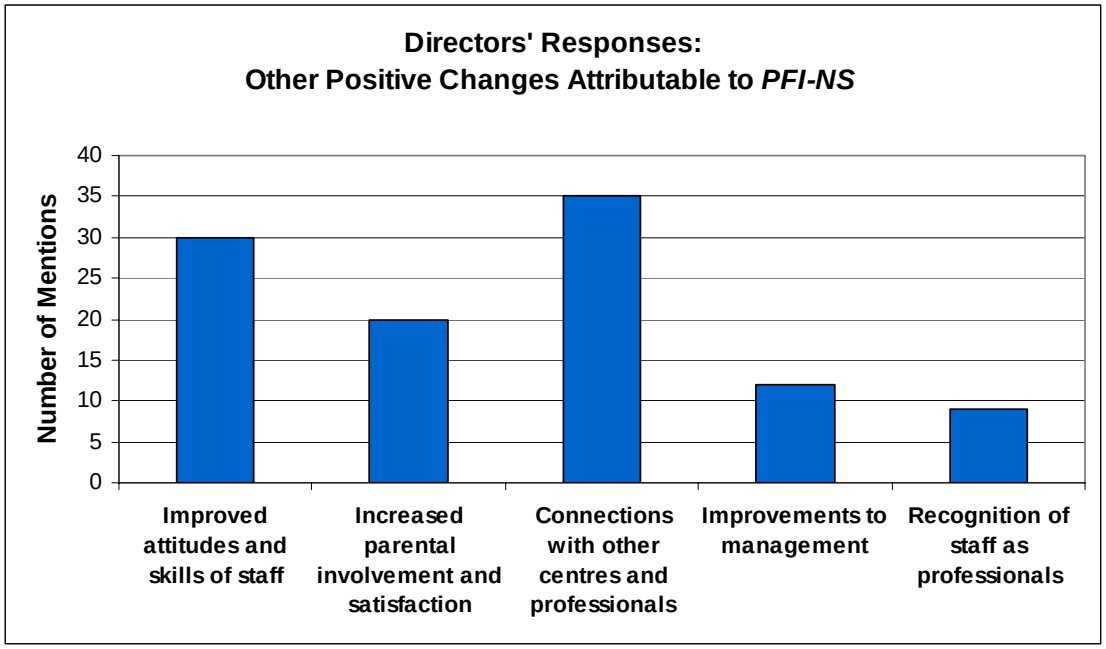
5.5 OTHER POSITIVE IMPACTS OF *PFI-NS*

In addition to effects on program quality and inclusion quality in the target classrooms, directors, lead educators and inclusion facilitators noted other positive impacts of the *Partnerships for Inclusion-NS* project. Figures 5.7 and 5.8 summarize the responses provided in interviews with directors and lead educators, respectively.

Of 86 directors who replied to the question, 70 provided specific examples of other positive effects of the PFI-NS program in their centre. Improvements within the centre

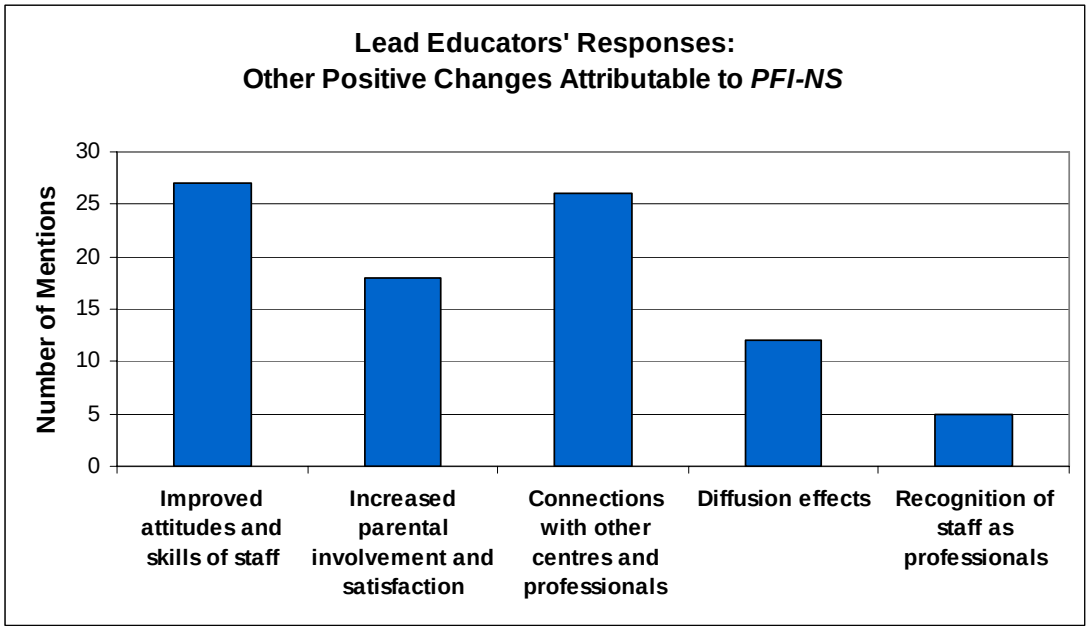
were most evident in changes in the staff. Directors described how the PFI-NS program had resulted in helping early childhood educators break old habits, become critical thinkers, become more actively involved in their work and become more aware of how to implement quality in the program. They also mentioned that some staff benefited from taking training or attending workshops. Directors also commented on parents being more involved, gaining an increased understanding of quality, and increased communication with parents. Of particular interest is that directors commented on how the PFI-NS facilitators promoted connections with other centres, enabling the directors to connect with peers and begin learning from and supporting each other. They also indicated that the facilitators helped connect them with related professionals to help support their work with children with special needs. These kinds of effects speak to the wider impacts of PFI-NS as being a resource to the early childhood field and building community capacity. Some directors also noted that the project resulted in the director and staff working more effectively as a team, gaining greater value from staff meetings, enabling the director to be better equipped to plan for the future, and changing human resource policies and practices (evaluations, development of a staff room, paying for staff to take courses) that are known to be important for staff performance and job satisfaction.

Figure 5.8 Directors' Observations of Other Positive Impacts of *PFI-NS*



N = 86

Figure 5.9 Lead Educators' Observations of Other Positive Impacts of *PFI-NS*



N = 85

Of 85 lead educators who replied to the question, 74 provided specific examples of other positive effects of the *PFI-NS* program. Staff commented particularly on the effects of the project on their feelings about their work – specifically feeling more actively involved and engaged in their work, more positive, more comfortable, and enjoying more effective teamwork within their centre. They described situations where parents were more involved and satisfied, and were impressed with the changes that had been made. Lead educators commented that this enabled increased communication with parents. Other comments referred to specific changes in the centre such as obtaining additional equipment, or overall positive changes.

Lead educators also commented about the positive effects of visiting other centres to establish peer networks and learn how other centres meet children's needs. Better connections with external resources were sometimes facilitated directly by the *PFI-NS* facilitators. In a few instances, the *PFI-NS* facilitator and ECDO worked together to help a centre gain child care support funding or access to other resources to help them include all children in the community.

It was interesting to note that staff rarely commented on improved management practices. Instead they described diffusion effects in the centre – positive effects seen in other classrooms as described below.

5.5.1 Diffusion Effects: Positive Impacts in Other Centre Rooms and in Communities

One of the major additional positive effects of the program, mentioned by 84% of directors and lead educators, was a positive diffusion of intervention effects into other centre classrooms as a result of the *PFI-NS* consultations that initially focused only on

one preschool room. Starting with the second cohort of centres in the project, *PFI-NS* facilitators made conscious efforts to extend opportunities for learning beyond the staff who were assigned to the preschool room that was the selected target for *ECERS-R* assessments and collaborative action planning. This change was made in response to the first evaluation and in response to directors' and staff requests. This extension of learning opportunities to other staff and other rooms occurred in a number of ways:

- Initial training about the *ECERS-R*, quality and inclusion was no longer provided only to the director and lead educator in a centralized location, but was made available to all centre staff on a regional or local basis. These training sessions and other workshops sometimes included a variety of staff from participating centres, as well as staff from centres that had participated previously who had not been able to be present. In rural communities with very limited access to workshops, staff and/or directors from non-participating centres were welcomed.
- *PFI-NS* facilitators freely spoke with and offered suggestions about quality improvements and inclusion to any staff in participating centres. This occurred informally as well as in centre-wide meetings and workshops. As time permitted, *PFI-NS* facilitators sometimes carried out formal assessments in other classrooms using the Infant-Toddler Environment Rating Scale (*ITERS*) or the School-aged Classroom Environment Rating Scale (*SACERS*) as a basis for discussions and planning.
- Changes in classroom environments, centre main activity areas, playgrounds, health and safety practices and management practices often affected children and staff in a variety of classrooms. Staff in the preschool room often shared their learning and pride in what they were doing with staff in other rooms.

Directors reported that staff in the other centre rooms had an increased desire and enthusiasm for professional development, as well as an increased understanding of how to better meet children's needs. While in many centres these results were achieved as a consequence of the inclusion facilitators generously sharing information and including other teachers in workshops, in other centres ECEs followed the lead of the educator in the participating classroom and implemented changes in their own rooms. Directors also reported layout changes in other rooms and in playgrounds, and the sharing of activity and program ideas. In some cases other rooms were observed to have benefited from the acquisition of materials and equipment. In many cases, the entire centre adopted the *ECERS-R* as a guide for quality. Finally, some diffusion effects occurred as staffing patterns changed within centres. It was not unusual for staff to be reassigned to different rooms within a centre for a variety of reasons

About half of lead educators commented on diffusion effects in their centre. They noted that other staff adopted curriculum changes and improvements to activity centres and made changes to the layout in their rooms. Diffusion effects were also noted in personal care routines, such as greater participation of children during meals and snacks.

Comments about diffusion effects included:

> *"The spillover effect has been strong, especially in our three-year old room" (Director)*
>
> *"I've seen other changes, based on materials and information from the [project facilitator]. They wanted the same positive effects in terms of children's behaviour that they observed in the project room. Supplies that were bought to flesh out the lead classroom have also been purchased for other classrooms." (Director)*
>
> *"I plan to continue to evaluate other programs within the centre using ECERS." (Director)*
>
> *"Staff from other classrooms ask us for help. The work in our room has overflowed into the other classrooms." (Lead Educator)*
>
> *"To sum it up, I loved this program; it is the best thing we've ever done. We want to change some of the other rooms around now." (Lead Educator)*

PFI-NS facilitators also recognized the value of diffusion effects. They recognized that taking staff to visit other centres not only provided opportunities for shared learning and comparison, but for building peer networks that could provide support after the project was over. Another important and unexpected positive effect noted by facilitators was that by providing workshops and learning opportunities to more staff, they were helping to defuse some of the negative effects of staff turnover. Specifically, in some cases a new staff member in a centre or classroom came in having already taken *ECERS-R* and Inclusion training or other workshops provided by the facilitator in another setting. This resulted in less disruption and smoother integration than occurred in other circumstances.

5.5.2 Perceived Impacts of *PFI-NS* on Children's Experiences

The directors and lead educators were asked to comment on any changes they noticed in the children that they felt were attributable to the influence of the *PFI-NS* project. Lead educators, in particular, commented on improvements in children's experiences and behaviour. Several educators specifically commented that their participation in *PFI-NS* had helped them to develop greater skills and awareness, which had a positive impact on children's play and interaction. They observed that children were happier and more satisfied, with some educators noting that children were more cooperative and better behaved. As well, they believed that improvements made to play areas and interest centres also contributed to an improvement in children's experiences.

Educators commented:

> *"We really have done quite a bit. [The inclusion facilitator] showed us how to put more emphasis on what the children want and really changed the classroom around, making it more kid-friendly."*
>
> *"The good part was the children, their attitude…You can see it on their faces. I am so much better at role modeling."*

"Staff have noticed it makes an incredible difference — children love the extended conversations."

"The children have really started to behave; the day is more relaxed."

5.5.3 Improved Relationships with Parents

Thirty percent of lead educators noted that there had been an increase in communication with parents. Parents were described as more involved with the centre and more satisfied. A few directors also noted greater parent involvement. Resources were shared more frequently with parents, and parents reportedly have provided positive feedback about the improvements they have seen in the centre.
Comments included:

"Parents have made comments about how fabulous our programming is." (Director)

"Parental awareness has increased, and they trust us." (Lead Educator)

"Many parents have commented on the things in the classroom…They also enjoy seeing the children's comments posted on the paper." (Lead Educator)

5.5.4 Community Involvement and Networking

One quarter of the directors and lead educators reported that increased involvement with other child care centres and a greater connection with external professionals were additional positive effects of their participation in the *PFI-NS* project. Lead educators reported that they had benefited from increased peer networking and learning from other centres.

Directors' comments included:

"Staff have gone out to see other centres. There is growing openness and camaraderie."

"The networking was a huge bonus to me, and getting to know directors in the area, especially as a new director; sharing battle stories."

"Meeting other staff in other centres has been valuable. At different workshops, everyone seemed so friendly and open to sharing ideas. …We're all in this together."

5.6 SUMMARY

The results reported in this chapter demonstrate that there is clear evidence that the *PFI-NS* model of assessment, collaborative action planning, and direct support had positive impacts on participating centres, staff, and ultimately, the children enrolled in these programs.
The results, based on observations of the centres by the facilitators, interviews with participating staff and directors, and scores on successive *ECERS-R* assessments, indicate that program quality was enhanced to a significant degree, and that in most centres

improvements were maintained and continued during the sustainability period. The proportion of centres with average *ECERS-R* scores of 5.0 or above, indicating good program quality that enhances children's development, increased from 34% at Baseline to 82% at the end of the Sustainability period. Improvements were evident across the full range of centres, although those with lower scores at Baseline were able to evidence the most improvement in *ECERS-R* scores.

In addition, both centre directors and lead educators reported that *PFI-NS* resulted in the renewal and active engagement of centre staff who became more reflective practitioners through the process. Staff also described how the changes they made in the program, in activities, and in their methods of interacting with the children resulted in children's enjoyment, improvements in children's behaviour, and a more relaxed and positive tone as activities became more child-centered, and as staff improved their skills. While the original focus of the project was directed to promoting change in a specific classroom within each centre, positive diffusion effects to other centre classrooms were common and added to the observed benefits. Improvements in program quality were seen by directors, educators, and *PFI-NS* facilitators as one important contributor to enhanced inclusion capacity, since observed changes generally had the effect of helping centres provide programs that could enable all children to participate comfortably and benefit, regardless of their level of ability.

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.

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 director's 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 6 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 teacher or resource assistant. Centres that gained additional resourced 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. 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 improvements on the *Principles* measure over the course of the project and could demonstrate only limited improvements 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.

End Notes

1. Kontos, S., Howes, C. & Galinsky, E. (1996). Does training make a difference to quality in family child care? *Early Childhood Research Quarterly, 11,* 427-445.

2. Campbell, P.H. & Milbourne, S.A. (2005). Improving the quality of infant-toddler care through professional development. *Topics in Early Childhood Special Education. 25,* 3-13.

CHAPTER 6: FACTORS THAT ENABLE AND LIMIT IMPROVEMENTS IN PROGRAM QUALITY AND INCLUSION CAPACITY

Two sources of information were used to identify which factors facilitated positive changes in program quality and inclusion capacity and what acted as impediments or challenges. Directors and lead educators were asked to comment directly on these matters in the telephone interviews that were conducted after Time 3 assessments. In addition, the researcher read all of the reflective case notes provided by the inclusion facilitators and project coordinator, paying special attention to entries that provided information on these matters or that described circumstances that were very successful or were frustrating for the centres and the project staff. These case notes were particularly important for identifying "external" issues, such as turnover among staff, as factors that sometimes affected improvement in some centres. Readers are referred to the three case studies included in Appendix B of this report. Each provides important insights into the factors that can enhance and impede progress in early childhood programs.

6.1 FACTORS THAT ENABLED SUCCESS IN MAKING POSITIVE CHANGES

Chapter 5 provided evidence of the many positive impacts of the *PFI-NS* project on aspects of overall program quality, inclusion capacity, inclusion quality, staff attitudes and engagement, and changes in some centres that reflected greater teamwork and awareness of how to provide all children with more stimulating, child-centered learning and care. The director and lead educator interviews and inclusion facilitators' case notes helped identify some of the important factors that promoted or enabled these positive changes.

6.1.1 Inclusion Facilitators' Effectiveness in Engaging Staff and Creating Reflective Practitioners

The *PFI-NS* inclusion facilitators clearly played a critically important role in effecting change among centre staff. They acted as mentors and sounding boards, and offered support to directors and staff. They provided resources to directors and educators, responding to the specific needs and challenges in each centre. They worked closely with directors and educators to develop strategies for implementing change and provided workshops that met the needs of the centre. Facilitators provided detailed feedback and interpretation of *ECERS-R* scores, helping staff to see beyond the numbers to gain an understanding of why and how the components of each subscale were important. In centres where directors and educators were enthusiastic and ready for change, facilitators helped them to focus their goals and priorities. In centres where there were greater difficulties or resistance, facilitators helped to bring staff on board where possible, providing encouragement and motivation. When centres encountered challenges or limitations, facilitators helped staff to brainstorm and problem solve, supporting different ideas and arrangements until staff could find something that worked for them. All of the facilitators had considerable and varied experience as early childhood educators, and as centre directors or resource teachers, and also had remarkable

interpersonal and communication skills. Each was strongly committed to the project and to treating early childhood professionals with respect.

Comments included:

> "*It wouldn't have been successful if it wasn't for the facilitator. She was our guide; she gave us encouragement. She often visited us. She would hear what was going on, what we were interested in or talking about and come back with resources to help us.…It is nice having someone who says, 'You can reflect'; 'It's okay'; 'You're doing a great job', or 'Why don't you…" (Lead Educator)*
>
> *"If it wasn't for these meetings with [the facilitator], some of these things would never get discussed." (Lead Educator)*
>
> *"I thought the inclusion facilitator's support was most helpful. She brought in resources and all the support she offered — including the conversations we had." (Director)*
>
> *"We have been actively involved in assisting these centres, not just telling them what to do and waiting for them to do it." … They liked the fact I have 22 years of experience with children and use this knowledge to give practical ideas and I was not afraid to roll up my sleeves and work with them. (Inclusion Facilitator)*
>
> *"We wouldn't have learned so much if we hadn't got to know you so well, and trust you. It is a good job you are able to come in as often as you do."(Educator)*
>
> *I felt that I was more of a support person during this time, listening to the lead educator and the director. I think the director was grateful for someone to talk with and vent to. I actually find that with a lot of the directors. They need someone to talk to because they are in a very isolated position. I feel honoured that they trust me enough to share their frustrations and anxieties. I know it does help that I was once a director too so I can really empathize with them. (PFI Facilitator)*

6.1.2 Staff Receptiveness

Just as staff resistance to evaluation and change could hinder success, staff willingness and openness facilitated positive change. Inclusion facilitators noted that *PFI-NS* was most successful in centres where staff had volunteered or, at least, had agreed with the director to participate in the project. The advice from directors and lead educators to future participants of *PFI-NS* was to be open and willing to change.

Changes in staff attitudes, awareness, and practices were among the positive impacts of *PFI-NS* noted by directors, lead educators and inclusion facilitators. These changes then facilitated improvements in other areas, such as incorporating new activities in the centre, improving extended teacher-child interactions, and generally enabling children to have a more positive, enriching experience. As well, directors and lead educators reported that

greater inclusion capacity was related to improvements in staff skills, knowledge, and understanding.

6.1.3 Director's Involvement and Leadership

Several staff commented that their director's support for the project was a critical factor that permitted and encouraged positive changes. Examples included those instances where directors provided funds for limited purchases to make immediate and visible improvements in furnishings, books and materials. Perhaps as important was directors who actively supported staff in collaborative action planning and worked with them to make desired improvements.

6.1.4 The Use of the *ECERS-R* as a Tool; The Use of the *SpeciaLink Inclusion Principles and Practices* Measures

While being subject to an assessment on the *ECERS-R* was intimidating for many centres and a few staff disagreed with some items or expectations embedded in the items, most very much appreciated the value of using a well-known assessment tool to identify areas in which they were already strong, and particularly to provide specific benchmarks for improvements as a basis for collaborative action planning. Seeing scores improve was reinforcing for all. Importantly, however, the *ECERS-R* provided an important vehicle to talk about why certain practices are important for children's development and led to richer, fuller discussions about educators' roles, the nature of learning activities, and program goals.

> *"As a director, ECERS has helped me with long-range planning and with justifying what I am doing."*
>
> *"Our program seemed blocked and ECERS came at the right time…PFI really helped staff to see why I wanted things done differently."*
>
> *She [the Director] frequently commented on how helpful she found the ECERS-R in explaining her priorities and concerns to the staff at meetings. "'It gives me the words to use. It backs up what I am trying to say. The staff now understand why I ask these things of them and know now that it isn't just me picking on them! Having you come in and say the same things really reinforces what I am asking them to do, too." (PFI-NS facilitator)*

Similarly, we believe that the *SpeciaLink Inclusion Principles and Practices Scales* – especially in its revised form – provided an objective, external benchmark that centres could use to reflect on what constitutes effective inclusion in early childhood programs. Most centres did not have a written inclusion policy. Benchmarking as a process inevitably requires reflection, discussion and goal-setting. *PFI-NS* facilitators used these scales as a basis for workshops on inclusion, for discussion, and for collaborative action planning. In a number of cases, they worked specifically to help staff develop written inclusion principles, or to help address individual children's particular needs.

6.1.5 On-site Workshops, Mentoring and the Development of Peer Networks

The *PFI-NS* on-site consultation model appears to be particularly appropriate for Nova Scotia where many centres operate outside of large urban areas and staff may have few local opportunities for professional development. On-site or local workshops avoid the cost and time required to travel outside of the area to attend a workshop and facilitate direct application of what is learned to the specific needs of the centre and the staff. The development of peer networks among directors and among early childhood educators also has many positive benefits.

> *Workshops are great, but it is very effective to have the workshops and then have a support person to help you with the changes. …I feel very strongly about this program. I feel it is important for this to continue to benefit the children as well as the ECE professionals in Nova Scotia (Director)*

> *I think one of the most effective parts of the intervention period was taking some of the staff on a tour of two very good preschool programs in the city. Seeing it for themselves really gave them the motivation to continue on improving their program. (PFI-NS facilitator)*

6.1.6 Additional External Resources

As reported in Chapter 5, improvements in program quality were widespread and robust across the four cohorts. *PFI-NS* facilitators provided a variety of resource materials, professional articles, materials for various activities, posters, and opportunities to engage in creative problem solving. A number of the facilitators took pictures that showed the changes in the centres and/or identified how children participate in a variety of activities for staff and parents. In some cases, *PFI-NS* facilitators were able to promote contact with external agencies or facilitate communication with ECDOs, sometimes leading to the granting of supported child care funding or the acquisition of a resource assistant to support inclusion.

Centres that had no children with special needs present often improved their capacity to include children as a result of staff training, reflecting on what constitutes ideal inclusion principles and practices, and making the program more flexible and appropriate for children with different abilities. Centres that already included children often made significant improvements in developing inclusion principles and improving practices. The latter was most common in centres that began the project with trained staff who had positive experiences with inclusion, and where the Baseline level of program quality was fairly high or improved rapidly. In several cases, access to funding or to additional external resources (specialists or early intervention support) enabled staff to develop additional skills, and become more accepting of including children with a broader range of disabilities. In a few centres, other complementary sources of support (e.g., Early Interventionists, the *Building Blocks* program) worked well and complemented and reinforced what staff were gaining from the *PFI-NS* experience.

"I have a totally different point of view on how I would accommodate children with disabilities. I think I would know how to make the space more accessible for them. I think the staff feel that way too. We don't feel we have discriminated in the past, but we just didn't feel comfortable enrolling them. We'd tell a parent to call another centre, that we knew enrolled children with disabilities. If a parent were to call me now, we'd take on the challenge. That's because of ECERS, and also because of the information we got from the Building Blocks workshop and the Autism workshop. We know we would not be alone (with a child with disabilities), if we ran into problems or had concerns." (Director, Cohort 2)

6.2 CHALLENGES AND IMPEDIMENTS TO CHANGES IN PROGRAM QUALITY

Figures 6.1 and 6.2 illustrate how directors and lead educators responded when asked what impacts of *PFI-NS* were unhelpful or problematic. Thirty-six percent of directors did not identify any challenges or problems, noting that changes had been positive overall; the same was true of 37% of the lead educators. Both groups identified common concerns: resistance to change, additional time and workload, and different perspectives among staff or between the director and staff that needed to be resolved. Directors also commented on the need for additional funding to support desired changes, especially major structural changes to improve the facilities.

6.2.1 Staff Resistance to Change

Twenty-one directors (24%) and 12 lead teachers (14%) noted that staff resistance or difficulties in adjusting to change was a challenge or problematic aspect — a point also noted by inclusion facilitators. While centres voluntarily participated in the *PFI-NS* project, not all lead educators or other staff were initially enthusiastic. Some staff were perceived to be set in their ways, and found it difficult to adopt new practices. Two directors noted that differences between staff in their commitment to the project and in their teaching styles were also barriers to implementing change.

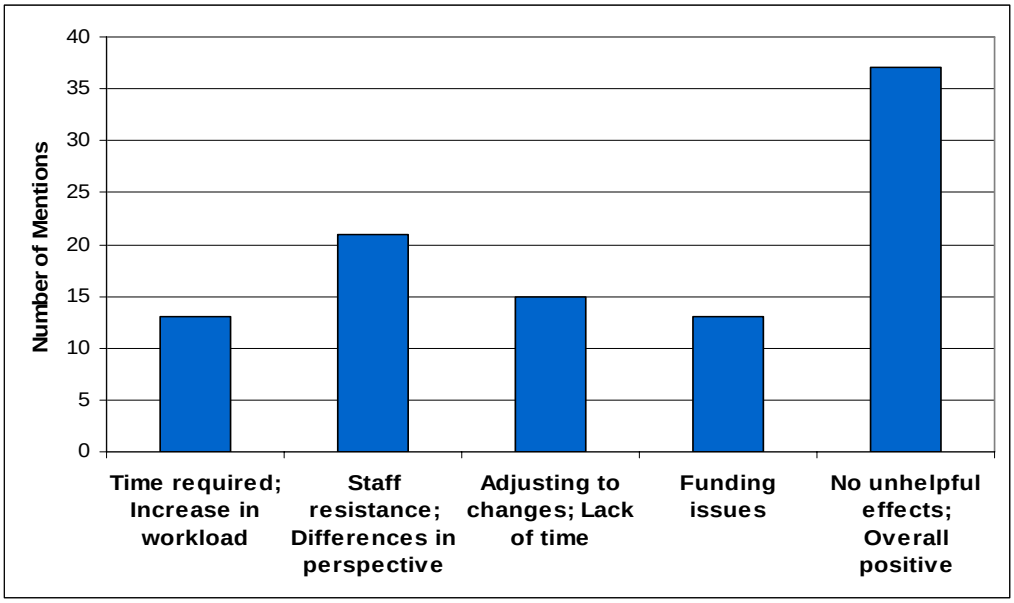
Twenty-six lead educators reported that making the changes the inclusion facilitator was encouraging them to make was problematic for them. They noted that the speed of change was sometimes too fast and that staff were asked to make significant changes to their practices.

Specific challenges were described as follows:

"Just getting the staff to change. Some staff have been here for 25 years; they like the way we do things now. Some of it didn't work; we had to change some things back…Had to deal with staff friction." (Director)

"I sometimes found it very hard that not everybody was willing to put in 100%." (Lead Educator)

Figure 6.1 Directors' Views of Challenges to Implementing Changes in *PFI-NS*

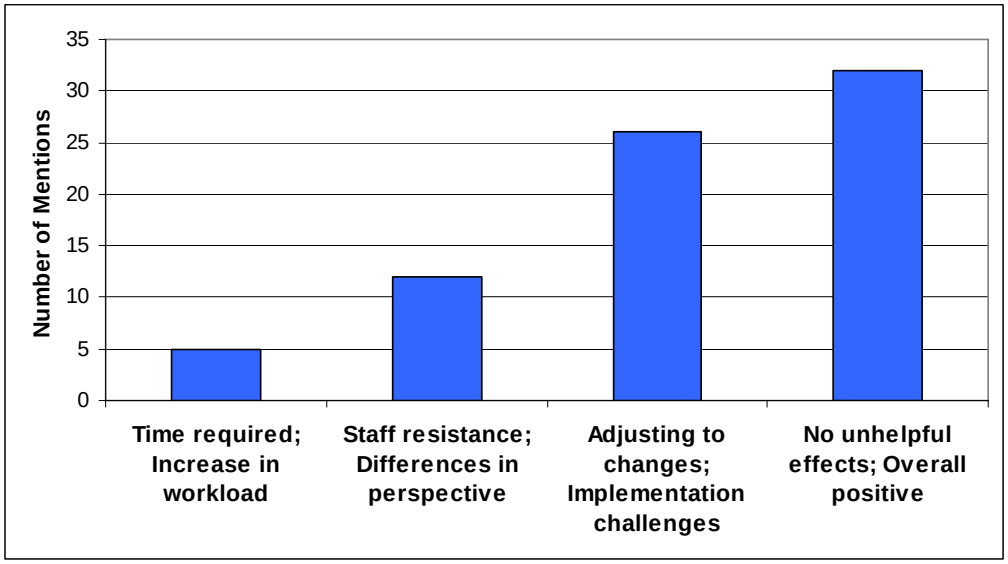


N = 87

> *"Some of the staff have had a hard time with the changes, [such as] changing craft to art was a big change, as was getting the children involved in serving themselves at meals and snacks, and changing room arrangements." (Lead Educator)*

Facilitators also commented on the negative impacts of staff resistance or inertia, noting that these impeded the process of effecting change within centres. Resistance was usually noted towards particular ECERS-R items requiring change, not towards inclusion. For example, facilitators' records show that they frequently encountered resistance to their suggestions for reducing theme-based programming, for making art less "cookie-cutter" and more creative, and for encouraging children's active participation in serving food during snack and mealtimes.

Figure 6.2 Educators' Views of Challenges to Implementing Changes in *PFI-NS*



N = 87

Facilitators' comments included:

> *"Doing the project [in this centre] was very difficult. This group of teachers is very much 'stuck' in their old ways and change is very hard for them."*

> *"They do not want to try open-ended questions. This staff liked routine and doing their routines believe that they are safe, and this is one place they have some power and control."*

> *"Each week I brought in resources about child-centered art and each week she avoided the topic. … She received her training many years ago and is quite rigid in her beliefs about how the children need to get ready for school. Finally, we had to agree to disagree."*

In some cases, facilitators recorded that staff who were initially wary of the project and of being evaluated were able to respond more positively once they better understood the project objectives and the ECERS-R.

> ***"****I don't mind telling you… I was scared at first. But it was a <u>good</u> experience!"*

Facilitators also noted that in centres where the director was controlling, where staff had only marginally agreed to participate, or where staff were committed to routines and control, change was more difficult and at times appeared to be haphazard or half-hearted.

6.2.2 Demands of *PFI-NS* Participation

TIME

When asked about aspects of *PFI-NS* that may have been unhelpful or problematic, 13 directors mentioned the time required by the project. They also reported that the increase in paperwork and workload sometimes took time away from other priorities. In response to these concerns, the longer Director and ECE questionnaires that were used in Cohorts 1 and 2 were replaced by a short, 3-page questionnaire for the director, beginning in Cohort 3. Similarly, a small number of lead educators noted that *PFI-NS* required a significant time commitment. They mentioned that they felt the increase in workload and that they seemed busier.

Time demands included time involved on the part of the director and lead educator in the initial *ECERS-R* training and in responding to questionnaires; time for meeting with the inclusion facilitator; time spent in staff meetings, workshops and professional development; Baseline, Time 2 and Time 3 assessments and collaborative action planning meetings; and participation in research interviews. Initially, each director and lead educator was asked to keep an on-going journal, but this requirement was quickly dropped. Time was also required to change room arrangements, organize materials, and prepare new and different learning activities. Sometimes meetings or workshops that involved a number of ECEs and the facilitator were scheduled at the end of the day and occasionally took place on a Saturday.

Directors' comments included:

> *"There is so much paperwork to do. I'd rather be in the trenches modeling what I want done."*
>
> *"It's really a good program, but there is just not enough time to do everything."*
>
> *"There is no written inclusion policy. The owner/director and I have been trying to get together to write one, but as she is also a teacher and has had some staffing problems, this has proven to be a difficult task. It is still on the agenda however" (PFI-NS facilitator)*

It should be noted that most early childhood educators in child care programs typically do not have paid planning time and do not receive additional pay for attending staff meetings. Scheduling issues for staff meetings and activities seemed to be a greater problem in centres where staff were resistant or the director was not actively engaged and supportive. In such cases, some facilitators also experienced difficulties when appointments were cancelled.

One facilitator noted that in one of her least successful centres,

> *"…staff meetings were not held because staff felt they were generally unnecessary and the director felt that staff had enough demands on them without asking them to give up one evening each month."*

In another centre,

> "*there was no time during the day when staff could meet to discuss classroom or centre goals and priorities… Without staff meetings, the group could not problem solve as a group... they lacked motivation around reflection and change and did not engage in the kind of problem solving needed."*

The other side of the coin was evident in centres where staff were engaged in the project, and enjoyed and valued their participation. Yet it is fair to comment that, however rewarding their efforts were, those child care practitioners who put considerable effort and time into making changes, attending meetings and workshops, and developing new learning activities and plans for the children generally did so as unpaid overtime. The fact that most early childhood educators are women with families of their own is another factor that should be appreciated.

> *"This centre has a caring and enthusiastic staff. While they did not enter into this process with a strong willingness to be reflective or make changes, their reasons for maintaining the status quo were valid. Staff have families that demand their attention outside of work hours. One staff has a second job at a local grocery store. Two staff were pregnant for the first time. The director made it clear that she was unwilling to demand more of her staff than they were presently giving. All staff seem happy with the program as it is. The children are cared for by compassionate staff that offer a good variety of activities and materials on a daily basis. The parents, children, and board of directors are also happy with the existing program."*

OTHER CONCERNS RELATED TO STAFF INVOLVEMENT

Some directors and lead educators also reported difficulty in finding replacement staff when *PFI-NS* training sessions or meetings were scheduled. Two directors reported they experienced tension with their staff over recommended changes and found it difficult to empower them to act on their own. Lead preschool room educators experienced the greatest demands on their time and energy in that they typically spent more time with the inclusion facilitator and had greater responsibility for supporting change among the other teachers in their room.

FUNDING AND PHYSICAL CONSTRAINTS

Thirteen directors (26% of those who mentioned at least one problematic aspect) reported that funding constraints and the financial strain of making improvements, such as purchasing new materials or furnishings, were challenges to their ability to implement change. A few thought that *PFI-NS* created expectations for change that funding limitations prevented them from making.

Some directors noted that change was constrained by the space in which they operated and that they would have to move or significantly renovate, both of which would be cost

prohibitive. Facilitators, too, noted that some centres' ability to accomplish further improvement was limited by their available resources, including centres that operated in restrictively small spaces. Facilitators and staff often worked together to find ways to achieve what they could with what they had. Facilitators did use approximately $200 per centre on materials, books and food for workshops and staff meetings after hours, but there was no other funding source available to the centres for major purchases or improvements. *PFI-NS* facilitators were generous in providing resources for staff and children, articles, activity materials for various areas, posters. Beginning in Cohort 3, several directors received expansion grants from the province and in these cases, planning for how the new space would be utilized was part of the *PFI-NS* experience. A few directors were able to allocate some funds to support initial or high priority changes that were not too costly, while several others successfully engaged in fund-raising for specific improvements. Several of the inclusion facilitators were especially skilful at modelling "no-cost/low-cost" solutions and sources, such as recycling materials and purchases at the local Goodwill or Frenchy's.

> *"Some centres really could not afford to make some of the recommended or desired changes, but most tried to find a way to achieve at least some of them or are still committed to realizing these goals eventually." (Inclusion Facilitator)*

> *"We always think we can't make changes because we have no money. It's nice to see that so many little things that don't cost a lot can make a big difference too." (Director)*

6.2.3 Recruitment and Retention of Skilled Staff

Perhaps one, if not the most difficult, challenge encountered in a number of centres was the issue of staff turnover. Based on the facilitators' case notes, there was at least some staff turnover in about half the centres, and in cases where the lead educator or director changed during the project, this presented a considerable challenge. While some staff may take maternity leave, retire, experience ill health or relocate to another town or city, staff turnover due to low wages, stressful or poor working conditions, conflict, or a sense that program quality is poor reflect serious human resource concerns that are associated with lower program quality and less stable relationships for young children (Doherty, Lero, Goelman, LaGrange & Tougas, 2000).[1]

Directors noted that staff recruitment and retention was an on-going challenge that negatively affects quality. They reported that staff were underpaid and that there was a high turnover rate among staff. Directors also commented on the difficulties they experienced in finding and keeping trained staff, particularly substitutes and special needs teachers. The lack of available substitute teachers has further impacts on a director's capacity to release staff from daily activities to enable them to participate in professional development activities or attend case conferences. Many directors commented that a substitute for an absent staff member was simply not an option — many staff come to work when ill, to avoid short-

staffing; and not infrequently directors shuffled their own work to "cover." One centre, at great expense, contracted with an office temp agency to supply substitutes.

Facilitators also commented on the number of new staff that had limited formal training in early childhood education or who had equivalency training that did not provide the knowledge base that other educators were able to use to understand the concepts underlying the basis for emergent curriculum planning and other changes. As well, half of the lead educators who commented about problems reported challenges related to recruiting and retaining staff. Similar to the directors, they too noted staff being underpaid, high turnover rates, and difficulties in finding and keeping trained staff.

Facilitators certainly noted the negative impacts of staff turnover. Instability among lead educators and other staff in target classrooms occurred sometimes as a result of illness or a staff member deciding to return to school, but more often occurred as a result of staff leaving for better paying, less demanding jobs. Several directors commented specifically about their concern that plans to expand the province's Pilot Pre-K program might lead to further resignations. Not infrequently, changes in staff made it more difficult to implement the goals and strategies of the project, especially since new staff (particularly new lead educators) who came in after the project had started often needed to be trained in the *ECERS-R* and oriented to the project. Turnover could also slow down the momentum of the project and diminish enthusiasm. This was particularly evident when facilitators thought that success was, in part, dependent on the motivation of a single staff member (usually the lead educator), and expressed concern that changes would not be maintained when that staff member left the centre. (The consequences of staff turnover are evident in all three of the case studies included in Appendix B.) One facilitator noted that during the intervention period:

> *"It seemed that each time a staff member changed, the process either slowed down or had to start over. With these changes in staff, it was difficult for the lead educator to implement the goals we had set out. She found she was always trying to teach new staff about the process. …She was getting really frustrated and about two months into the intervention period, I noticed a real slowdown in the momentum and enthusiasm."*

On the other hand, when staff members were resistant to change or not working well together as a team, changes in staffing could have positive effects. The same facilitator later commented that:

> *"The centre hired a recent graduate from an ECE program and they transferred a staff member from another location. This had a tremendous impact on the progress as the new staff were good and took on projects with enthusiasm.… The changes in staffing made a big impact on interactions. This new group was more engaged with the children."*

In one or two cases in later cohorts, staff turnover had an unanticipated positive effect in that new staff came from centres where *PFI-NS* had already been implemented or they had attended a workshop led by *PFI-NS* facilitators in their region. In these cases the new staff member was ready to move forward very quickly.

6.3 CHALLENGES AND BARRIERS THAT LIMIT INCLUSION OR PRESENT LINGERING CONCERNS

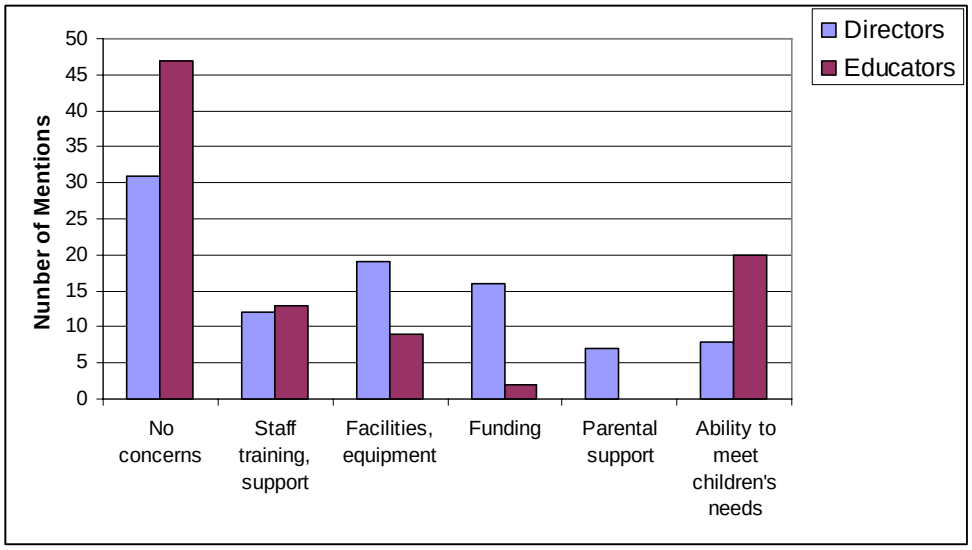
As described in the previous chapter, many centres improved in developing or implementing inclusion principles and made substantive changes in inclusion practices. As well, a majority of directors and lead educators stated that they were more accepting of a broader range of children with special needs. The factors that promoted greater acceptance and that were described as important positive changes were most often attributed to:

- staff becoming more knowledgeable, willing, confident, and comfortable in working with children who have special needs;
- directors becoming better able to locate and use external resources to support inclusion efforts, as well as centre staff becoming more involved as team members with external professionals and among themselves;
- Changes made to the centre's layout and organization of space to make it more accessible, and in some cases creating a quiet space for children to be in when they need to; and
- Increased access to funding.

Not surprisingly, both directors and lead educators indicated that greater inclusion capacity was limited by a number of these same factors — including physical facilities and the lack of specialized equipment, difficulties in securing funding to support inclusion and retain valued and experienced staff, and limited staff knowledge and confidence in meeting the needs of children with disabilities.

Both directors and lead educators were asked in interviews, "Do you have any lingering concerns about your centre's capacity to be successful with inclusion and continue to grow?" Figure 6.3 summarizes the responses.

Figure 6.3 Perceived Challenges That May Limit Inclusion



N = 84 directors and 82 lead educators

One should note that a large percentage of directors, and particularly lead educators, commented that they did not have lingering concerns about their centre's capacity to continue to be inclusive and be more effective in the future. Among directors, the most common concerns related to:

- needed changes to expand or renovate their facilities and/or purchase specialized equipment to be more accommodating to children with particular special needs;

- the need for additional funding (supported child care funding, funds to hire additional staff, and concerns about possible changes to funding); and

- concerns about staff – specifically, concerns about staff's capacity to sustain changes, the need for additional or on-going staff training, and the need for more emotional, informational, and practical supports (including additional staff members) to enable educators to be effective and confident in their capacities to include all children in the program.

Directors were particularly concerned about the lack of funds to make structural improvements since financial aid was needed to support additional staff and resource specialists, in addition to improving the facilities. A few directors expressed concerns about funding freezes, funding being reclaimed, and changes to funding for different diagnoses.

Indeed, inclusion facilitators saw some heroic attempts to include children with special needs despite the significant barrier of not having secure funding for support staff. Long wait times to establish the eligibility of children for extra funding, long waiting lists for special differential funding, and then long waiting periods prior to receiving funds all created seemingly needless anxiety. Moreover, centres that historically employed resource teachers on an *ad hoc* basis by including at least four children with special needs all or most of the time were increasingly anxious about their continuing capacity to be inclusive. Some private owners/directors still believed they were ineligible for supported child care funding, despite the fact that current policies make funds available to private (commercial) centres as well as to non-profit centres.

Directors and lead educators also indicated that staff skills and attitudes could limit greater inclusion. A few directors were concerned that staff attitudes needed to be more positive towards inclusion and that staff needed additional training. They believed that their staff would not continue to make the same effort without continuing support from the inclusion facilitator. Four lead educators reported that staff needed on-going, specialized training, and that they needed additional staff in the centre to successfully include children with special needs. Indeed, the responding educators, more than the directors, were particularly concerned about having sufficient support and about their capacity to meet the needs of children with disabilities, especially those with behavioural or emotional problems and/or those who require 1 to 1 staffing.

Other concerns regarded the lack of support from parents and the demands on staff time. There was the belief that staff would require greater support and the concern that it would be challenging for teachers to balance the needs of, and find time for, all children with greater inclusion.

6.4 SUMMARY

In summary, the factors that enabled and limited positive changes in program 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 supported child care 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.
- 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.*

END NOTES

1. Doherty, G., Lero, D. S., Goelman, H., LaGrange, A. & Tougas, J. (2000) *You Bet I Care!: A Canada-wide study on wages, working conditions, and practices in child care centres.* Guelph, ON: Centre for Families, Work and Well-Being. www.worklifecanada.ca

CHAPTER 7: LESSONS LEARNED AND RECOMMENDATIONS FOR IMPROVING AND EXTENDING THE *PARTNERSHIPS FOR INCLUSION - NOVA SCOTIA* APPROACH

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 while 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 Services. 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 (inadequate funding, increased qualifications, and serious recruitment and retention challenges) that have plagued the child care field.

The Nova Scotia government has also 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 *PFI-NS* that can provide evidence-based means to enhance program quality, inclusion capacity, and inclusion quality that might 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 is based on 98 child care centres throughout the province that participated in the *PFI-NS* project over a four year period, beginning in November/December 2002 and extending until October, 2006. *PFI-NS* utilized an approach that has been used for some time in North Carolina and was adapted by Dixie (Van Raalte) Mitchell for the

Keeping the Door Open project in New Brunswick, Prince Edward Island and Saskatchewan. In Nova Scotia further adaptations were made that emphasized the importance of training centre directors and lead educators in preschool rooms on the *ECERS-R* method of assessing program quality. In each of these projects, the major focus is not on inclusion per se, but on using an on-site consultation model that emphasizes sound early childhood practices in order to improve and reinforce overall program quality as a basis for providing stimulating and responsive learning and care for all children — those with and without disabilities. The primary focus for the *PFI-NS* project initially consisted of full-day child care programs that already included children with special needs. Over time, the project incorporated half-day preschool programs and centres that did not include children with special needs in an effort to build their capacity to do so. Other changes were also made to embed the project within local communities so that centre staff could participate in workshops and training events on a regional or local level.

"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 supports to facilitate improvements. Each facilitator[xv] worked intensively with five or six centres, often providing professional development workshops for all centre staff and bringing in a range of resource materials to support positive changes. The project included a Baseline assessment followed by collaborative action planning, a 5-6 month period of active consultation and support, and a follow-up Sustainability period. Measures of program quality, inclusion principles and inclusion practices were obtained at Baseline, at the end of the active consultation period, and after an additional 4-5 months. Supplementary information was obtained at the end of the Sustainability period from directors and lead educators in semi-structured interviews and from detailed case notes kept by the project coordinator and the inclusion facilitators.

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.

Improvements in program quality and inclusion effectiveness include those measured by the *Early Childhood Environment Rating Scale-Revised* (*ECERS-R*) and the *SpeciaLink Inclusion Principles and Practices Scale*, as well as in reports of 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. Directors, lead educators, and inclusion facilitators reported that the effects of the consultations

[xv] The project coordinator worked with two centres, given her other responsibilities for overall project management.

tended to spread to other rooms in the centre and also commented on the positive impacts of quality improvements for children.

7.1 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.

Facilitators' observations, *ECERS-R* scores, and directors' and lead educators' feedback all reflect substantial improvements in program quality. *ECERS-R* scores were significantly higher at both the end of the consultation phase and at the end of the sustainability period compared to Baseline scores. Average *ECERS-R* scores for all 98 centres increased from 4.6 at Baseline to 5.35 at the end of the consultation period and 5.52 at the end of the Sustainability period. By the end of the Sustainability period, 82% of centres received ratings indicative of good or very good quality, compared to only 34% of centres at Baseline. Moreover, almost all centres that originally scored below 4.0 on the *ECERS-R* measure achieved scores that indicated substantial improvement. Forty-six percent of participating centres demonstrated an "observable change" in program quality by the end of the active intervention period (i.e., scores evidenced a move from one quality category to another or an increase of 1.0 or more on the *ECERS-R* in centres that were already evidencing good quality care). Significant improvements were observed on each subscale of the *ECERS-R* instrument. It is important to note that substantial improvements were observed in almost all centres, including those centres that were providing good, developmentally appropriate care at the beginning of the project. Centres that had the lowest scores made the greatest measurable gains.

Facilitators commented on directors' and educators' efforts to improve their programs and environments. As well, directors and educators, themselves, commented on the changes they had made in their centres and how these had improved children's experiences. Changes were most notable in room arrangements, specific learning activities (such as science, art and music), children's more active participation at snack time, extended teacher-child conversations, and scheduling to enable greater flexibility and smoother transitions. Many programs became more child-centered and adapted curricula that capitalize on children's interests and experiences.

Changes in staff attitudes and awareness were impacts of *PFI-NS* that were frequently commented upon by directors, lead educators, and facilitators. It was repeatedly noted that staff had become more reflective in their practices, and many reported having discovered a renewed sense of engagement in their work and commitment to quality.

2. Improvements in classroom quality were sustained over time.

The Sustainability period was the time to assess centres' ongoing commitment to change without the weekly support of the facilitator. Overall, improvements to centre scores were not only maintained but, in many cases, continued. As a result, the proportion of centres

that were deemed to have made an "observable change" in program quality over their Baseline scores increased further, from 46% at Time 2 to 58% at Time 3. Consequently, it can be concluded that the *PFI-NS* project was able to produce impacts that reflected a continuing commitment and maintenance of quality improvements on the part of centre staff and their directors for a period of at least 4-5 months. This suggests that staff involved in the project developed the skills to be reflective practitioners, and were able to act on their new knowledge and the collaborative action plans that had been developed with the facilitators.

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

While *PFI-NS* interventions were primarily directed to staff in one selected preschool room in each centre, almost 85% of directors and lead educators reported that *PFI-NS* had impacts in the centre beyond the participating classroom. In many centres, the benefits of the *ECERS-R* approach was employed centre-wide, and facilitators were able to contribute to improvements in other rooms, particularly by including all centre staff in professional development workshops and responding to some of their specific needs. A primary recommendation of directors and lead educators from the first cohort of centres was that in the future all staff be trained in *ECERS-R* and that *PFI-NS* be offered on a centre-wide basis. This recommendation was implemented, resulting in stronger diffusion effects across rooms within centres and centre-wide involvement in a commitment to enhance program quality, inclusion quality and inclusion capacity.

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

Beginning with Cohort 2, the initial training on Quality and the *ECERS-R* assessment method was offered to directors and staff (not just the lead educators) in participating centres at the regional level, rather than having one training workshop in Halifax. In later cohorts, training on quality and on inclusion offered by *PFI-NS* facilitators was made available to staff from centres that had participated in previous cycles, staff in centres that would be starting the next cycle, and staff in adjacent centres that were not participants in the project. As well, *PFI-NS* facilitators sometimes took staff to visit neighbouring centres that provided good examples of quality programming, environments and inclusion practices. Both of these initiatives helped contribute to regional and community peer networking and capacity building.

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 many aspects of their program, they still faced challenges and barriers to enhancing quality and effectively including children with disabilities. Staff turnover was a particular challenge in many centres, and was the biggest impediment to making and sustaining positive changes over the course of the project, substantially slowing progress in a number of centres. Staff turnover and difficulties in finding replacement and substitute staff were often associated with low wages and reflect

systemic Human Resource challenges in this field that pose a serious threat to program quality and sustainability. Another serious issue relates to staff qualifications. Directors and facilitators commented on the lack of preparation evident among some staff who had an equivalency, rather than a college diploma, as well as the importance of having some staff who had additional knowledge and skills related to inclusion. Lack of funding for capital improvements and for the purchase of materials and equipment were other impediments. Recent government funding initiatives for child care expansion, renovation and repairs, and playground enhancement are helping to address some of these needs.

An additional concern that was documented by the inclusion facilitators and commented on by directors relates to the nature of funding available specifically to support centres' inclusion efforts. Directors commented on the degree of uncertainty they experienced about criteria for extra support funding, long waiting lists to determine eligibility, and extended periods before funding is provided. These factors add additional stress and anxiety and can jeopardize directors' capacities to retain those staff who are most knowledgeable and experienced with inclusion (i.e., staff who have previously been funded by *Supported Child Care*).

7.2 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.

While directors' and educators' attitudes at Baseline were generally favourable towards inclusion, directors, lead educators, and facilitators all commented on an improvement in staff confidence and awareness of the importance of including children with special needs in their classrooms. Over the course of the project, facilitators were able to make recommendations and provide assistance and information that helped improve inclusion practices in a number of centres that regularly include children with special needs.

2. Improvements in centre and classroom environments and in teacher-child interactions benefit all children and enhance inclusion capacity.

Lead educators reported positive impacts that affect all children's experiences. Change in staff's attitudes and behaviours and the adoption of more child-centred programming had a positive impact on their interactions with the children. Child care staff listened to and engaged the children more, and children were able to engage in more child-initiated activities. Changes in scheduling and routines that resulted in greater flexibility allowed for smoother transitions and less waiting time and frustration for all. As a result, educators observed improvements in children's behaviour. Interactions between children

with special needs and their typically developing peers were also observed to have improved.

Three specific examples where "best practice" in the *ECERS-R* has led to better inclusion quality are the following:

- Adding a private space benefits all children, and specifically benefits children with autism who often need a place to withdraw from the stimulation of a typical early childhood classroom and children. Many centres hadn't thought to address this need until they participated in *Partnerships for Inclusion - Nova Scotia*.
- Adding picture labels benefits all children to become more independent, but is particularly helpful for children with communication delays.
- Providing equipment that supports varying levels of development allows children with developmental delays to participate at their own level of ability. In several centres the use of Sign Language or the PECS method to facilitate communication was used in ways that not only directly benefited children with special needs, but facilitated communication and interactions among groups of children in ways that enhanced full integration and participation in the program.

3. ***PFI-NS'* impact on inclusion effectiveness varied among centres that did and did not include children with special needs during the project. Among the former, improvements were most notable in *inclusion practices* and typically occurred during the Sustainability period. 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.**

   Analyses were done separately for centres in Cohorts 1 and 2 and centres in Cohorts 3 and 4 since different forms of the *SpeciaLink Inclusion Principles and Practices* were used. Centres in Cohorts 1 and 2 (almost all of which included children with special needs during the project) showed minimal improvements in developing or implementing inclusion principles, in part because many of the centres were already successful in this regard; but did evidence significant improvements in average total *Inclusion Practices* scores and in practices that specifically 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 in these latter cohorts, on average, evidenced minimal improvements in the development of inclusion principles and could not demonstrate changes in practices. While some staff and directors described themselves as more accepting of including children with special needs and more prepared to do so, others needed more time to consolidate the improvements they had made in program quality, more opportunities to observe effective inclusion in other centres, and the opportun**ity** to experience success with supports in place to help them do so.

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.**

Research on inclusion quality in Canadian child care programs has demonstrated that a variety of factors must be addressed to enhance and maintain inclusion quality. Among them are environmental changes to enable centres to be more accessible, access to specialized equipment and materials, staff training and ongoing support, additional staffing beyond ratio as necessary, and access to support from specialists and parents. Our previous research (Irwin, Lero & Brophy, 2000; 2004)[3] confirms that inclusion quality, like program quality, must be continually recreated, and that attention must be given both to the resources to support inclusion quality that exist *within centres* and those that can be *provided to centres* and their staff by government, early interventionists, local professionals in a variety of areas, and resource consultants.

7.3 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.**

The *PFI-NS* project has been a time-limited, experimental initiative that was provided to a limited number of early childhood programs. An important lesson from the project is the critical need for on-going community-based resources to support quality enhancement and its maintenance. Under usual circumstances, some staff might attend professional development workshops or take courses, but in most locales there has been no means to ensure or support centre-wide engagement in quality enhancement initiatives — and none that provide on-site assessments and resources "in situ" in ways that can have specific and visible impacts on programs.

In addition to promoting change in individual centres, the *PFI-NS* project also has the capacity to encourage the development of networking across centres and greater professionalism and mutual support among child care programs and early childhood educators. Some directors reported that one of the positive effects of the program has been that they have become more effective in liaising with external professionals and in marshalling resources to support inclusion.

The project has also built capacity and expertise among the inclusion facilitators/consultants, who have learned a great deal through successive offerings of the project and are in a position to provide support to each other and training to other experienced individuals to become inclusion facilitators/quality consultants in other parts of the province.

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.

Several centres in the project were observed to suffer from repeated instances of staff turnover for a number of reasons. A few experienced a move to a new location or other major stressors. *PFI-NS's* on-going support and focus on quality was an important resource for these centres during these times. As well, the government's commitment to double the number of children with special needs in child care programs, while desirable, requires careful management and support. Many provinces are currently embarking on a period of significant system change. In such times, it is useful to consider the need to support community-based programs and ensure on-going stability and a focus on quality.

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.

One of the drawbacks to this model is that it may require substantial investments of unpaid overtime on the part of early childhood educators. Typically child care staff are not paid for preparation time or for attending staff meetings or professional development workshops after hours or on weekends. Releasing staff to participate in project activities requires hiring replacement staff — an additional cost to programs that have little discretionary revenue. The North Carolina model on which *PFI-NS* is based provides each participating centre with $200 to support quality improvements within the centre; *PFI-NS* adopted this approach by budgeting a like amount for purchases and food to support staff attendance at meetings and professional development workshops and considered it highly beneficial. However, $200 per centre is virtually symbolic, compared to the unpaid time and resources expended by the centres and centre staff. Both time and lack of funds to make quality improvements were identified by directors and lead educators as impediments or problematic aspects.

In order to facilitate centres' participation and recognize staff involvement, a more substantial stipend should be provided to participating centres. Programs that make significant improvements in program quality and inclusion effectiveness can be publicly recognized and reinforced. Staff who take on a leadership role as change agents and those who participate in many professional development workshops should also be rewarded, with appropriate compensation and credits that are recognized as contributions to continuing professional education. Budgetary support for educational upgrading and for replacement staff when educators are participating in professional development activities should also be considered as part of a systemic approach to quality enhancement.

4. The importance of voluntary participation

Discussions with the developers of the *PFI-NS* model and related initiatives suggest the importance of voluntary, rather than compulsory, participation by child care centres. Their view is supported by the findings that staff openness and engagement are foundational for success and that staff (and director) resistance is a major impediment to making positive changes. Voluntary participation is far more likely to result in positive

outcomes to a process geared to making personal and program changes. The likelihood of voluntary participation by other centres would be expected as word spreads about the positive experiences centres have had with the *PFI-NS* project. Providing some financial support to centres to facilitate their participation and enable them to make recommended changes would increase the likelihood of participation as well.

5. The importance of administering quality enhancement programs through mechanisms that are arms-length from government

This issue has also been discussed by the developers of the *PFI-NS* model, including Dixie (VanRaalte) Mitchell, who has extensive experience with a related program in New Brunswick. Their strong recommendation is to ensure that all *ECERS-R* scores, *Inclusion Scales* scores, and observations are treated as confidential information, with no sharing of such information with licensing officials. This approach is seen as critical for developing and maintaining trust and for ensuring honest and frank discussions about necessary quality improvements (the only exception being unusual circumstances that endanger children's health and welfare).

6. *PFI-NS* and related initiatives can be used as a component in program accreditation efforts

One of the approaches some jurisdictions are taking to promote high quality is centre accreditation. Accreditation is a voluntary system that uses external measures and criteria as a basis for determining whether a program meets specific standards indicative of high quality. Usually an external accrediting body is established and is responsible for providing independent assessments to those programs that apply to become accredited. The National Association for the Education of Young Children (NAEYC) accreditation model is perhaps the most well-known example. Programs may or may not have access to funding and resources to assist them to meet accreditation criteria and subsidize the expenses of applying for accreditation. Accredited programs use their status to attract parents and may qualify for higher per diem rates from local governments. Alberta has been developing such a system, and other Canadian jurisdictions may do so as well.

It is possible to easily use the *PFI-NS* approach as a component within an accreditation system in the future, if desired. Specifically, the model offers centres an important vehicle for making the kinds of quality improvements that would be included in accreditation criteria. Further, *PFI-NS's* attention to inclusion practices is unique and would add additional support to this aspect in an accreditation model. In effect, participation in *PFI-NS* processes and the use of the *ECERS-R*, the *Inclusion Scales,* and other objective measures could easily support an accreditation approach and provide participating centres with additional recognition and reinforcement for participating. It also works on its own, however, without orienting to an external agent for validating the program quality and inclusion quality improvements centres make when empowered and supported to do so.

7.4 LESSONS LEARNED: SUGGESTIONS FOR FURTHER RESEARCH

1. The importance of continuing research

The current study was an evaluation based on the first four cycles of a new program to enhance program quality, inclusion quality and inclusion capacity in Nova Scotia child care programs. The experience provided an important opportunity to utilize a model of on-site consultation and support developed in North Carolina and to adapt it specifically to the needs of early childhood programs in Nova Scotia. Successive cycles adopted a model of training and support that focussed on improvements not only in the preschool room, but in centres generally, and used methods that enabled staff from local areas to participate in joint training sessions, visit each other's programs, and develop peer support networks.

Centres that had limited or no experience with inclusion were included in later cohorts and have provided an important challenge as we seek to better develop and assess improvements in inclusion capacity. A further development that occurred was the shift to the newly revised forms of the *SpeciaLink Inclusion Principles and Practices* measures. Use of the new measures provided opportunities for more specific and rigorous assessment of changes in inclusion quality. Multiple methods and the use of a well-known and widely used instrument to assess quality and quality improvements are strengths of this evaluation.

Evidence-based program and policy development require well-documented process and outcome evaluation data. Careful analysis of how *PFI-NS* affected centres in the various cohorts that had higher or lower levels of overall quality at Baseline and more or less experience with inclusion provides a deeper understanding to guide service delivery. Comparisons to related programs in other jurisdictions should also be useful, particularly since they would provide the opportunity to assess how differences in program implementation and context affect outcomes. In particular, no studies have compared such programs using planned variations in the frequency of visits or the nature of support provided.

2. Maintaining the integrity and usefulness of the research process

This evaluation has reinforced the importance of ensuring research integrity and research utility. Research integrity would be enhanced by having an independent person, other than the inclusion facilitator who works with a centre, participate in assessments. This method has been used in North Carolina and avoids the difficulty of having the same person who is providing encouragement to staff also do objective assessments. While *PFI-NS* inclusion facilitators made every effort to be objective and professional, it can be difficult to be objective when one is so intimately involved in coaching and encouraging staff and program directors.

A second recommendation is the importance and evident value of having an external individual collect information on changes made, and on enablers and impediments to

improvements from centre staff. These interviews provided an important window on the change process and provided unique information that informed this evaluation.

3. Assessing impacts on children and parents

Another possible extension of this research would be to examine the impacts of program improvements and more effective inclusion practices on children and parents — particularly children with disabilities. Information from the interviews suggested that children benefited considerably from the changes made to activities, the curriculum, scheduling, and teacher-child interactions, and that some parents were also impressed with the changes that were introduced. Specific changes in inclusion practices were not captured as well in the current study, but field notes contributed by the inclusion facilitators suggested that there were some significant changes in how well individual children with disabilities were accommodated in specific centres — in a number of cases leading to more positive interchanges between children with special needs and more typically developing children. These outcomes are important to capture well, since critical policy goals encompass ensuring that early learning and child care programs are both more universally inclusive and of high quality.

4. Studying program expansion and maturity

Further follow ups and additional cycles of the project will evidence the processes that mark expansion and program maturity. It is important to study how initiatives like *PFI-NS* can be ramped up and expanded without losing their uniqueness, and what lessons we can learn from the facilitators as they gain more experience with a wider range of centres. In particular, it will be important to examine how *PFI-NS* changes if it becomes an on-going program, rather than a time-limited initiative or if it changes in any other significant way.

7.5 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 significantly improve in inclusion quality — as evidenced in greater use 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 a few 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, as described in this chapter 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 an important community-based infrastructure support to child care programs that is complementary to the work of ECDOs 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.

As an ongoing program, *PFI-NS* could provide assessments, consultations and support appropriate to all age groups served by Nova Scotia child care programs, including infants and toddlers, preschoolers and school-age children. It could also more flexibly meet the needs of individual programs, providing more assistance when centres face more challenges or require more information and support. Workshops and training sessions on quality, inclusion, curriculum development and other topics could be scheduled more regularly as well, allowing more directors and staff to participate. Reporting and accountability procedures would ensure that government is informed about participation processes and outcomes. Some form of recognition for centres that participate and are successful in providing high quality, inclusive care could be introduced as well.

Transformation of *PFI-NS* into a sustainable element in government and community-based infrastructure supports to the child care community should include a review to determine how best to ensure effective complementarity and coordination among *PFI-NS* consultants, early interventionists, ECDOs, specialists, and educators in post-secondary ECE programs.

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.

The Supported Child Care (SCC) funding system is a critically important component in supporting the inclusion of children with special needs. In order to be effective, 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. As part of an overall plan to improve and maintain high quality early childhood programs, we recommend that government review current training programs and, in particular, strengthen regulations to reflect current knowledge about the importance of formal

training in early childhood education for professionals in this field. A number of provinces[4] and the Child Care Human Resources Sector Council[5] 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 re-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.

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 their involvement with *PFI-NS* facilitators. 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

1. OECD (Organization for Economic Co-operation and Development) *Starting Strong II: Early Childhood Education and Care,* Paris, France: OECD Publishing, UK.

2. Government of Nova Scotia. (2006). *The Early Learning and Child Care Plan*. http://www.gov.ns.ca/coms/families/provider/documents/ELCC_Plan.pdf

3. Irwin, S. H. (2005). *The SpeciaLink Child Care Inclusion Scales* (Revised). Available from SpeciaLink at http://www.specialinkcanada.org

4. Government of Ontario (2007). *Investing in Quality: Policies, Practitioners, Programs and Parents.* Report of the Expert Panel on Quality and Human Resources. Ministry of Children and Youth Services. http://www.children.gov.on.ca/NR/CS/Publications/QHRReport_en.pdf

5. Child Care Human Resources Sector Council (2007). *Career Promotions & Recruitment Strategy*. http://www.ccsc-cssge.ca

REFERENCES

Arnett, J. (1989). Caregivers in day care centers: Does training matter? *Journal of Applied Developmental Psychology 10*: 541-552.

Brown vs. Board of Education (1954). See *Oyez Project* at Northwestern University through http://oyez.nwu.edu/cases/cases.

Buysee, V., Wesley, P. W., Bryant, D. & Gardner, D, (1999). Quality of early childhood programs in inclusive and non-inclusive settings. *Exceptional Children, 65,* (3), 301-314.

Campbell, P.H. & Milbourne, S.A. (2005). Improving the quality of infant-toddler care through professional development. *Topics in Early Childhood Special Education. 25,* 3-13.

Child Care Human Resources Sector Council (2007). *Career Promotions & Recruitment Strategy*. http://www.ccsc-cssge.ca

Clarke-Stewart, A. (1999). *How child care relates to children's cognitive and language development: NICHD study.* Paper presented at the American Association for the Advancement of Science meetings. Anaheim, CA. January 21-26.

Doherty, G., Lero, D. S., Goelman, H., LaGrange, A. & Tougas, J. (2000) *You Bet I Care!: A Canada-wide study on wages, working conditions, and practices in child care centres.* Guelph, ON: Centre for Families, Work and Well-Being. www.worklifecanada.ca

Eaton vs. Brant County Board of Education (1997). See both P.R. de Massy, The Eaton case before the Supreme Court of Canada: A "constructive" reading of the decision, and C.S. Judd, The Eaton and Eldridge Cases: Same but Different? In *entourage* (10) 3/4, (1997).

Goelman, H., Doherty, G., Lero, D.S., LaGrange, A. & Tougas, J. (2000). *You Bet I Care! -- Caring and learning environments: Quality in child care centres across Canada.* ON: University of Guelph: (Centre for Families, Work and Well-Being). Available from Web Site: http://worklifecanada.ca

Government of Canada (2000). *Early Childhood Development Agreement*. Reports and background documents are available at http://www.socialunion.gc.ca/menu_e.html.

Government of Nova Scotia (1967). *Day Nurseries Act*, R.S.N.S. 1967. c. 71. Replaced by *Consolidated Day Care Act*, S.N.S. 1978 c. 6. Available from Web Site: http://www.gov.ns.ca/legislature/ege/legn.htm and http://www.gov.nslca/just/regulations/.

Government of Nova Scotia (1978). *Consolidated Day Care Act*, S.N.S. 1978 c. 6. Available from Web Site: http://www.gov.ns.ca/legislature/ege/legn.htm and http://www.gov.nslca/just/regulations/.

Government of Nova Scotia. (1979). *Task Force on Day Care Financing Report.* Halifax, NS: Author.

Government of Nova Scotia. (2006). *The Early Learning and Child Care Plan*. http://www.gov.ns.ca/coms/families/provider/documents/ELCC_Plan.pdf

Government of Nova Scotia, Department of Social Services, Task Force on Day Care (1983). *Report of the task force on day care.* Halifax, NS: Author.

Government of Ontario (2007). *Investing in Quality: Policies, Practitioners, Programs and Parents.* Report of the Expert Panel on Quality and Human Resources. Ministry of Children and Youth Services. http://www.children.gov.on.ca/NR/CS/Publications/QHRReport_en.pdf

Harms, T., Clifford, R.M., & Cryer, D. (1998). *Early Childhood Environment Rating Scale - revised edition (ECERS-R).* N.Y.: Teachers College Press, Columbia University.

Irwin, S.H. (2005). *The SpeciaLink Child Care Inclusion Scales (Revised).* Available from Web Site: http://www.specialinkcanada.org

Irwin, S.H., Lero, D.S. & Brophy, K. (2000) *A Matter of urgency: Including children with special needs in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org.

Irwin, S.H., Lero, D.S. & Brophy, K. (2004). *Inclusion: The next generation in child care in Canada.* NS: Breton Books. Available from Web Site: http://www.specialinkcanada.org.

Kontos, S., Howes, C. & Galinsky, E. (1996). Does training make a difference to quality in family child care? *Early Childhood Research Quarterly, 11*, 427-445.

Lero, D. S., Irwin, S. H. & Darisi, T. (2006). *Partnerships for Inclusion- Nova Scotia*: An Evaluation Based on the First Cohort of Child Care Centres. Specialink and the Centre for Families, Work and Well-Being. Available at http://www.specialinkcanada.org/books/PFI_report.pdf

McCall, R. B. & Green, B.L. (2004). Beyond the methodological gold standards of behavioral research: Considerations for practice and policy. *Social Policy Report, 18* (11), 1-12.

Mitchell (VanRaalte), D.L. (2001). *Keeping the door open: Enhancing and monitoring the capacity of centres to include children with special needs*. NB: New Brunswick Association for Community Living.

OECD (Organization for Economic Co-operation and Development) *Starting Strong II: Early Childhood Education and Care*, Paris, France: OECD Publishing, UK.

Palsha, S.A. & Wesley, P.W. (1998). Improving quality in early childhood environments through on-site consultation. *Topics in Early Childhood Special Education*, 18:4, 243-253.

Peisner-Feinberg, E.S. & Burchinal, M.R. (1997). "Relations between preschool children's child care experiences and concurrent development: The Cost, Quality and Outcomes Study." *Merrill-Palmer Quarterly, 43*: 49-70.

Peisner-Feinberg, E.S., Burchinal, M.R., Clifford, R.M., Culkin, M.I., Howes, C., Kagan, S.L., Yazejan, N., Byler, P., Rustici, I. & Zelazo, J. (1999). *The children of the cost, quality, and outcomes study go to school: Executive Summary*. Chapel Hill: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development.

Roeher Institute. (2003). *Inclusivity of the child care policy environment in Canada: Much work to be done*. ON: Author.

Vandell, D. L. (1999). *Cognitive, linguistic and social consequences of early experience: Child care and social competence: NICHD study*. Paper presented at the American Association for the Advancement of Science meetings, Anaheim, CA. January 21-26.

Webber, C. (2003). *Partnerships for Inclusion - Nova Scotia final report*, 2003.

Whitebook, M., Howes, C. & Phillips, D. (1990). *Who Cares? Child Care Teachers and Quality of Care in America*. Final Report of the National Child Care Staffing Study. Oakland, CA: Child Care Employee Project.

Wolfensberger, W. (1972). *The principle of normalization in human services*. Toronto: National Institute on Mental Retardation (now called the Roeher Institute).

APPENDIX A-1: INTERVIEW SCHEDULE FOR DIRECTORS

PARTNERSHIPS FOR INCLUSION FOLLOW-UP QUESTIONNAIRE
(Administered at Sustainability Check, after the 3rd assessments)

Centre ID _____ Centre Name _____
Date of Interview _____
Person Interviewed _____

1. What has changed in your centre (main changes), 9 months after the end of the PFI-NS intervention period directly as a result of *PFI-NS*?
   Please comment on changes in any of the following: (the 7 subscales)
   a. Space and furnishings
   b. Personal care routines
   c. Language and reasoning
   d. Activities offered to the children
   e. Teacher-Child Interactions
   f. Program structure
   g. Parents and staff

2. What enabled those changes?

3. Were there any other changes of a positive nature that you feel are directly attributable to *Partnerships for Inclusion* (e.g., peer networking; public perception, connections with related professionals)?

4. Were there any other changes, related to *PFI* that you think have not been helpful (have been difficult for you), for your centre, or for you as a director? (increased workload, increased demands for financial expenditures – staff time, new equipment, friction between staff or between you and staff).

5. "Many people feel that PD (Professional Development opportunities) make a huge difference in the success of this program." With respect to the PD opportunities offered by PFI-NS facilitators…
   - Were they offered?
   - Was there flexibility in the way they were delivered/offered?
   - Was sensitivity shown in initiating conversations in the classroom?
   - Was respect shown for your schedule and the demands of your position?

6. If *PFI-NS* were to be done in other centres, what recommendations would you make to optimize the intervention?
   - For project staff?
   - For other directors?
   - For other staff?

7. What do you think have been the main effects of *PFI* on your staff?

8. What (if anything) has changed in your centre, in the past 8 months, as a result of other training /consultative interventions or events? (such as Building Blocks, Speech and Language project, Autism Initiative)

9. Do you know of any "diffusion effects" from *PFI* — that is, effects in other classrooms or centres that are not part for the project but that are making changes using the *ECERS-R*?

10. Are there any other changes that have affected quality both positively and negatively? (e.g., special needs assistants, turn-over, equipment, sustainability grants).

CHANGES SPECIFIC TO INCLUSION:

11. Has *PFI* had any effects on children with special needs, changes specific to inclusion during *the PFI* project? Yes/No: Please comment.

12. Please comment on changes specific to inclusion …
    - Number of children with special needs now, in the entire centre _____
    - Types of special needs _____
    - Are you / your staff more accepting of a broader range of children with special needs than before? _____If yes, what allowed you to do this?

13. What are you doing with the children with special needs that you didn't do until recently? (e.g., IPPs, closer involvement with professionals, social facilitation)

SUSTAINABILITY

14. Do you have any lingering concerns about your centre's capacity to be successful with inclusion and continue to grow? Please explain

15a. Between the end of the regular intervention visits by your inclusion facilitator and now, what has been maintained and what has slipped?

Maintained: Slipped:

15b. Why do you think this is the case?

Maintained: Slipped:

Director's Closing Comments:

APPENDIX A-2: INTERVIEW SCHEDULE FOR LEAD EDUCATORS

PARTNERSHIPS FOR INCLUSION FOLLOW-UP QUESTIONNAIRE
(Administered at time after 3rd *ECERS-R* review)

Centre ID _____ Centre Name _____
Date of Interview _____
Person Interviewed _____

1. What has changed in your classroom (main changes), in the past 9 months, directly as a result of *PFI-NS*?
   Please comment on changes in any of the following: (the 7 subscales)
   a. Space and furnishings
   b. Personal care routines
   c. Language and reasoning
   d. Activities offered to the children
   e. Teacher-Child Interactions
   f. Program structure
   g. Parents and staff

2. Were there any other changes, of a positive nature, that you feel are directly attributable to *Partnerships for Inclusion*? (e.g., peer networking; public perception, connections with related professionals).

3. Were there any other changes, related to *PFI* that you think have not been helpful (have been difficult for you), for your classroom, or for you as a lead teacher? (increased workload, increased demands for financial expenditures – staff time, new equipment, friction between staff or between you and staff).

4. "Many people feel that PD (Professional Development opportunities) make a huge difference in the success of this program." With respect to the PD opportunities offered by PFI-NS facilitators…
   - Were they offered?
   - Was there flexibility in the way they were delivered/offered?
   - Was sensitivity shown in initiating conversations in the classroom?
   - Was respect shown for your schedule and the demands of your position?

5. If *PFI-NS* were to be done in other centres, what recommendations would you make to optimize the intervention?
   - For project staff?
   - For other directors?
   - For other staff?

6. What do you think have been the main effects of *PFI* on your staff?

7. What has changed in your classroom as a result of other training/consultative interventions or events? (such as, Building Blocks, Speech and Language project, Autism Initiative)

8. Do you know of any "diffusion effects" from *PFI* — that is, effects in other classrooms or centres that are not part for the project but that are making changes using the *ECERS-R*?

9. Are there any other changes that have affected quality in your classroom both positively and negatively? (e.g., special needs assistants, turn-over, equipment, sustainability grants).

10a. Has *PFI* had any effects on children with special needs?

10b. What changes specific to inclusion (if any) have occurred during *PFI* intervention period?
- Number of children with special needs in your classroom ___
- Types of special needs ___
- Accepting of a broader range of children with special needs?
- If yes, what allowed you to do this?

11. What are you doing with the children with special needs that you didn't do until recently? (e.g., IPPs, closer involvement with professionals, social facilitation)

<u>SUSTAINABILITY</u>

12. Do you have any lingering concerns about your centre's capacity to be successful with inclusion and continue to grow? Please explain

13a. Between the end of the regular intervention visits by your inclusion facilitator and now, what has been maintained and what has slipped?

Maintained: Slipped:

13b. Why do you think this is the case?

Maintained: Slipped:

<u>Educator's Closing Comments:</u>

APPENDIX B:

THREE CASE STUDIES OF CENTRES PARTICIPATING IN *PFI-NS*

Case Study #1

This centre is located on the ground floor of an apartment building. It has a ramp leading into the building. All classrooms are on one level; however because of the physical layout, there are challenges in accessing washrooms and cubbies.

This centre has a long history of including children with special needs. They have included children with various types and levels of disabilities and state that they will try to include any child. They have never turned a child away based on a disability. During the time that this centre was involved with Partnerships for Inclusion, there were as many as 6 children with disabilities (some assessed, some being assessed) including Down Syndrome, hearing impairment, and global developmental delays.

The initial *ECERS-R* evaluation resulted in an overall score of 3.8. The greatest challenges were in the areas of *Personal Care Routines* and *Activities*. The staff of the preschool room came well-prepared to the Collaborative Action Plan meeting. They had carefully reviewed the evaluation and identified changes they wanted to make. Some changes, especially those related to health and safety, had already been made.

The support phase lasted approximately 7 months. During that time, the facilitator made regular visits to the centre each week. A great deal of time was spent on changing the physical environment. The staff was open to making changes and trying new things.

The second *ECERS-R* evaluation took place in early May. The changes to room arrangement and access to materials were reflected in a change of overall score from 3.8 to 4.9. At the CAP meeting, which was held in June, the staff stated that it had been a busy year and they were feeling burnt-out. No specific goals were set at this meeting.

The third evaluation took place in November 2006. By this time, there had been significant changes in staffing, with all new staff in the preschool room. Of these 3 staff, only one was trained in ECE and none had any training or experience with the *ECERS-R* scale. While this was the case, the score had slipped only slightly going from 4.9 in May to 4.5 in November.

This centre was unhappy with its initial evaluation of inclusion practices. As they said, "We thought we would have done better with this." This identifies a commonality among some centres that have been including children for many years but have not necessarily considered how they include children.

The *Inclusion Principles and Practices* scores actually dropped in this centre over the 3 evaluations. The reason for this was that the responses from the director during the first scoring were inaccurate in terms of what was actually happening in the centre. Through discussions, the director came to understand what was expected in terms of these scales and recognized that this centre needed to make changes in order to achieve higher scores. As well, the new staff in the program were less familiar with the inclusion practices and could not articulate the centre's values.

Key Learnings from this Case Study:

1. Initial program quality was mediocre. Improvements were made during the active support phase, but at the end of that period further work was needed to ensure a consistent, high level of program quality that supports children's learning and development.

2. The initial focus on program improvements were in obvious, salient aspects: health and safety, personal care routines, physical arrangements and activities.

3. Inclusion in and of itself is not sufficient, even when staff are motivated and committed. A thoughtful review and reflection of inclusion principles and practices based on a well-developed measure and external assessment can prompt important changes in inclusion practices and principles.

4. Staff turnover can impede consistent progress in quality improvements. When newer staff have less formal training in ECE and no background in understanding the components of program quality, the director and PFI staff literally have to start from scratch. New staff may also have a limited understanding of inclusion principles and practices and need to develop a clear understanding of their centre's history, values, and approach to inclusion. Mentoring within the centre and from outside can play a crucial role in helping new staff adapt. Ongoing professional development opportunities on- or near site could facilitate learning and skill development.

Case Study #2

This is a small, private centre that was approached by the facilitator in their region to participate in the *Partnerships for Inclusion* project. While the owner seemed somewhat reluctant at first, it was clear that the lead educator was very enthusiastic. She was able to convince the owner that the centre should participate and agreed to take responsibility for the work of the project. The lead educator had worked in child care for many years and felt she could make a real difference in this centre with the support of the *PFI* project. She was gifted, insightful and passionate.

The staff of the participating classroom were excited about the project and dedicated to making changes. This had a certain amount of spin-off in the rest of the centre. All staff were able to participate in the regional training, which was important because in this small centre all staff worked together at various times throughout the day and need to work well as a team. The owner, who was fairly traditional in her approach and was concerned about maintaining order, often threw up road blocks; however she became more trusting as the process continued and was more willing to try new things. The staff person who led the process was very respectful. She was patient and willing to take small steps, celebrating each change and encouraging more. Success bred success in this centre throughout the project; staff were respectful and supportive of each other and the director was pleased to see positive changes, although the physical layout of the centre continued to pose some challenges.

The initial *ECERS-R* evaluation resulted in an overall score of 3.9. The second *ECERS-R* evaluation took place in late March. Their overall *ECERS-R* score increased to 5.1
The third evaluation took place in October 2005. The final overall score was 4.9. While this was a slight decrease from the second evaluation, it showed that this centre sustained a higher quality environment as compared to the baseline evaluation.

Inclusion Principles – Overall Score - 2.3 to 4.5 out of 7.
Inclusion Practices – Overall Score – 1.36 to 2.2 out of 7.

There was significant change in terms of the inclusion of children with special needs in this centre as measured by the *Inclusion Principles Scale*, but scores on the *Specialink Inclusion Practices Scale* indicated room for considerable improvement. This centre had a history of including children with special needs on an informal basis. The director reported that in the past they had enrolled children with autism, cerebral palsy, global delays and behaviour challenges; however, until this year, none of these children had received Supported Child Care funding or had on-site consultative support. At the time of the third observation there were three children enrolled with identified special needs. A fourth child was being observed because staff felt there was some sort of developmental delay. SCC funding was provided for a full-time resource teacher. The centre made adaptations and accommodations to include these children in all aspects of

programming. The lead educator worked with staff to develop an inclusion policy which reflected the philosophy of inclusion within the centre. Staff also started working with therapists and early interventionists to develop a team approach to working with the children and families. Parents also were more satisfied. All of these positive changes, when consistently observed, would lead to higher scores on the *SpeciaLink Inclusion Practices Scale.*

Unfortunately, just after the third evaluation, the lead educator in the classroom left the centre to work part-time. As an experienced early childhood educator and one-time director, she wanted more freedom than a full-time job permitted. She also felt that the owner was giving her more responsibility than she wanted. Upon leaving, this educator expressed concern that staff would not take the initiative to make changes without her. She was concerned that the centre had become dependent on her. She wanted more freedom and fewer responsibilities.

At the time of the third evaluation, the owner was unable to find the inclusion policy that they had written.

Key Learnings from this Case Study:

1. Leadership and engagement in the process of making change is critical – most especially from a centre's director. This centre benefited greatly from the enthusiasm and commitment of the lead educator. Unfortunately, the director did not have the same level of engagement and capacity for leadership, which became even more evident when the lead educator left her position in the centre.

2. Some senior early childhood educators and directors will be retiring from the field or scaling back their positions. It is important that new staff be well trained and that opportunities for mentorship capitalize on the knowledge and experience available among those who can function as mentors in centres or in communities.

3. Some centres that include children with special needs do so without having children formally assessed and/or without additional funding and resources. Inclusion quality is compromised in these circumstances. In this centre, Supported Child Care funding enabled major changes in the centre's capacities to include these children effectively; however it remains to be seen if a full commitment to quality inclusion principles and practices can be sustained in this centre.

Case Study #3

This centre had children with special needs in the part-day program and in the after school program, but also were aware that there were some (unidentified) children with behaviours and issues in the room for three-year olds. There had been a large turnover of staff in this room because of these issues. The teachers in the room were overwhelmed with these children.

After the baseline *ECERS-R*, the educators asked many questions and slowly started to implement some of the ideas suggested. Because there were almost instant beneficial results they continued until they developed a well-run, calm learning environment. This centre used the *PFI-NS* facilitator's services a lot. *ECERS, ITERS*, or *SACERS* was done in every room. The facilitator presented many workshops – responding to the staff's requests and needs. She also provided a wide range of resources, ideas, etc. Overall average *ECERS-R* scores improved from 4.3 to 5.4.

The director is a dynamic woman who decided that her centre will be of best quality and serve the needs of the community in which they are located. After staff observed that some children – especially those with special needs - needed a longer, more structured day, they changed the part-day program into a longer program (9 am - 2:30 pm). At the beginning of the project the Director also worked in the part-day program. By the end of the project she decided that her energy was best spent supporting and facilitating best practices in all the rooms. She brought all the staff to the *ECERS* training and used the weekend as a team building exercise. All staff attended the inclusion training as well.

One educator had to leave because she was offered a job with much more money as a nanny. The educator that replaced her had some experience in child care, but was waiting to return to school, so would not be there long.

SpeciaLink Principles Scale - Overall the scores went from 4.3 to 5.0 out of 5.
SpeciaLink Practices Scale - Overall the scores went from 3.3 to 4.5 out of 5.

This centre has a resource teacher because they recognized that there are many children in other rooms who need some kind of support. The resource teacher is primarily responsible for one child with severe special needs, but also spends time in the other classrooms being a resource and can provide some limited support to the other teachers. There are several children who have unidentified needs. These children are awaiting assessment.

Because the inclusion program now is throughout the centre, all staff are aware of all children in the centre with special needs. They know the relevant information about each child and any goals for the child that they can implement on the playground and in

the centre. All staff are aware of what *natural proportions* means and agree with this principle, although the written inclusion policy does not state this.

Key Learnings from this Case Study:

1. Staff and centres can go through cycles – In this case, too many children with special needs and challenging behaviours in one room had left staff feeling overwhelmed at the beginning of the project. The desire to meet the needs of all children must be balanced across and within centres. Staff burnout can lead to stress, feelings of failure, staff turnover and a discouraging cycle with respect to inclusion quality.

2. Directors must consider how they can most effectively contribute as pedagogical leaders and inclusion leaders, encouraging best practices in each room and ensuring that all staff have the knowledge, skills and support they need to deliver high quality care. This director served as a positive role model by taking steps to ensure that all staff had access to *PFI*-provided workshops on quality and on inclusion, and that all staff benefited from external assessments and additional resources. Not all staff can or will want to participate in team-building outside of work hours, so sensitivity will be needed; but team building is an important process for staff. This director was a positive change agent and improvements in *ECERS-R* program quality scores and *Inclusion Principles and Practices* reflect the efforts of all involved.

3. It is not unusual for some children with special needs to be waiting for, or not yet scheduled for a formal assessment. This is a period when centre staff and the children, themselves, are most disadvantaged. Consideration should be given to how to reduce long waiting periods and provide additional support to ensure effective transitions into programs.

4. The role of resource teachers is often poorly understood. Both the director and resource teacher in this centre ensure that all staff appreciate their role in including children fully within the centre. The resource teacher provides support to all staff, while retaining primary responsibility for facilitating the full participation of a child with severe special needs.

5. Staff turnover can occur for many reasons. Recruiting and retaining knowledgeable and committed staff is a systemic issue that all provinces are beginning to address through a combination of methods that includes wage enhancements that are often tied to levels of formal training and ongoing professional development.