



Saskatchewan Instructional
Development and Research Unit

FOURTH INTERIM REPORT

Summary and Recommendations of the Fifth Year of a
6-Year Longitudinal Study Examining the Effectiveness
of the Pre-Kindergarten Program in the
Regina Public School Division No. 4



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by
C. Krentz, T. Mensch, B. Warkentin

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EXECUTIVE SUMMARY

The *Fourth Interim Report* is based on the data collected during 2004 to 2005, the fifth year of a 6-year longitudinal study on the effectiveness of the prekindergarten program in the Regina Public School Division No. 4. At the end of the Grade 1 year, a total of 43 children from the initial prekindergarten group (IPG) of 75 children and 23 children from the original comparison group of 43 children selected in 2002-2003 remained in the study. In the fall of 2004, 10 more IPG children returned to the study; however, due to movement throughout the school year of other IPG children and CG children, the number of children followed in the Grade 2 year of the study was 48 in the IPG and 15 in the CG. These sixty-three children were registered in 19 schools, 11 of which are community schools, 1 is an associate school of the RPS Division, and another, a satellite site of that school. Thirty teachers in all were a part of the study this year. In two of the schools, nine children continued in French Immersion; in a third, one child began French immersion this year.

The instruments used to collect this year's data were the same as last year's: the *School Social Behaviour Scales* (2nd ed.) (*SSBS-2*), the *Math Year-End Curriculum Assessment* and the *Reading Running Records Assessment*, and a *Classroom Environment Rating Scale*, revised from last year by the researchers. Each of these instruments was completed by the classroom teachers and analysed by the researchers. Detailed results and recommendations can be found in the *Fourth Interim Report*. Summaries follow below.

From the *SSBS-2* results, it appears that the majority of both the IPG and CG children are competent in their classroom social situations. At the same time, the results for 12 IPG and 3 CG children indicate consistent concerns in half or more of their scores on the social competence and antisocial behaviour subscales/totals; that is, four or more of their subscale and total scores are at the *at-risk* or *high risk* level. Teachers mentioned the following as factors that influence children's social competency: stability of home life, regularity of attendance, need for medication for behavioural or health problems, academic ability, and speech or hearing problems.

The *Math Year-End Curriculum Assessment* revealed that, on the average, IPG children mastered 77% and CG children, 81% of the Grade 2 curriculum content. Results show that individual children from both groups mastered skills in some strands more efficiently than in others. The greatest area of difficulty for both groups seemed to be the Numbers and Operations strand and, within this strand, Problem Solving. However, as was the situation last year, some of the lower scores may be due to absenteeism and thus incomplete responses rather than a lack of mastery.

The *Reading Running Records Assessment* underscored the need for early literacy intervention. Of the total group of 63 Grade 2 children followed in this year's study, 21 (33%) were reading at an instructional level of 17 or higher at the end of the school year; these included 17 IPG and 4 CG. At the same time, 18 (29%) of the study children were reading at Levels 0-8, in comparison to the 8.9% of the Regina Public School division's second graders who were reading approximately a year behind grade level. In total, slightly more than three fourths of the 63

children in this year's study were assessed as reading below the Grade 2 average by the end of June 2005.

The ***Classroom Environment Rating Scale*** resulted in an overall average of 71% (*Good*) on the five subscales. This indicates that the second graders are in a good quality-care environment, between *Good* and *Very Good*. Teachers rated as the highest the Schedules and Routines subscale (87% - *Very Good*) and Supervision and Interactions subscale (85% - *Very Good*). They rated subscales Space and Furnishings and Support to Parents the lowest – both 59% (*Good*). The Materials and Activities subscale scored in the middle at 65% (*Good*). Teachers identified many of their concerns in the final question related to their classroom as a child-centred learning environment.

Both the Teacher Focus Groups and the Parent Questionnaires confirmed that the teachers' involvement in this year's study had been a positive experience not only for the children but also for the teachers themselves. Data from the Teacher Focus Groups included a variety of ways in which the Grade 2 children had grown academically and socially, the parents had become more involved in the school, and teachers themselves had developed professionally. At the same time, the Parent Questionnaires affirmed that their children had received a high-quality Grade 2 program and 'had numerous opportunities to advance their social competence, reading and math skills and communication ability.' Both teachers and parents mentioned that the daily agendas and opportunities for teacher-parent-student conferences were key in maintaining positive connections between home and school.

From the compiled data of this year's study, the following recommended actions are presented under each of the related research questions. This fourth interim report has grouped these recommendations in order of priority to encourage implementation.

Priority 1: Impact of the Grade 2 Program on Children's Learning and Development

- Recommendation 1.6: Ensure that numbers of children in classrooms are proportional to the quality education and care that can be provided to them by teachers and other professionals caring for them in the classroom. (Data Source: *SSBS-2, Classroom Environment Rating Scale, Reading Running Records*)
- Recommendation 1.1: Provide opportunities that encourage positive relationships with peers and adults and incorporate student reflection/evaluation on behaviour. (Data Source: *SSBS-2, Classroom Environment Rating Scale, Teacher Focus Groups, Parent Questionnaires*)
- Recommendation 1.2: Continue specific programs designed to develop social and emotional areas: for example, *Reading Buddies, In Motion, The All Star Program*, daily agendas, and a public speaking program. (Data Source: *Parent Questionnaires*)

- Recommendation 1.3: Integrate opportunities, especially for addition and subtraction, measurement and problem-solving using concrete materials and manipulatives to help children apply mathematical concepts in their daily life. (Data Source: *Classroom Environment Rating Scale, Math Curriculum Assessment*) **Note.** The recent addition of the new Math Makes Sense program may also help in developing children’s mathematical understanding.
- Recommendation 1.5: Ensure daily inclusion of active physical movement. (Data Source: *Classroom Environment Rating Scale*)
- Recommendation 1.8: Ensure that adequate supervision for children’s well-being is provided on the playground. (Data Source: *SSBS-2, Teacher Focus Groups, Parent Questionnaires*)
- Recommendation 3.2: Track the rate of children’s absenteeism and lateness and its effects on overall achievement in Grade 2. (Data Source: *SSBS-2, Classroom Environment Rating Scale, Reading Running Records, Math Curriculum Assessment, Teacher Focus Groups*)
- Recommendation 3.3: Consider improving accessibility of more social workers/counsellors in the schools. (Data Source: *SSBS-2, Teacher Focus Groups*)
- Recommendation 1.4: Ensure teaching materials, particularly in the areas of diversity and science, are replaced or renewed when necessary and that these include a wide variety of pictures, books, games, activities, experiments, software, AV and natural materials to explore. (Data Source: *Classroom Environment Rating Scale*)

Priority 2: Teacher Professional Development Opportunities

- Recommendation 1.7: Ensure the adults in the classroom have appropriate training and sensitivity in order to accommodate individual needs and strengths of students. (Data Source: *Classroom Environment Rating Scale, Reading Running Records, Teacher Focus Groups, Parent Questionnaires*)
- Recommendation 3.1: Ensure that adequate qualified teacher assistance is available to classrooms where there are high needs children integrated into the classroom. (Data Source: *Classroom Environment Rating Scale, Reading Running Records Teacher Focus Groups*)
- Recommendation 3.4: Provide ongoing opportunities for Grade 2 teachers to meet together to network and support each other. (Data Source: *Teacher Focus Groups*)

Priority 3: Parent/Family Involvement

- Recommendation 4.1: Continue ongoing communication about children's progress using events and activities such as daily agendas, monthly newsletters, telephone calls, celebrations of learning, parent-teacher-student conferences. (Data Source: *Classroom Environment Rating Scale, Reading Running Records, Math Curriculum Assessment, Teacher Focus Groups, Parent Questionnaires*)
- Recommendation 4.2: Invite parents to the classroom to help with daily reading, other literacy activities and learning centre time, or to teach a skill, interest, hobby. (Data Source: *Classroom Environment Rating Scale, Reading Running Records, Teacher Focus Groups*)
- Recommendation 4.3: Encourage parents' active participation in the home reading program, on field trips and through exchanges in the children's daily agenda. (Data Source: *Teacher Focus Groups, Parent Questionnaires*)
- Recommendation 4.4: Invite parents' active participation in school family functions such as open house, Thanksgiving dinner, school dance, sports day, cultural day, barbeque, hot lunch program, winter festival, fund raisers, achievement assemblies, school dances, movie nights, potluck dinners, celebration festivals and Christmas concerts. (Data Source: *Parent Questionnaires*)
- Recommendation 4.5: Encourage parents' participation in school and community-sponsored activities such as Families and Schools Together (FAST), community kitchens and the good food box. (Data Source: *Teacher Focus Groups*)

Priority 4: Community Partnerships

- Recommendation 2.1: Continue to promote partnerships with a broad variety of individuals and groups within the community. (Data Source: *Reading Running Records, Teacher Focus Groups*)
- Recommendation 2.2: Ensure one partnership is finished before a new initiative is begun. (Data Source: *Teacher Focus Groups*)

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INTRODUCTION

The *Fourth Interim Report* documents the events and outcomes of the fifth year (2004-2005) of a study that is expected to be completed in 2006; the year's focus is on the experience and outcomes of the Grade 2 children. This longitudinal study was designed to investigate the effectiveness of prekindergarten experiences for young children in the Regina Board of Education community schools. Background and context information can be found in the *First Interim Report* (Krentz, McNaughton, & Warkentin, 2002). Events and outcomes of the third year of the study can be found in the *Second Interim Report* (Krentz, Mensch, & Warkentin, 2004a). The *Third Interim Report* (Krentz, Mensch, & Warkentin, 2004b) summarizes the fourth year of the study.

OVERVIEW OF THE FIFTH YEAR OF THE PREKINDERGARTEN LONGITUDINAL STUDY

On March 16 and May 17, 2005, the researchers met with the 30 Grade 2 teachers from the nineteen different schools involved in this year's prekindergarten study; 5 of these teachers had also been in the study last year. Teachers were given an overview of the longitudinal study and the findings to date. They were introduced to the research tools that would be used this year - the *Reading Running Records Assessment*, the *Math Year-End Curriculum Assessment*, the *Classroom Environment Rating Scale*, Parent Questionnaires and Teacher Focus Groups, and the *School Social Behaviour Scales* (2nd ed.) (*SSBS-2*). At this time, the teachers completed a demographics form, the *Classroom Environment Rating Scale*, and began completion of the *SSBS-2* rating scale for the children in their study.

Researchers met with the teachers again on June 14, 2005, to facilitate the teacher focus groups. Teachers returned the completed parent questionnaires at this time.

REVIEW OF THE STUDY AND ITS DESIGN

STUDY PARTICIPANTS

At the end of the fourth year of the prekindergarten study, there were a total of 66 children involved. Of these, 43 children were from the original prekindergarten group (IPG); they had attended prekindergarten in one of the eight community schools in 2001-2002. The remaining 23 children were in the comparison group (CG) and had been chosen by the kindergarten teachers of the original prekindergarten group (IPG) in 2002-2003.

When the Grade 2 teachers began data collection for the children in this year's study (2004 – 2005), there were 63 child participants remaining. These included 48 children (24 female, 24 male) from the original prekindergarten group (IPG) and 15 children (8 females, 7 males) from the comparison group (CG). The child participants were now in nineteen Regina Public Schools, of which eleven were community schools. In all, 10 children were enrolled in French immersion in three of the schools. Again, the decrease in the number of study participants was due to

families moving to another school. If such movement resulted in the separation of the IPG child from the comparison child, the CG child was withdrawn from the study.

MEASURES AND DATA COLLECTION

The School Social Behaviour Scales (2nd ed.) (SSBS-2)

The School Social Behaviour Scales (2nd ed.) (SSBS-2) was used again this year to assess the social competencies and behaviours of the children in the study. For a detailed description of this scale see Appendix A.

Administration of SSBS-2

Completion of the *SSBS-2* rating form takes about 10 minutes and has three sections. The first section, Identifying Information, provides basic facts about the student as well as about the rater in relationship to the student. The second section includes the scales, Scale A (Social Competence) and Scale B (Antisocial Behaviour). The third section is Additional Information. In this section the rater may record important insights about the student's behaviour, which may help the person who interprets the scores.

In completing the scales, every item must be rated. In case of uncertainty, the teacher is advised to estimate as accurately as possible. Rating is based on the teacher's observations of a student's behaviour during the past 3 months. The rating points are between 1 (*Never*) - if the student does not exhibit a particular behaviour or if the teacher has not observed a particular behaviour - and 5 (*Frequently*) - if the student often exhibits a particular behaviour.

The *SSBS-2* was scored, and the scores were interpreted by the researchers.

Findings

In scoring the *SSBS-2*, raw scores were converted to *t*-scores and percentile ranks; these show an individual's score in relation to others in the norming sample. In interpreting *t*-scores, generally a score of 50 indicates placement at the average level of the norm sample. Percentile scores express the percentage in the study sample that fall below a specific score, 1 being the lowest rank and 100 being the highest.

In addition, social functioning levels correspond to these scores and help interpret the individual's social competence or lack thereof.

Scale A: Social Competence

The *Social Competence Scale (A)* includes four social functioning levels: *High Functioning*, *Average*, *At-Risk*, and *High Risk*.

The *High Functioning* level reflects excellent social competence; that is, students scoring at this level are likely to have excellent social skills and very good relationships with teachers, peers and others. This level includes raw scores on the total Social Competence Scale or the subscales that are above 80% (the 80th percentile) of the norm.

The *Average* level includes typical or adequate social competence. The majority of students score in this range, between the 80th and 20th percentile.

The *At-Risk* level scores extend from the 20th to the 5th percentile. Students who score here are close to, or slightly below, the norm. Scores in this range indicate the need for further evaluation or possibly intervention.

The *High Risk* level includes children who typically have poor peer relationships and lack knowledge and skills related to social situations. This level includes scores below the 5th percentile.

More than half of both the initial prekindergarten group and the comparison group scored in the *average* level for all three subscales and the overall social competence total. The remainder of the children scored both in the higher or lower levels. The IPG had a greater number of children in the *higher functioning* level than in the *at-risk* or *high risk* levels for two out of the three subscales; for the third subscale and the social competence total, the reverse was true. The CG had a greater number of children in the *higher functioning* level than in the *at-risk* or *high risk* levels in all three subscales and the overall total (see Figure 1).

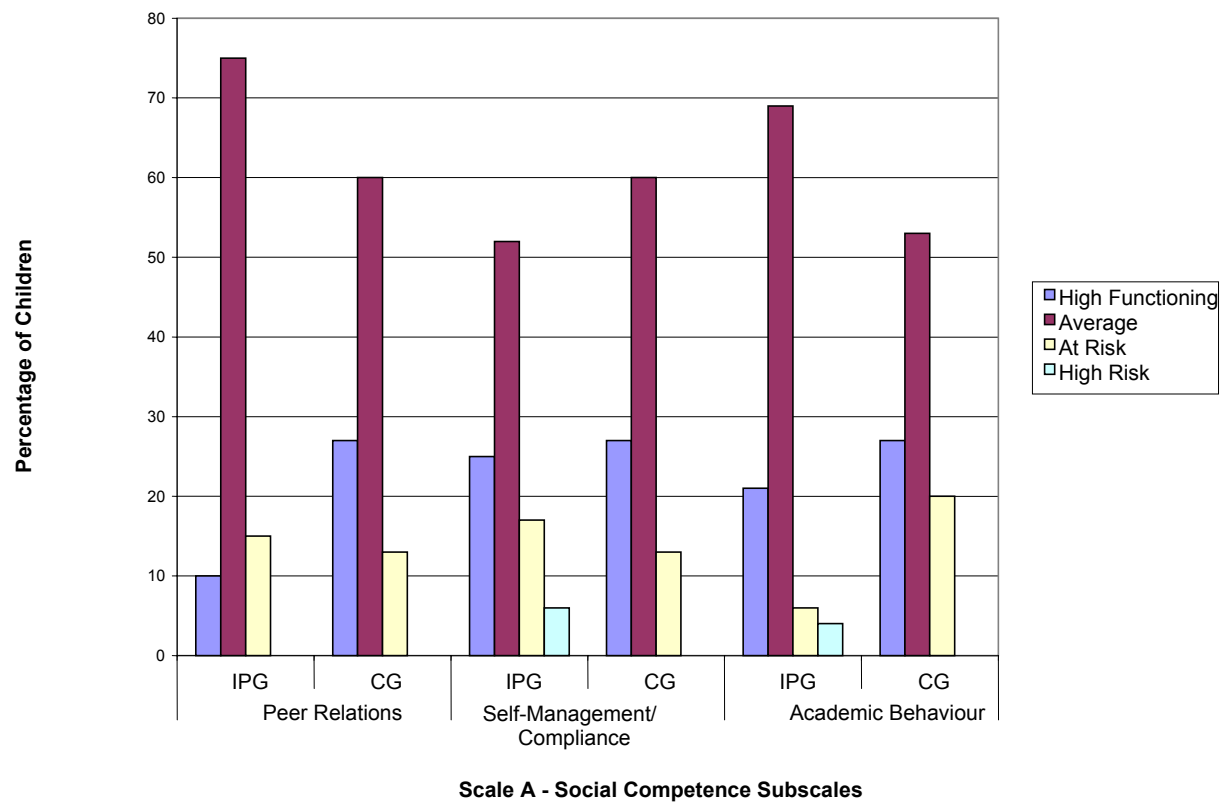


Figure 1. SSBS-2 Social functioning levels.

For more detailed information on the children's ratings on the Social Competence subscales, Peer Relations, Self-Management/Compliance and Academic Behaviour, see Appendix B.

The Social Competence Scale totals reveal that about 10% of the IPG and 27% of the CG children are *high functioning*. As regards the remainder of the children, 19% (9 out of 48) in the IPG and 13% (2 out of 15) in the CG are *at-risk* while 2% (1 out of 48) of the IPG and none of the CG are in the *high risk* range (see Figure 2).

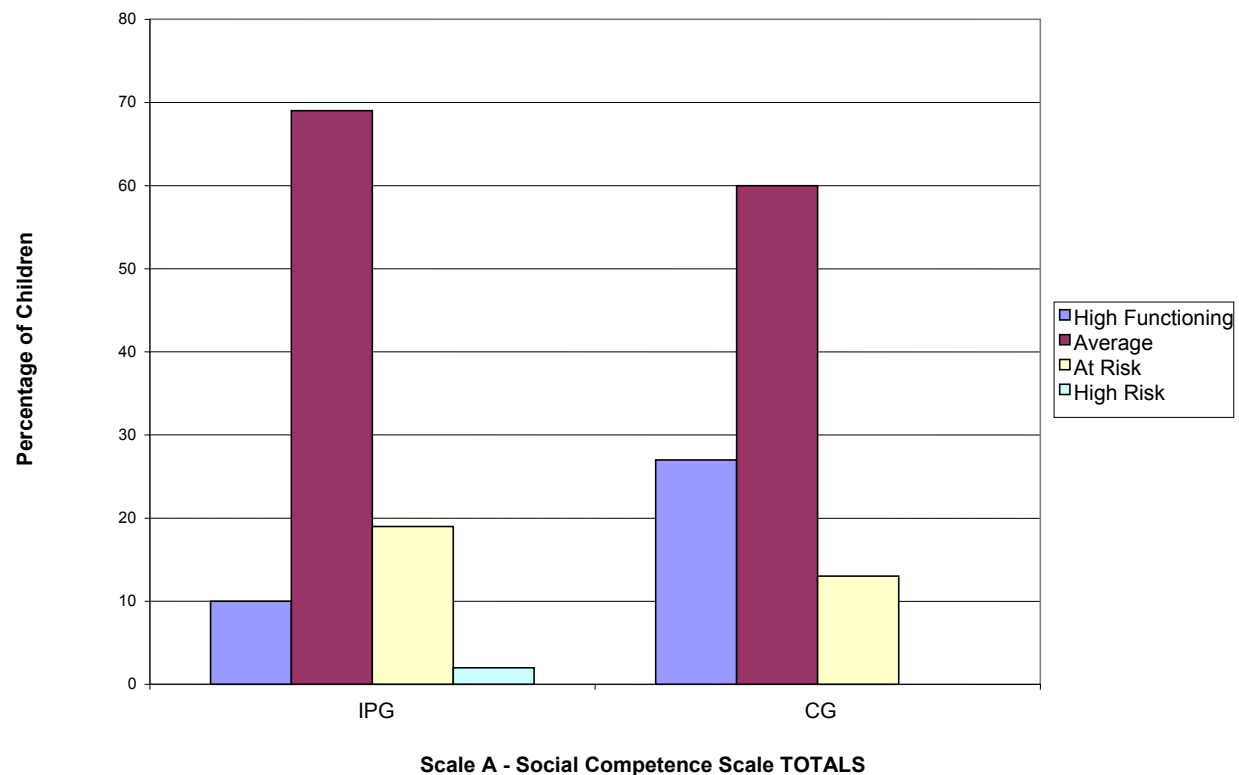


Figure 2. SSBS-2 Social functioning levels.

It is important to remember that this study is following a considerably small number of children in total and that the number of the comparison group (CG) children is more than one third less than those of the initial prekindergarten group (IPG). The actual number of children who scored *at-risk* or *high risk* in any of the subscales or totals on Scale A was 14 in the IPG and 5 in the CG; there were only 2 IPG and 1 CG who consistently scored at these levels. The majority – over 75% - of children in both groups scored in the *average* level most of the time.

Scale B: Antisocial Behaviour

The *Antisocial Behaviour Scale (B)* includes three social functional levels: *Average*, *At-Risk* and *High Risk*.

The *Average* level includes scores below the 80th percentile. Students performing at this level are likely to exhibit few or no antisocial behaviour problems.

The *At-Risk* level scores between the 80th and 95th percentile. Students scoring in this range may require intervention for some patterns of antisocial behaviours.

The *High Risk* level includes scores in the highest 5th percentile. Likely these students are exhibiting significant antisocial behaviours which may lead to severe adjustment problems in the school setting.

As in the social competence scale, results on the antisocial behaviour scale were similar in that the majority of both the IPG and the CG children scored in the *average* level for all three subscales and the overall total. The remainder of the IPG children scored in the *at-risk* or *high risk* levels. All of the remaining CG children scored in the at-risk level (see Figure 3).

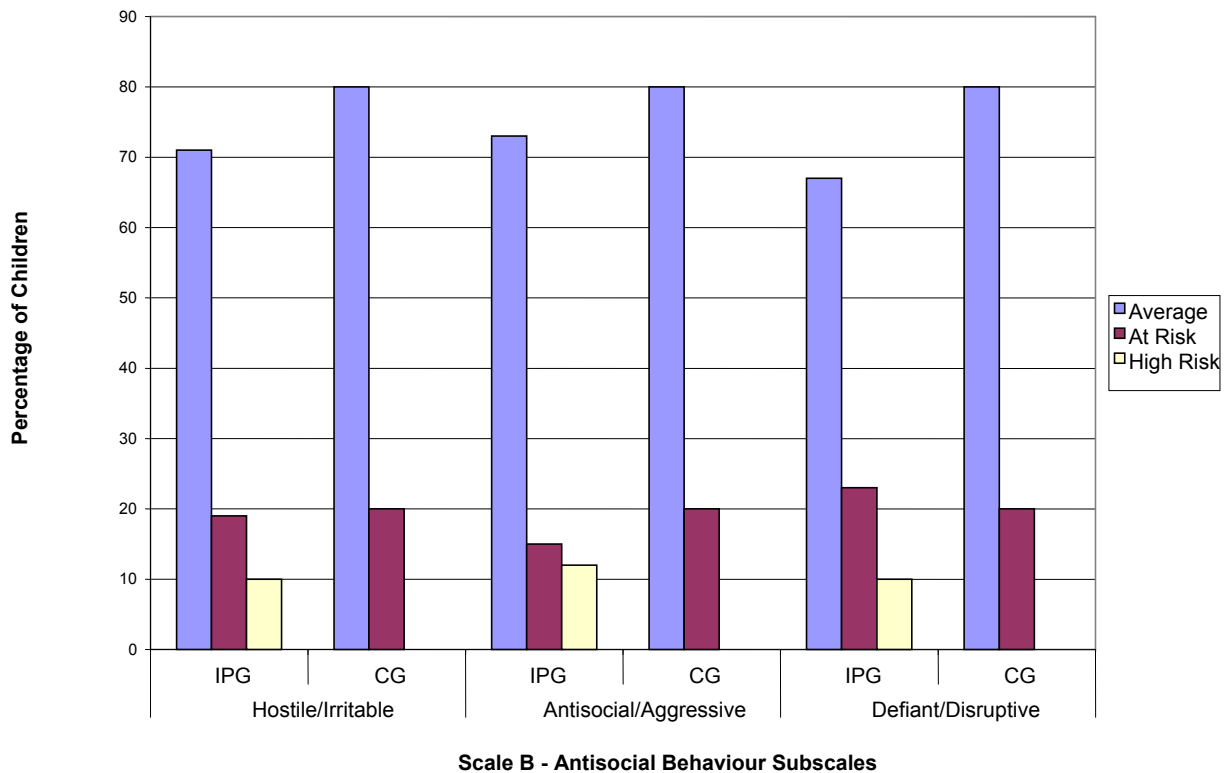


Figure 3. SSBS-2 Social functioning levels.

For more detailed information on the children's ratings on the three Antisocial Behaviour subscales Hostile/Irritable, Antisocial/Aggressive and Defiant/Disruptive, see Appendix C.

Overall, on the Antisocial Behaviour Scale Totals, 67% of the IPG (32 out of 48) and 80% of the CG (12 out of 15) children scored in the *average* level. The IPG had 21% (10 of 48) and the CG had 20% (3 of 15) children in the *at-risk* level. In the *high risk* level the IPG had 12% (6 of 48) children and the CG had none (see Figure 4).

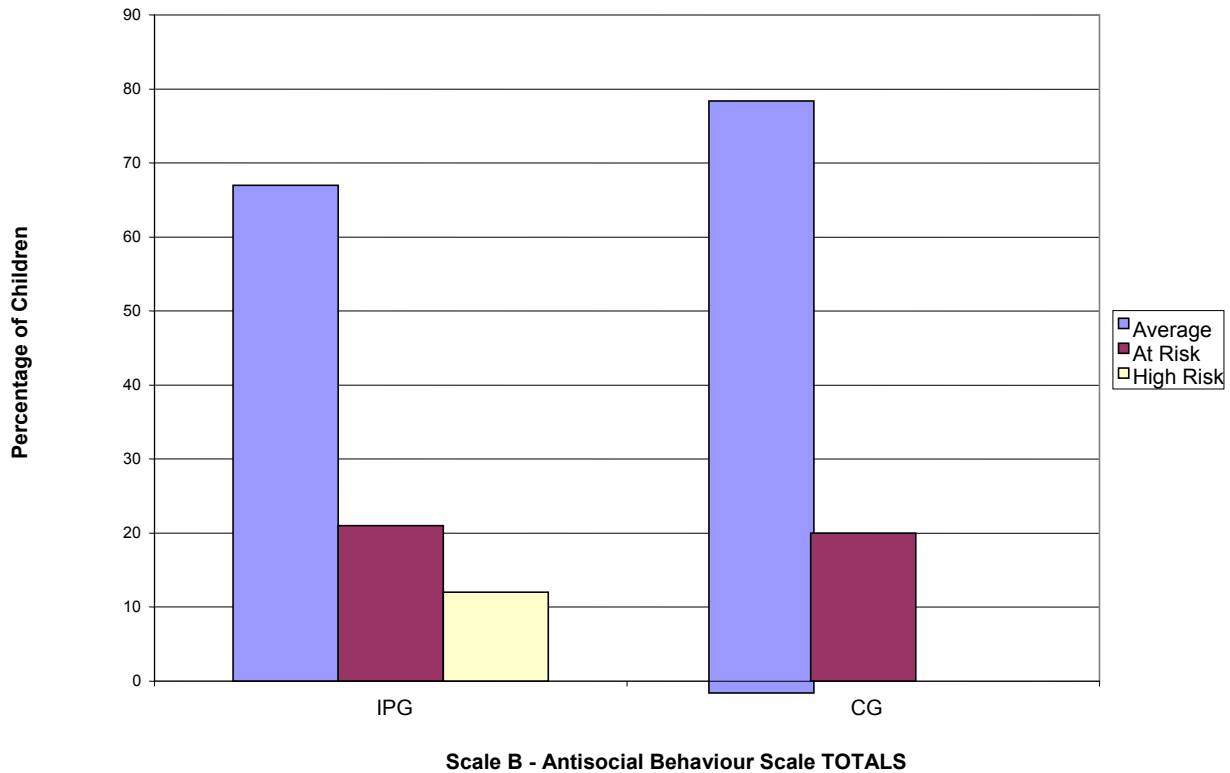


Figure 4. *SSBS-2* Social functioning levels.

Again, it is important to remember that this study involves a very small number of children and there is less than one third the number of children in the CG than are in the IPG. The actual number of children who scored *at-risk* or *high risk* in any of the subscales or totals on Scale B was 17 in the IPG and 5 in the CG. Among the IPG children, there were 6 who consistently scored in either the *at-risk* or *high risk* levels and 5 who consistently scored in the *high risk* range. Among the CG children, there were 2 who consistently scored in the *at-risk* range. The majority of children – over 67% IPG and 80% CG - scored in the *average* level most of the time.

Concluding remarks

From the *SSBS-2* results, it appears that the majority of both the IPG and CG children are behaving appropriately in their classroom social situations. Repeatedly, teachers included comments such as: ‘excellent student, well-behaved, cooperative, respectful, tries hard, kind, helpful’, etc. These children seem to have “adequate social competence ... that generally leads to solid peer relationships and academic success” (Merrell, 2002).

However, the results for 12 IPG and 3 CG children show consistent concerns in half or more of their scores on the social competence and antisocial behaviour subscales/totals; that is, four or more of their subscale and total scores are at the *at-risk* or *high risk* level. The author of the *SSBS-2* suggests that a student who receives even one Social Competence total score or one or more Social Competence subscale scores at the *high risk* level has substantial social competence deficits and peer adjustment problems and would benefit from social skills training or

interpersonal skills intervention (Merrell, 2002). Merrell also indicates that children who receive even one Antisocial Behaviour total score or one or more subscale score at the *high risk* level are likely exhibiting significant antisocial behaviours and are at very high risk for having or developing conduct disorders or various types of delinquent behaviour.

In the additional information provided in the last section of the *SSBS-2*, some teachers had identified in these children the following or similar concerns:

- depending on what is happening at home, child shows extreme mood swings from being overly willing to openly defiant
- child's previous teachers indicated there were behavioural and academic concerns
- serious behaviour problems – temper tantrums – and low academic ability. Application has been made for a behaviour-adaptation classroom
- child is working at a grade level (or more) below, in all areas
- child has pouting fits; until last month was in French Immersion (since K). Child gets frustrated when unable to do work and channels energy into disturbing others
- child is a “bully”; when challenged, child expressed to Mom and teacher a lack of caring what others say about that behaviour
- child is verbally abusive to other children and staff, is aggressive on playground, and threatens other children
- child just diagnosed in late June with insulin-dependent diabetes; behavioural concerns all year but no thought that it was related to the physical until child went into diabetic shock and was hospitalized.

In addition, the following concerns were mentioned as factors that influence the child(ren)'s social competency:

- home life is quite unstable; for example, dad in and out, older brothers in trouble in school and community; parents share custody; parents just became foster parents and now have 7 children in the house; parent's addiction problems; child in and out of foster care
- child came to school part way through the year
- child misses a lot of school; attendance is irregular; misses many mornings and comes late frequently
- child is on medication due to ADHD (3x) - scoring would be different when off meds. Another has ADHD but parents do not want child on medication
- learning difficulties and problems in attending; speech problems; hearing difficulties.

Math Year-End Curriculum Assessment and Reading Running Records Assessment

The *Math Year-End Curriculum Assessment* and the *Reading Running Records Assessment* are two assessment tools already in place in the Regina Public School Board. These two tools were chosen again for the study this year to measure children's growth in the reading and math domain.

Description of Math Year-End Curriculum Assessment

This assessment is actually based on the provincial curriculum objectives for Grade 2. These objectives are divided into five strands - problem solving, data management and analysis,

numbers and operations, geometry, and measurement. The total assessment is based on a score of 128. See Appendix D for a detailed description of the strands.

Administration of Math Year-End Curriculum Assessment

Teachers administer and score the assessment as outlined in its accompanying instruction booklet. The assessment is given within a 1-month period near the end of the school year.

Findings

The total average score on the *Math Year-End Curriculum Assessment* (out of 95) was 73.2 for the IPG children and 76.9 for the CG children. Individual children's total scores ranged from 40 to 92 in the IPG and from 62 to 93 in the CG. Results show that individual children from both groups mastered skills in some strands more efficiently than in others (see Figure 5).

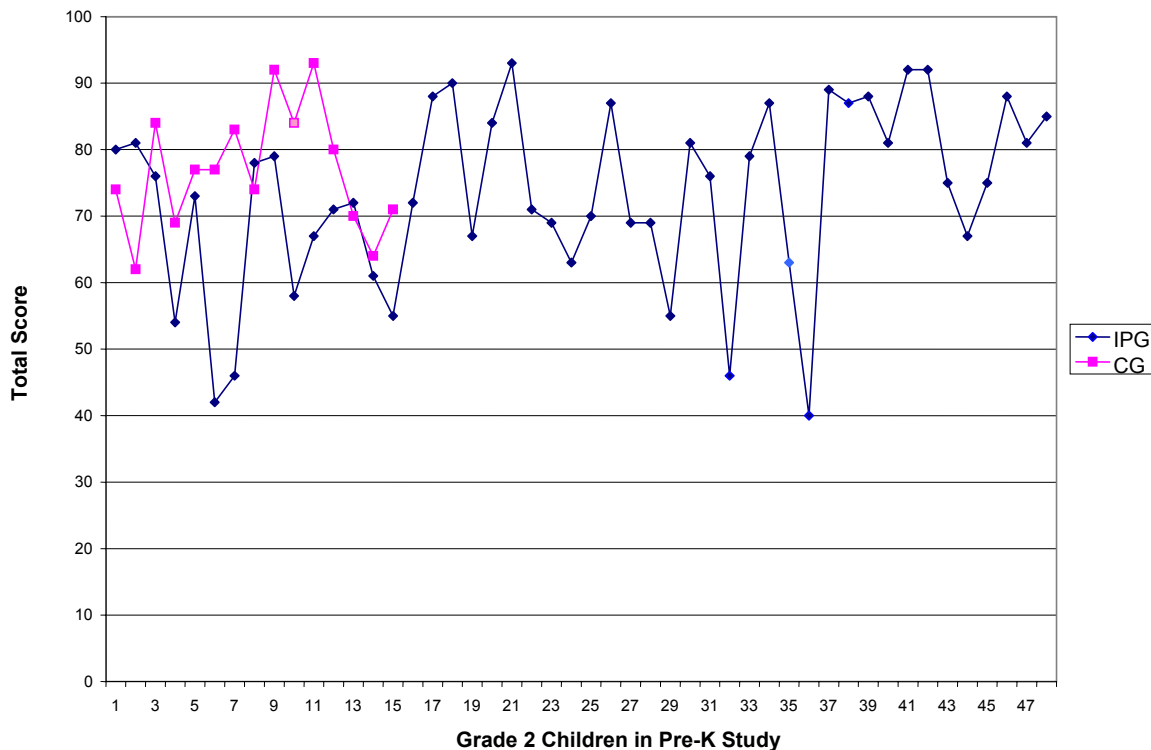


Figure 5. Math year-end curriculum assessment – total scores.

Within the four strands of Numbers and Operations, Measurement, Geometry, and Data Management, the average scores for both IPG and CG varied slightly from strand to strand. In all strands, except Data Management, the CG children scored slightly higher than the IPG children; there was, however, no significant difference. In Data Management, the IPG children scored .4 higher than the CG children (see Table 1).

Table 1

Math Year-End Curriculum Assessment – Total Mean Scores

CURRICULUM STRAND	IPG	CG	DIFF
Numbers and Operations	36.2	38.4	2.2
Measurement	13.7	15.1	1.4
Geometry	6.3	6.6	.3
Data Management	17.3	16.9	.4
TOTAL	73.2	76.9	3.7

In the **Numbers and Operations** strand, the overall average for the CG children was 2.2 higher than the IPG children. Both of these groups received their lowest score in problem-solving: IPG – 5.4 out of 8, or 68%; CG – 5.6 out of 8, or 70%; in fact, 5 of the CG and 14 of the IPG children scored between 0 and 4 in problem-solving. There was very little difference in the average scores for the three components of this strand: Number Sense – 1.1; Operations - .9; Problem Solving - .2; however, the CG scored slightly higher than the IPG in all three (see Table 2).

Table 2

Numbers and Operations – Total Mean Scores

	IPG	CG	DIFF
Number Sense	18.8	19.9	1.1
Operations	12.0	12.9	.9
Problem-Solving	5.4	5.6	.2
TOTAL	36.2	38.4	2.2

Of the four strands in the Math assessment, it was the Numbers and Operations strand that received the lowest scores by both the IPG and the CG children. Children's individual scores ranged from 13 out of 49 to 48 out of 49. The average IPG score was 36.2; the average CG score was 38.4. Percentage-wise, this is 74% and 78%, respectively (see Table 3).

Table 3

Math Year-End Curriculum Assessment – Percentage of Mastery Scores

	IPG	CG
Numbers and Operations	74	78
Measurement	76	84
Geometry	79	83
Data Management	87	85
TOTAL	77	81

The greatest difference between the two groups, percentage-wise, was in Measurement. Overall mastery of this strand was 76% for the IPG and 84% for the CG.

In Geometry more than one fourth of the IPG children (13) and 6 of the 15 CG children had perfect scores. In contrast, two children from both IPG and CG scored less than four out of eight.

For the total scores in Data Management, there was a .4 difference between the two groups. This is the only Math strand in which the IPG results (17.3 or 87%) were higher than those of the CG (16.9 or 85%).

Concluding remarks

Results for the *Math Year-End Curriculum Assessment* for both groups indicate that, on the average, IPG children mastered 77% and CG children, 81%, of the Grade 2 curriculum content. Considering the small number of children in the study, and the disproportionate group sizes, the difference between the two groups' scores is not significant. It could be concluded that the greatest area of difficulty for both groups was the Numbers and Operations strand and, within that strand, Problem Solving. However, as was the situation last year, some of the lower scores may be due to absenteeism and thus incomplete responses rather than a lack of mastery.

Description of Reading Running Records Assessment

The Regina Public School System has developed a rubric designed to support first- and second-grade reading instruction. For a detailed description of this assessment see Appendix E.

Administration of Reading Running Records Assessment

Running records data are collected twice yearly (November and May) to recognize that progress over time is more significant than endpoint data. The Fall and Spring Reading Levels are recorded on the Running Records Assessment form.

The instructions for administering the Benchmarks Assessment are clear and thorough and are included in a "Records of Reading Behaviour" package. This package guides the teachers step-by-step through the process. The package includes directions for: Introducing the Text, Taking the Record, Scoring the Record, Decoding the Errors into Accuracy Percentage, Calculating the Self-Correction Rate, Checking on Clues/Fluency/Comprehension, and, finally, Assigning a Reading Level.

Findings

In June 2005, 69.8 % of the Regina Public School division's second graders were reading at an instructional level of 17 or above. At the same time, 8.9% of the division's Grade 2 students were reading at Levels 0-8, indicating these students are approximately a year behind in grade level. In November, Grade 2 students numbered 1096; in June, 1118.

Of the total group of 63 Grade 2 children followed in this year's study, 21 (33%) were reading at an instructional level of seventeen or higher at the end of the school year; these included 17 IPG

and 4 CG. At the same time, 18 (29%) of the study children were reading at Levels 0-8. These included 13 IPG and 5 CG. Two IPG children were reading at Levels 0-3, which indicates that these students have no independent reading strategies. Interpretation of these findings must consider the small number of study participants and the high rate of absenteeism in these classrooms (see Figure 6).

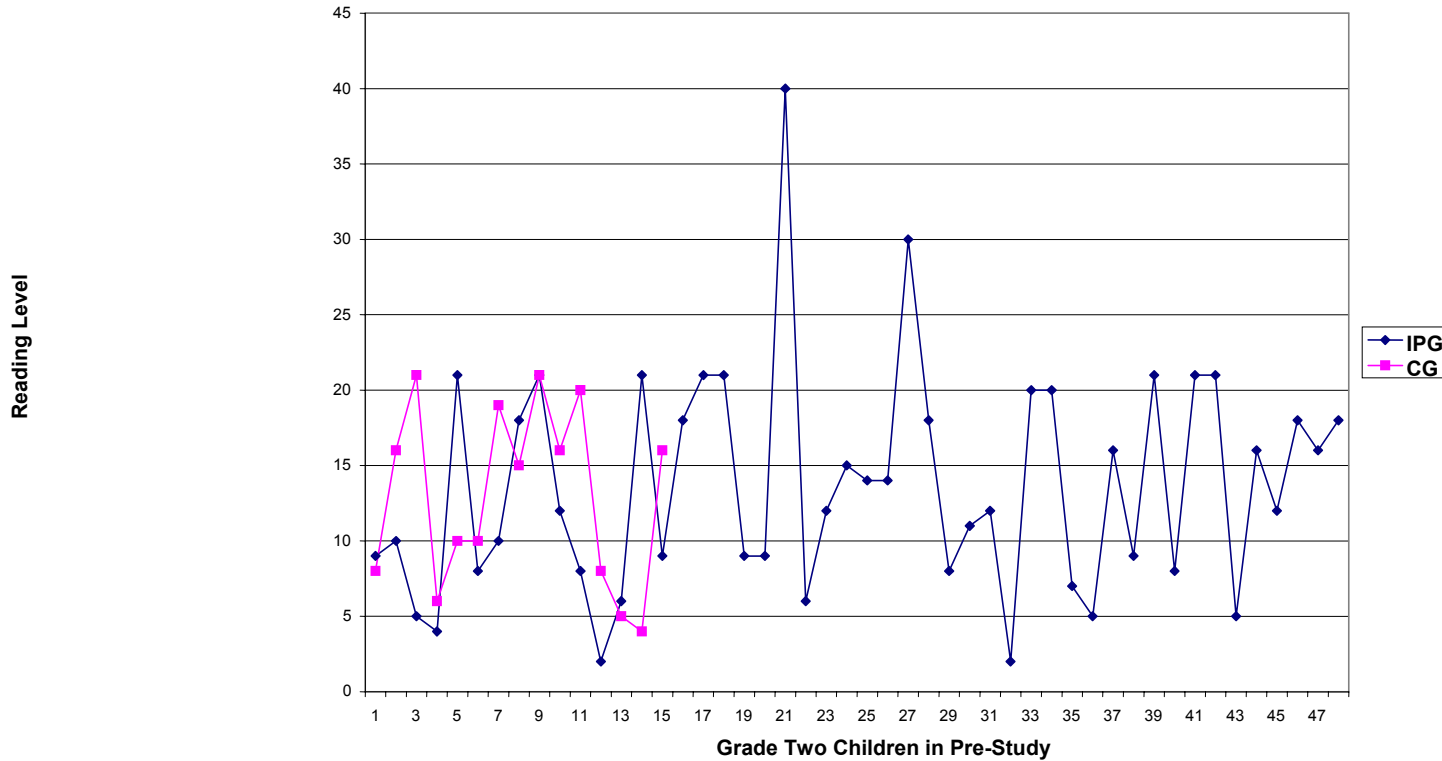


Figure 6. Reading running records - Reading level in June/05.

All but two children in the IPG progressed more than one reading level from Fall/04 to Spring/05. The average number of levels progressed by this group was 6. Nineteen children progressed 2 to 5 levels; seventeen progressed 6 to 9 levels; five progressed 11 to 15 levels; one child progressed 17 levels; four children were reading beyond Level 20 already at the beginning of the second grade – one was reading at the Grade 4 level (see Figure 7).

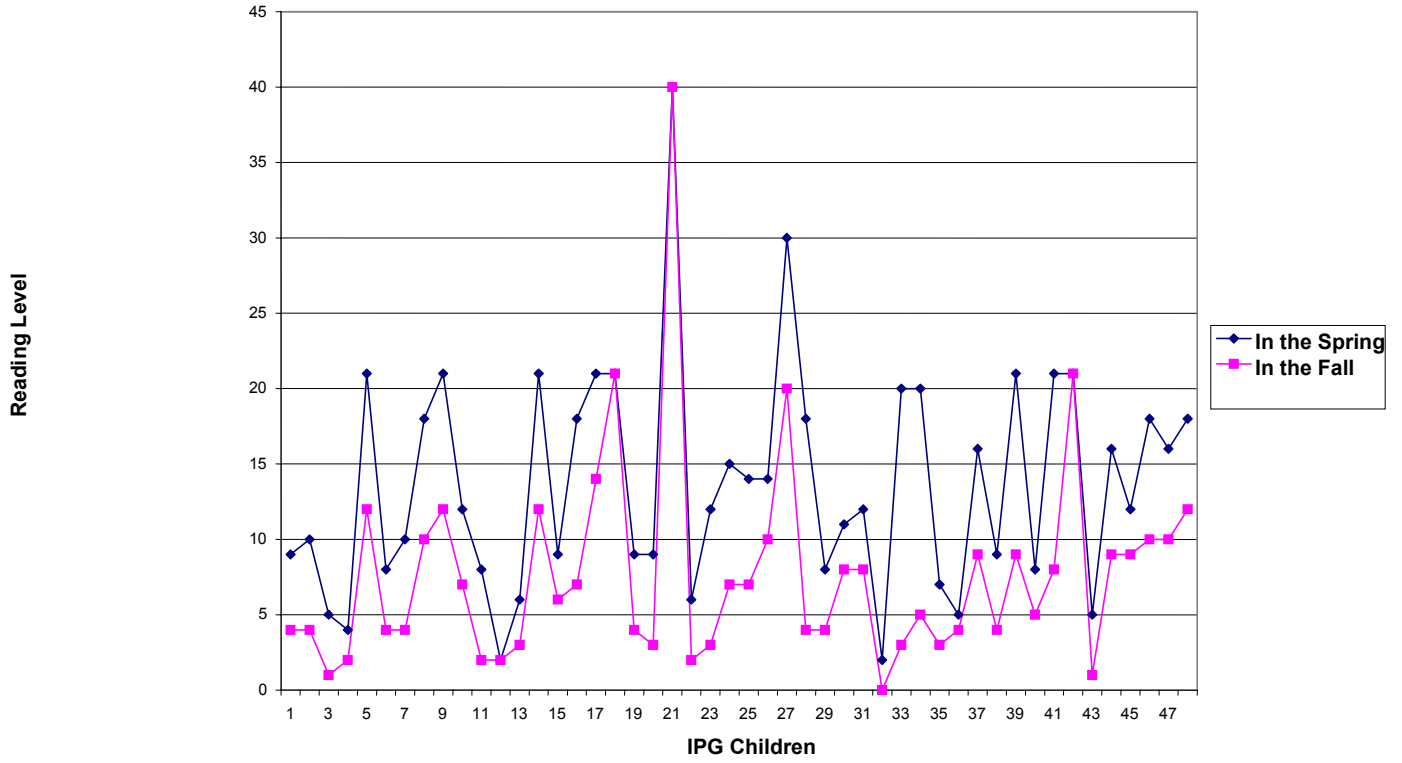


Figure 7. Reading running records assessment – Initial prekindergarten group.

The average number of reading levels progressed by the CG children between the Fall/04 and the end of June/05 was also 6. Two progressed 3 reading levels; one progressed 4, three progressed 5 and 6 each, and two progressed 8 and 10 each. Two children were reading beyond Level 20 throughout the second grade (see Figure 8).

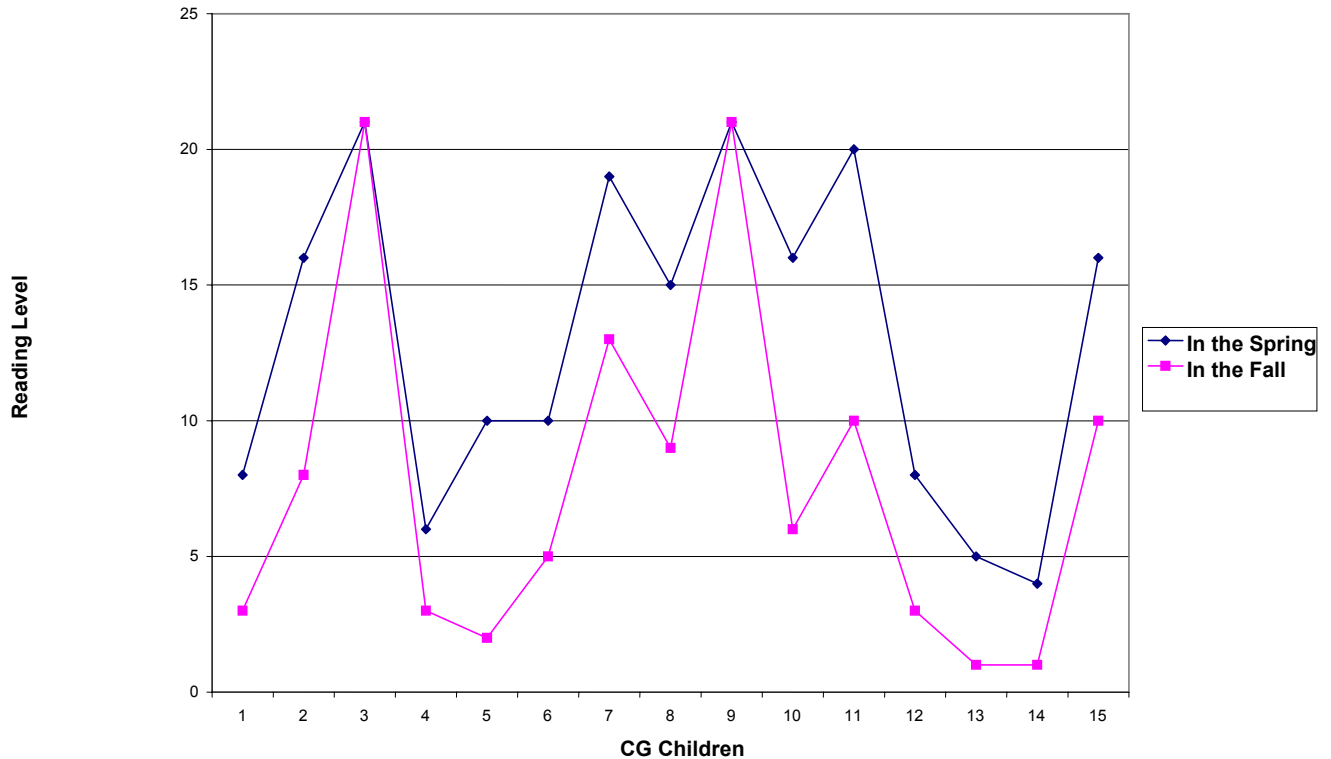


Figure 8. Reading running records assessment – Comparison group.

Concluding remarks

In Fall/04, one child began Grade 2 reading at a Level 0; forty-nine children began at levels between 1 and 10; seven between 11 and 20; six beyond Level 20, including one reading at a Grade 4 level. The average number of levels progressed by children in both IPG and CG was 6. While there was progress among all but one child, the *Reading Running Records Assessment* for the IPG and CG children for the 2004/05 year confirms the need for early literacy intervention. Slightly more than three fourths of the 63 children in this year's study were reading below the Grade 2 average by the end of June.

Classroom Environment Rating Scale

Description of Classroom Environment Rating Scale

In the first two years of the Prekindergarten Longitudinal Study, a classroom observation, the **Early Childhood Environment Rating Scale (ECERS-R)**, was completed in each classroom by an external observer. Since there was no comparable environment rating scale available for primary grades, an adaptation of this scale was developed by researchers to be used in the study for Grades 1 to 3. There is one major difference in the administration of the latter environment rating: The classroom teachers, rather than an external observer, do the rating. See Appendix F for a description of this scale.

Administration of Classroom Environment Rating Scale

Grade 2 teachers completed this Classroom Environment Rating Scale based on their own perceptions of their students' learning environment. Indicators were rated according to the following degrees: *Minimal, Adequate, Good and Very Good*. Teachers simply placed a checkmark in the appropriate column which best described their classroom environment with respect to each indicator. When using the *ECERS-R*, a high-quality care program needs to score at least in the *Good* range, according to the National Association for the Education of Young Children (NAEYC) (1995).

Findings

Thirty classroom environments were rated in the nineteen schools. Eight of these schools had more than one Grade 2 classroom environment; one was a Grade 1/2 split class. The average number of children in these classrooms was 22; one classroom had as few as 14 children and another as many as 27. Five classrooms had less than 20 children; twenty-five classrooms had between 20 and 27 children (see Figure F1, Appendix F).

The overall average for classrooms on the five subscales was 71% (*Good*). Teachers rated as highest the Schedules and Routines subscale (87% - *Very Good*) and the Supervision and Interactions subscale (85% - *Very Good*). They rated subscales Space and Furnishings and Support to Parents as the lowest – both 59% (*Good*). The Materials and Activities subscale scored in the middle at 65% (*Good*) (see Figure 9).

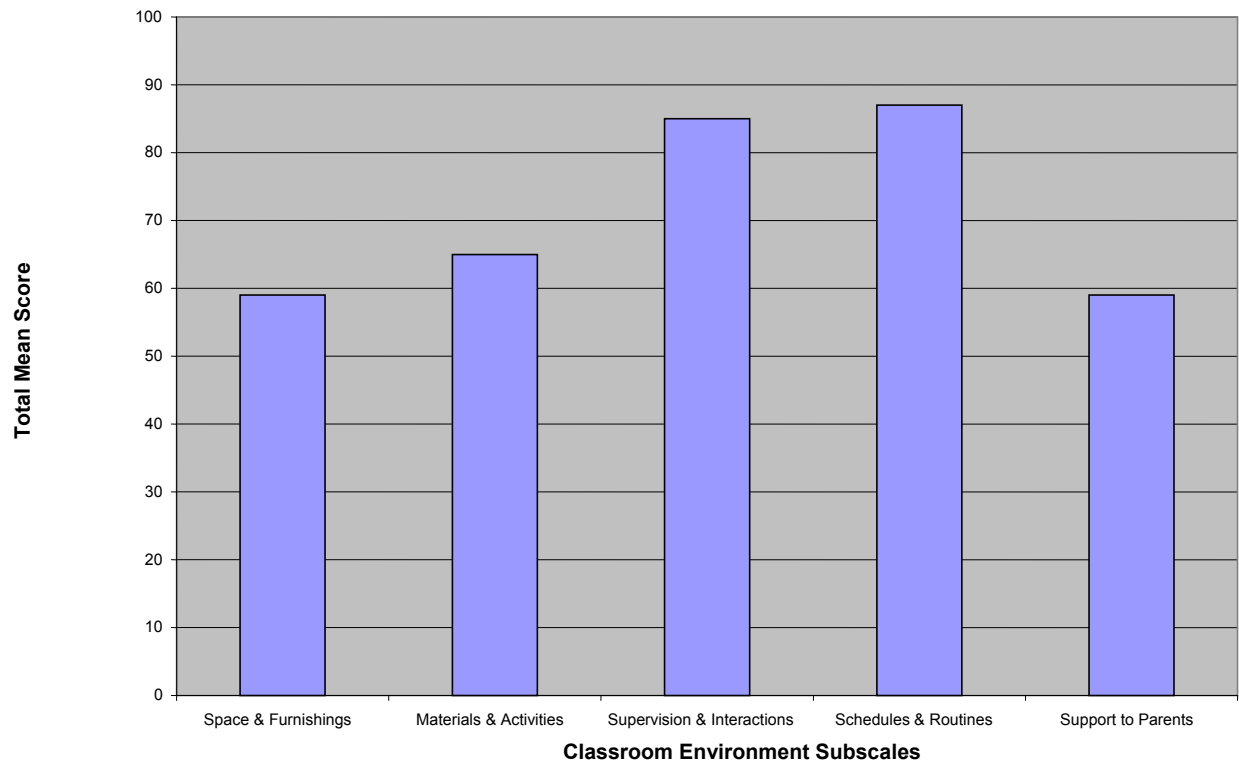


Figure 9. Classroom environment rating – subscales - total mean scores.

In the Space and Furnishings subscale, there were 12 indicators describing the physical climate and space of the classroom and the outdoors, the variety and choice of activity centres, and the classroom displays.

The average score per classroom was 28 out of a possible 48, or 59%; of the thirty classrooms, eighteen teachers scored between 28 and 41 (see Figure F2, Appendix F). Of the twelve indicators on this subscale, six were rated an average of *Adequate* and the other six, an average of *Good*. While two teachers indicated a lack of space in their classrooms, the feature which more teachers identified as *Very Good* was ‘ample room for teacher to move around to give attention as needed.’ The lowest rankings identified in this subscale included:

- space for privacy available to children (*Adequate*)
- comfortable furnishings for children to lounge, relax and read a book (*Adequate*)
- displays include photographs of students participating in field trips and classroom projects (*Adequate*).

In the Materials and Activities subscale, there were nine curriculum areas of Grade 2 described. The number of indicators for each area varied. The average score per classroom was 118 out of a possible 180, or 65% (*Good*) (see Figure F3, Appendix F).

From highest to lowest, teachers rated the nine curriculum areas (see Table 4).

Table 4

Teachers’ Ratings of Grade 2 Curriculum Areas, from Highest to Lowest

Area	# of Indicators	Score
Language Arts	7	79
Health	6	73
Math	6	67
Culturally Appropriate Practices	4	65
Social Studies	3	63
Physical Education	4	61
Science	6	58
Arts Education	5	57
Technology	4	55

In Language Arts, teachers generally rated the indicators higher, for example:

- the teacher reads aloud to children on a daily basis (91% - *Very Good*)

- who, what, when, where, why and how questions are asked (83% - *Very Good*)
- resources include a wide and varied range of books, poems, topics (83% - *Very Good*).

One teacher mentioned that because Math is done in units there is no daily opportunity for addition and subtraction, measurement, problem-solving, etc. This comment is supported by the overall average teacher ratings for the indicator ‘daily opportunities to measure and use appropriate measurement techniques and apply to real life’ (56%). This total average shows the lower range of *Good* quality care; however, 4 teachers rated this indicator only *Minimal*, 16 rated it as *Adequate*, 9 rated it as *Good*, and 1, as *Very Good*.

In the area of Culturally Appropriate Practices, teachers rated a lack of ‘a variety of resources available, for example, books, newspapers, ...’ (63% - *Good*). Teachers also rated the Social Studies indicator ‘pictures around the classroom, books, software and AV materials [that] portray diversity...’ as lacking (60% - the lower *Good* range); the average of the 30 teachers’ ratings on this particular indicator was actually *Adequate*.

In addition, teachers rated the following Physical Education indicator as 59% overall - the lower *Good* range: ‘daily inclusion of simple movement exploration – alone and with others, with and without equipment.’ Here again, on the average, teachers rated this indicator as *Adequate*.

One teacher specifically mentioned a lack of available science AV materials; ratings for these two indicators confirmed that:

- classroom supplied with wide variety of books, AV and other materials... (65%)
- provision of science equipment ... (53%).

Twenty of the 30 teachers rated these indicators either *Minimal* or *Inadequate*.

In the Supervision and Interactions subscale, six indicators described student interactions with teachers and peers, listening and communication, and discipline methods. The average score per classroom for this subscale was 20 out of a possible 24, or 85%. Teachers generally rated themselves and their students positively on this subscale; no major concerns were apparent (see Figure F4, Appendix F).

In the Schedules and Routines subscale, there were four indicators describing daily scheduled activities, procedures and routines. The average score per classroom was 14 out of 16, or 88%. Again, teachers rated highly the daily schedule, the activities, and the children’s familiarity with procedures, routines, etc. (see Figure F5, Appendix F).

In the Support to Parents subscale, 11 indicators described ways that parents can be involved in and supported through the Grade 2 classroom and the school. These included:

- parent meetings
- potluck dinners
- newsletter
- volunteering in classroom or for field trips
- sharing skills and hobbies in a classroom visit
- participating as a Board member or on the Parent Council.

The average score per classroom for this subscale was 6.5 out of 11, or 59% (see Figure F6, Appendix F). All 30 teachers identified that their parents are involved in the *Newsletter* (100%) and 'Parent-Teacher conferences' (100%). 'Volunteering in the classroom or around the school' (83%) and 'Open House' (70%) were also rated as activities in which parents more frequently participated. Teachers rated low on being a 'Board Member' (2 out of 30) and 'parents share skills, hobbies, interests or talents in a classroom visit' (9 out of 30).

Teachers were asked four additional questions that related to a child-centred learning environment. The questions and a summary of the responses follow.

1. **Would you describe your classroom as child-centred?**

Two teachers replied 'no'; 28 responded 'yes.'

2. **Are different activities taking place simultaneously in your classroom?**

One teacher answered 'no,' three replied 'sometimes,' and 26 responded 'yes.'

3. **Are students seated in groups to facilitate interaction?**

Nine teachers responded 'no'; one added 'not possible given classroom dynamic with 25 students or more and the size of the room/desks.' Five teachers replied 'sometimes,' and 16 teachers answered 'yes.' Additional comments included: 'but not all the time,' 'at tables or on the carpet, for various activities.' 'We also sit in groups at the round table, in a circle on the floor, and in small groups in the adjoining conference room.'

4. **Are there any special features of your classroom area that you would like to mention?**

Seventeen of the 30 teachers listed several special features of their classroom related to the physical space, the setup, the activities, the adult helpers and the children themselves. See Appendix F for a complete list of responses.

- Physical space features included appropriately sized counters, sinks and lockers, adequate storage space in closets and cupboards, and even extra adjacent rooms available for small groups, free or quiet time or privacy.
- Positive aspects of classroom setup included centres, working in groups, student choices determining structure, frequent change of structure. One teacher noted seating has to be standard because of the small size of classroom and the large number of students.
- Features related to activities included daily student personal evaluation, independent computer-based learning, and daily literacy groups for book experiences with adults and tape/book reading at each child's level.
- Special classroom features related to the children themselves included the large number of special needs ranging from academic to social to emotional to behavioural and the difficulty in meeting the children's needs as well as meeting Board/curriculum expectations/requirements. Meanwhile, there is too little assistance available for large numbers of high-needs students, for example, the variety of special needs across the twenty-two classrooms is vast - including a 1/2 split grade, one classroom encompasses

Grades K to 5, 4 special needs (JARP – Junior Adaptation Resource Program) students, plus 3 students on medicine for ADHD, plus 1 child with both behavioural and medical concerns, adaptation students join regular classrooms, children are integrated from structured learning, and there is poor attendance due to constant moving in/out of many students.

- The classrooms' adult helpers that teachers identified ranged from Teacher Associates [4], full-time aides [2], and special aides for a designated child to part-time aides for a special-needs child or part-time assistants (these varied in their training and experience) and included professionals in speech and language or learning assistants, as well as interns, retired teachers, and other parent or adult helpers. Six of the 30 teachers mentioned they had no adult helpers in their classrooms.

Concluding remarks

The Classroom Environment Rating Scale (CERS) completed by the 30 Grade 2 teachers indicates that they rate their overall environment, on the average, between *Good* and *Very Good*. This shows, according to *CERS*, the Grade 2 children are, on the whole, in a good, quality-care environment. Particular indicators on certain subscales were scored lower; that is, *Minimal* or *Inadequate*, while others were scored higher. Supervision and Interactions and Schedules and Routines were rated in the highest range – *Very Good* - by the teachers; the indicators Support to Parents and Space and Furnishings were rated in the lower range of *Good* quality care. Teachers identified many of their concerns in the final question related to their classroom as a child-centred learning environment.

DESCRIPTION OF TEACHER FOCUS GROUPS AND PARENT QUESTIONNAIRES

Description of Teacher Focus Groups

In June 2005, four researchers conducted two teacher focus groups that included twenty two of the thirty Grade 2 teachers from fourteen of the nineteen participating schools. Most teachers in the study had taught more than 5 years with the following distribution: six taught more than 25 years, eleven taught between 10 and 25 years, seven taught between 5 and 10 years, and six taught less than 5 years. Eighteen teachers had taught Grade 2 for less than 10 years and twelve teachers had taught Grade 2 for more than 10 years.

In preparation for the focus group sessions, teachers received the questions in advance. The sessions averaged about 1 ½ hours. Questions that guided the teacher focus groups are included in Appendix G.

Common Themes

The following section addresses the common themes that arose from the teacher data.

Theme 1: Impact of Grade 2 program upon children's development and school experiences

Teachers described ways in which the Grade 2 program contributes to children's learning. They noted that the Grade 2 program builds on skills learned in the Grade 1 program. The Grade 2 program focused on academic learning especially in the areas of reading, writing and computation. Teachers explained that the Grade 2 program accommodated a variety of ability levels and interests while providing children with the opportunity to grow socially, foster independence, and create responsibility.

Teachers noted that the Grade 2 program delivered a well-rounded literacy program for the children and their families. For example, the home reading program provided opportunities for parents to get involved and establish a good family-school connection. Out-of-school experiences also contributed to the Grade 2 program, with field trips to locations such as the RCMP museum, Government House, Wascana Trails, Agribition, the Science Centre/IMAX, the MacKenzie Art Gallery, the Motherwell Homestead, and the Legislative Buildings.

Teachers noted how families were affected by the Grade 2 school experiences. Families respected the school routines and shared responsibility with the school. For example, families ensured that their children's school agendas were returned regularly. Teachers described families as having confidence and believing in themselves and their children. They noted that the self-esteem of children and their families increased as Grade 2 goals were attained.

One teacher reported that three students began the school year reading at a Level 5 and continued to make progress. At the end of the school year, the three students had a Level 22 in reading.

Teachers listed many ways in which children grew during the Grade 2 school year:

- Academic growth in reading and writing. One teacher noted that students were able to edit their own written work independently at the close of the school year.
- Literacy groups successfully included children at their own levels.
- Growth in independence allowed children to monitor themselves, accomplish tasks on their own, facilitate sharing, and follow routines.
- Children had organizational skills, took initiative, and became leaders in groups.
- Growth in the emotional well-being was evident when children paused to think about their actions before reacting.
- Children became culturally aware and applied appropriate terminology.
- Social skills increased and self-control grew. Students developed positive attitudes toward school.

Teachers addressed the physical health and well-being of their children through a variety of ways. During snack time, teachers took time to discuss the food groups and encourage students to identify the food group that a snack represented. It seems, from teacher comments, that some classrooms received more nutritional snacks than others. Some teachers reported that a school nutritionist coordinated and planned the snacks, ensuring that good snacks were provided, while other schools did not have access to a nutritionist. Noncommunity schools did not have a snack break. The community program, Chili for Children, was identified as another way for children to receive a nutritional meal. Some schools had breakfast programs that began at 8:30 a.m.

Nutrition units were taught and cooking with the nutritionist was provided in some schools. Safety lessons included classroom and school and community safety, with a focus on playground cleanliness. Personal hygiene was addressed and students were reminded to wash their hands before snacks and after washroom use. One teacher noted that nurses from Four Directions came to the school to provide support for dental health and awareness, head lice, and hand washing.

Physical Education periods occurred 4 times per week. Several teachers used the *In Motion* program that promotes physical activity for 5 minutes per day from a selection of 15 different activities. Two teachers reported that they responded to children's emotional and well-being problems.

Other supports included Brain Gym, movement games, singing using a compact disc, aerobics using a daily workout video, daily motion programs that include walking around a track or the school and ensuring the school is a safe place. Two classrooms noted that their students have individual water bottles. One teacher provides relaxation time following the afternoon recess. Ten minutes is set aside to listen to classical or solitude music, providing a calming opportunity for students.

Teachers explained the features and practices of Grade 2 classrooms that contributed to hands-on, active learning in Arts Education, Physical Education, Outdoor Education and Nutrition programs, including:

- reading groups such as literacy groups, guided reading, and taped book reading
- using daily agendas and personal goal setting
- planting trees or seeds, such as beans, or an amaryllis plant and watching its growth; students were encouraged to guess how tall the plant would be
- extending learning by bringing in guests and guest speakers; for example, authors. Aboriginal paintings were brought from the MacKenzie Art Gallery to one school site
- broadening experience through outdoor education and field trips to a variety of locations; for example, visiting Wascana trails in the fall and spring and recognizing changes in the season (e.g., the sage plant)
- participating in Wellness Days, Integration Days, and School House Group activities
- engaging in activity centres and centres that corresponded with units of study - through observation and interaction.

Teachers noticed that IPG children know the purpose of why they are in school. Some children were reported to be making regular progress in all areas and some have exceeded expectations. Children tended to be very well-behaved, cooperative and friendly. Other children continued to have social challenges especially with their peer group. Seven teachers indicated there were no differences between the CG children in the Grade 2 class and the children who had attended a prekindergarten program.

Theme 2: Family involvement

Initial communication with parents usually included a feast or family barbeque in September. Throughout the school year various methods were used to communicate with families. Teachers sent home monthly or weekly newsletters and calendars with simple hints and suggestions about

how “Parents can work with their child.” Student agendas went home daily with children and informal verbal conversations with family members took place at dismissal. Telephone calls and written notes were also part of family communication.

Teachers noted that goal-setting conferences and celebration of learning events were important opportunities to communicate with families. Informal classroom activities brought moms and dads to observe their children in the classroom environment. Events included assemblies, swimming lessons, field trips, volunteer opportunities, end-of-unit wrap-up celebrations, and classroom open houses.

Grade 2 teachers described other family involvement in the program such as home reading programs, parent volunteers in reading sessions or other capacities, chaperoning field trips and swimming lessons, or special activities (e.g., hot dog and pizza sales, cultural mosaic and cultural crafts). Schools encouraged family participation in events such as Parent Teacher Council, family fun days, family dances, pancake breakfast, potlucks, and school assemblies which featured the Terrific Kids and Student of the Month awards. Seasonal concerts, spring plays, Readers’ Theatre, and a tea for parents also provided family involvement opportunities.

One classroom reported that regular volunteers were available once a week. One grandma came to the classroom for cooking experiences that included baking buns and bannock.

Teachers identified several supports available to children’s families that encouraged their own development and learning. Some of these resources were the Co-Parenting Education Program (COPE); Families and Schools Together (FAST); Community Access Program (CAP) that provides opportunity for parents to use computers for resumes; Community Kitchens; and the Good Food Box.

The Parent Teacher Association (PTA) planned sessions with speakers who discussed topics such as daily living skills, budgeting, preparing Story Sacks, filing income tax forms and also facilitated hands-on computer evenings for adults. School libraries added resources such as child-rearing books. Additional activities that were mentioned included library fundraisers, bake sales, Spell-A-Thon (children added words), Terry Fox Run, World Vision fundraising for tsunami relief, Project Love, and Christmas hampers for selected families.

The community school coordinator was a vital liaison and an important source of information for families and teachers. In some schools a social worker/counsellor was also available to families. Usually the social worker was assigned to three schools. Teachers felt that more families would benefit from this type of support.

One prekindergarten teacher provides a table outside the classroom with garden and fashion magazines and the daily newspaper. All school parents are invited to take the reading materials if the literature applies to their interests or needs. Another classroom had a reading morning each week. The students would read to a parent and this experience helped the parent learn to read.

Teachers described family involvement as a crucial component in assisting children's understanding of the value and importance of education. When families encouraged children's learning, the children seemed to develop a sense of ownership in their learning. Children took pride in their work and wanted to share their knowledge with their families. With family support children's self-esteem increased, school became more meaningful, positive attitudes developed, and a sense of belonging increased. Children seemed to benefit from a much more positive experience when families were involved in the school experiences. Family involvement seemed to bridge the gap between parent perception of the school and the teachers.

Theme 3: Teacher learning and experiences

Teachers explained that through their involvement in this project they better understand the benefit of the prekindergarten program. Teachers commented that it was interesting to see how the children have progressed and questioned 'where would children be?' if they had not had the prekindergarten experience. Teachers were able to identify important skills that children develop and use throughout their school years.

Teachers gained more ideas about teaching approaches and classroom organization. One teacher described looking more closely at the activities in the classroom and how these relate to the children in the classroom. Another teacher said the involvement in this project helped her to reevaluate the Grade 2 program and to add more hands-on activities in the program. Many teachers were pleased to have the opportunity to connect with other teachers who teach the same grade level at another school site. Teachers noted that within their school, sufficient opportunity to network with other Grade 2 teachers was available. The teachers agreed they would like to meet with other Grade 2 teachers from the school division on a regular basis. Although the Blue Book sessions are one possible venue, teachers commented that the Blue Book sessions are often full and many teachers are unable to register for the sessions. Meeting with teachers from similar schools would develop a support network which would allow teachers in the same grade level to support one another.

Teachers offered ideas that might lead to higher quality programs in Grade 2. They recommended smaller class sizes so that students in a classroom do not exceed 20 pupils for every teacher. Teachers suggested that trained assistants in every classroom would be very beneficial. Teachers identified that more time is needed with specific children in small-group situations. Teachers appreciated the opportunity to choose which math program they would teach to their students.

Teachers suggested materials that would assist in the delivery of a better quality program. These included:

- children's literature – books at children's reading level
- games and manipulatives
- art supplies
- more high-quality computers.

Seven teachers reported they had one computer that was of high quality and in good working order in their classroom; two had two high-quality computers; and one teacher had three high-quality computers because of involvement with a special computer program.

Teachers suggested ideas for professional development that they thought would improve the Grade 2 program. Specific teachers indicated that future professional development should include:

- more information about local community programs so teachers can inform families of opportunities they should pursue
- computer skills
- classroom visits to see how others organize and set up their classrooms.

Teachers noted they benefited from the focus group discussions with their colleagues and expressed the desire to continue these types of discussions. Teachers valued the opportunity to network with their Grade 2 colleagues from other school locations. They noted that if a child moves schools several times, the child might get the same unit of study in multiple school locations. Teachers were interested in exploring how programs could be delivered during the same timeframe across the school division to eliminate duplication.

Theme 4: Community partnerships

Teachers described the community partnerships that benefited their classroom or school throughout the past year. The following list contains examples of the variety of partnerships:

- the Physical Education department at the University of Regina helped plan activities for a Wellness Day
- the Albert and Glen Elm librarians came to the school to read to the children. One school noted that firefighters from down the street came in to read to children.
- the Investors Group Financial Services partnered with a school. The school supplies artwork in picture frames for the Investors Group lobby and the company contributes financially for special projects.
- the Exhibition Board generously gave time and resources to support the December turkey lunch, an individual gift for each student, and a year-end barbeque.
- teachers also noted Conexus, Day of Caring, and Four Directions as partnerships, but did not elaborate on what the contributions were to each location. Teachers noted that variety is needed in partnerships and suggested that perhaps one partnership should be finished before a new initiative begins.

Description of Parent Questionnaires

In May 2005, Grade 2 teachers distributed questionnaires to sixty-three parents/guardians (48 IPG and 15 CG). Twenty-nine (46%) questionnaires were completed and returned in June 2005. Fifteen questionnaires were from IPG parents, while 14 came from CG families. In other words,

32% of IPG families and 93% of the CG returned their questionnaires. A copy of the questionnaire is included in Appendix H.

COMMON THEMES

The following section of the report summarizes the findings compiled from the parents' and guardians' written responses. These themes are somewhat similar to the categories generated in the teacher focus group discussions.

Theme 1: Impact of the Grade 2 Program on Children's Learning and Development

Parents from both groups (IPG and CG) felt their Grade 2 children had numerous opportunities to develop their social competence, reading and math skills, and communication ability.

They noted that, for the most part, their children enjoyed the Grade 2 experiences and liked the new challenges. When asked which experiences promoted their children's growth and learning in Grade 2, both groups of parents agreed upon:

- the reading program
- communication and interaction with peers and teachers
- special programs
- field trips.

The wide range of responses from the IPG parents yielded some commonalities. Eight respondents highlighted social skills that were promoted and enhanced through opportunities for interaction in the classroom because of specific programs designed to develop social and emotional areas. These specific programs included *Reading Buddies*, *In Motion*, *The All Star Program*, and a public speaking program. As one parent stated "A's Grade 2 teacher helped him enormously with social skill growth." In addition, 5 of the 15 IPG parents stressed that the reading program was helpful and their children continued to excel in reading. Another 5 respondents stated that field trips, namely the tour of the bird sanctuary and programs such as *Wise Rider*, *Hug a Tree* and *Stranger Safety* had a tremendous impact on their children's growth and development.

Six of the 14 CG parents highlighted the reading program, which incorporated *Reading Buddies*, as making the greatest contribution to growth and learning. Another 5 parents felt the Learning Assistance teacher offered the most help, while 2 respondents noted the tutorial program at the University of Regina had a tremendous effect on their child's development. In addition, 3 parents valued the communication and cooperation that existed between the parents and teachers and felt this approach contributed to their children's success. As one parent commented, "the cooperative, proactive teacher-parent relationships and the learning log" were experiences that promoted growth and learning in Grade 2.

Theme 2: Parent/Family Involvement

Twelve (3 IPG and 9 CG) of the 29 respondents were not involved in school or classroom activities. It is interesting to note that one parent commented “when my daughter was in Pre-K, I helped with the breakfast program,” but the parent hadn’t been involved since then. Of the other 17 families, most had participated equally in school events and Grade 2 classroom-based activities. One IPG parent belonged to the Parent Council, while two CG parents were members of school councils. A number of IPG parents (11) were actively involved in a wide variety of classroom activities ranging from field trips and reading assistance to swimming lessons. Five of the respondents saw the parent-teacher-student conferences as the highlight of their involvement. In one instance grandparents volunteered their time whenever needed because the parent was unable to attend.

Eleven of the 15 IPG respondents participated in school-wide events and activities ranging from family functions such as the open house, Thanksgiving dinner, school dance, sports day, cultural day, barbeque, hot lunch program, winter festival and fundraisers (bake sales) to achievement assemblies and erecting a new play structure.

Only 5 respondents from the CG reported being involved in school and classroom activities. Of these, five school-based events were noted. Four parents mentioned participating in school dances, movie nights, potluck dinners, and celebration festivals. Two CG parents helped with the Christmas concert, one participated in organizing the Grade 8 reception, and another parent helped with a bake sale.

A variety of classroom-based activities were mentioned by the CG families. Three assisted on field trips; two were involved in Christmas preparation activities; one attended Parents’ Day; one helped with the learning log and homework; one assisted with the swimming program; and another volunteered for learning assistance.

Theme 3: Parent/Family Impressions of the Grade 2 Experiences

Most parents (23) from both groups felt that, overall, their children were part of high-quality programs that met their children’s needs and contributed to their growth and development in all areas. The children enjoyed positive learning experiences. Six of the respondents noted that the Grade 2 year was more difficult and challenging than Grade 1.

In response to Question 3, some IPG parents (4 out of 15) valued the opportunities for their children to mature socially and academically. For example, one parent stated “he matured in ways that surprised me!” Another parent wrote “A... enjoyed this year more than last due to learning coping skills in social settings,” and still another wrote that her child was “much more relaxed; less shy, and more social.”

Five responses referred to the teacher as the reason for the positive year and placed value on her/his approach with the children. Comments such as: “teacher’s attitude towards my child got him interested ... wanting to get to know him and not just another student,” “more

encouragement from the teacher,” and “an excellent, patient teacher to support her” show the importance of the teacher’s relationship with the students.

Two IPG parents felt the Grade 2 experience was about the same as Grade 1, one parent felt Grade 2 was not as difficult as Grade 1, and two others noted that Grade 2 presented a struggle and a challenge for their children.

Four CG parents felt that Grade 2 was more difficult and presented more challenges than Grade 1, while the majority (9) of the responses noted that Grade 2 was a positive experience and, as one parent wrote, “Grade 1 was excellent but Grade 2 was even better.” They referred to Grade 2 as “a great learning experience,” offering “more challenging things to do,” and a noticeable reduction in “behavioural problems.”

One parent felt her child was not as confident as she was last year in Grade 1 and still another commented that “my child now officially hates school.”

When asked if there was anything they would add or change to improve their child’s Grade 2 experiences, parents had few comments to offer. Twelve of the 15 IPG parents responded to this final section of the questionnaire. Of these, nine stated there was nothing they would add or change, while three others noted the following:

- introducing a variety of learning experiences
- having a teacher assistant in the classroom
- not enrolling child in French immersion.

One of these parents stated, “I think it is always important to introduce new and alternative learning methods and experiences to access the strengths of students.”

All the CG parents responded to the final question about adding or changing anything in the Grade 2 program. Eleven said “nothing,” while three suggested the following:

- inform parents regarding the high ratio of special needs children in the class
- add more playground supervisors to prevent trouble
- enforce the “hands-off” rule.

It is interesting that there was little consensus between the IPG and CG parent responses when they commented about changes and additions to the Grade 2 program, except that only three from each group made comments.

SUMMARY AND RECOMMENDED ACTIONS

Interim recommended actions, based on preliminary findings, are presented under each of the original research questions. These recommendations build on recommendations found in previous interim reports (2002, 2003, 2004).

The major research questions guiding the study are:

1. What existing common practices and standards constitute high-quality curriculum and instruction in the prekindergarten classroom?
2. To what extent do the programs promote community partnerships and access integrated services?
3. To what extent do the educational services promote children's cognitive and social development and enhance school success?
4. What program activities support parenting and encourage the parents' own development and learning?

RESEARCH QUESTION 1

What existing common practices and standards constitute high-quality curriculum and instruction in the prekindergarten classroom?

The results of the *School Social Behaviour Scales* (2nd ed.) (SSBS-2) showed that the majority of the Grade 2 children in this year's study scored in the average level on both the Social Competence and Antisocial Behaviour Scales. At the same time, a small number of both IPG and CG children scored in the *at-risk* or *high risk* levels overall or in one or more of the subscales.

The results for the *Math Year-End Curriculum Assessment* for both groups indicated that, on the average, both IPG and CG children mastered most of the Grade 2 curriculum content. Areas of challenge included the Numbers and Operations strand, notably Problem Solving.

The *Reading Running Records Assessment* showed that 33% of the 63 children in this year's study were reading at a Grade 2 or higher level by the end of June. This included 17 of the 48 IPG and 4 of the 15 CG children. At the same time, 29% (13 IPG, 5 CG) were reading a year below the second-grade level.

The *Classroom Environment Rating Scale* demonstrated that the Grade 2 children are, on the whole, in a good, quality-care environment. Overall ratings were, on the average, between *Good* and *Very Good*. However, for some classrooms, there were indicators on certain subscales that were rated within the *Minimal* or *Inadequate* range or the *Excellent* range.

Recommended Actions

- 1.1 Provide opportunities that encourage positive relationships with peers and adults and incorporate student reflection/evaluation on behaviour. (Data Source: SSBS-2, Classroom Environment Rating Scale, Teacher Focus Groups, Parent Questionnaires)

- 1.2 Continue specific programs designed to develop social and emotional areas: for example, *Reading Buddies, In Motion, The All Star Program*, daily agendas, and a public speaking program. (Data Source: Teacher Focus Groups, Parent Questionnaires)
- 1.3 Integrate opportunities, especially for addition and subtraction, measurement and problem-solving using concrete materials and manipulatives to help children apply mathematical concepts in their daily life. (Data Source: *Classroom Environment Rating Scale, Math Curriculum Assessment*) **Note.** The recent addition of the new Math Makes Sense program may also help in developing children’s mathematical understanding.
- 1.4 Ensure teaching materials, particularly in the areas of diversity and science, are replaced or renewed when necessary and that these include a wide variety of pictures, books, games, activities, experiments, software, AV and natural materials to explore. (Data Source: *Classroom Environment Rating Scale*)
- 1.5 Ensure daily inclusion of active physical movement. (Data Source: *Classroom Environment Rating Scale*)
- 1.6 Ensure that numbers of children in classrooms are proportional to the quality education and care that can be provided to them by teachers and other professionals caring for them in the classroom. (Data Source: *SSBS-2, Classroom Environment Rating Scale, Reading Running Records*)
- 1.7 Ensure the adults in the classroom have appropriate training and sensitivity in order to accommodate individual needs and strengths of students. (Data Source: *Classroom Environment Rating Scale, Reading Running Records* Teacher Focus Groups, Parent Questionnaires)
- 1.8 Ensure that adequate supervision for children’s well-being is provided on the playground. (Data Source: *SSBS-2, Teacher Focus Groups, Parent Questionnaires*)

RESEARCH QUESTION 2

To what extent do the programs promote community partnerships and access integrated services?

Teachers acknowledged a number of community partnerships and the value that these contribute to the overall education of the children in their classrooms.

Recommended Actions

- 2.1 Continue to promote partnerships with a broad variety of individuals and groups within the community. (Data Source: Teacher Focus Groups, *Reading Running Records*)

- 2.2 Ensure one partnership is finished before a new initiative is begun. (Data Source: Teacher Focus Groups)

RESEARCH QUESTION 3

To what extent do the educational services promote children's cognitive and social development and enhance school success?

Teachers agreed that their involvement in the Pre-K study enhanced their understanding of what comprises a higher quality-care program in Grade 2. They emphasized the challenge of meeting the individual needs of all the children, this being in proportion to the total number of children in the classroom, the number of high-needs children, and the availability of professional help as well as volunteer help, and whether or not the latter has adequate, or any, training.

Recommended Actions

- 3.1 Ensure that adequate qualified teacher assistance is available to classrooms where there are high needs children integrated into the classroom. (Data Source: *Classroom Environment Rating Scale, Reading Running Records* Teacher Focus Groups)
- 3.2 Track the rate of children's absenteeism and lateness and its effects on overall achievement in Grade 2. (Data Source: *SSBS-2, Classroom Environment Rating Scale, Reading Running Records, Math Curriculum Assessment, Teacher Focus Groups*)
- 3.3 Consider improving accessibility of more social workers/counsellors in the schools. (Data Source: *SSBS-2, Teacher Focus Groups*)
- 3.4 Provide ongoing opportunities for Grade 2 teachers to meet together to network and support each other. (Data Source: Teacher Focus Groups)

RESEARCH QUESTION 4

What program activities support parenting and encourage the parents' own development and learning?

Both teachers and parents expressed the importance of communication between home and school, as well as how the parents' active involvement in classroom or school activities resulted in a more positive and successful experience for their Grade2 children. Parents appreciated the varied opportunities and supports available to them through the school.

Recommended Actions

- 4.1 Continue ongoing communication about children's progress using events and activities such as daily agendas, monthly newsletters, telephone calls, celebrations of learning, parent-teacher-student conferences. (Data Source: *Classroom Environment Rating Scale, Reading Running Records, Math Curriculum Assessment, Teacher Focus Groups, Parent Questionnaires*)
- 4.2 Invite parents to the classroom to help with daily reading, other literacy activities and during learning centre time, or to teach a skill, interest, hobby. (Data Source: *Classroom Environment Rating Scale, Reading Running Records, Teacher Focus Groups*)
- 4.3 Encourage parents' active participation in the home reading program, on field trips and through exchanges in the children's daily agenda. (Data Source: *Teacher Focus Groups, Parent Questionnaires*)
- 4.4 Invite parents' active participation in school family functions such as open house, Thanksgiving dinner, school dance, sports day, cultural day, barbeque, hot lunch program, winter festival, fund raisers, achievement assemblies, school dances, movie nights, potluck dinners, celebration festivals and Christmas concerts. (Data Source: *Parent Questionnaires*)
- 4.5 Encourage parents' participation in school- and community-sponsored activities such as Families and Schools Together (FAST), community kitchens and the Good Food Box. (Data Source: *Teacher Focus Groups*)

CONCLUSION

In this penultimate report, the progress of the original prekindergarten group of children in the longitudinal study clearly indicates that these children and their families continue to be involved in their school communities and in the learning opportunities offered to them. While the numbers of children are smaller than either the original prekindergarten group or the comparison group, it seems a relatively consistent number of these children and families return to the Regina Public School system each year. Teachers seem to be respected by these families who report their satisfaction with their children's progress and with the activities that encourage their involvement. These types of positive school/home links are highly important to children's success in the educational setting. In the Saskatchewan Learning document, *Caring and Respectful Schools: Toward School^{Plus}* (2004), the following summary emphasizes the pivotal nature of a caring school context:

Caring and respectful schools are open, inclusive and culturally affirming learning communities. They nurture understanding and respect among diverse groups. They ensure that all students have access to a barrier-free learning environment and benefit equally from a variety of learning experiences and appropriate services in support of learning excellence and well-being. (p. 13)

Within the school community, all of the children in the study have grown and learned in several areas according to the study findings. The data also indicate that there are children who will benefit from continued support in language and reading or building social skills or mathematical understandings. Indeed, some concern was raised by teachers about children whose social development and language skills seemed to hinder their progress. Warwick (2005) registers concerns in a recent publication focused on language and literacy in the following excerpt:

As children's healthy psychosocial and emotional development is linked so closely to proper language development, many researchers suggest the need for increased investment in studying this field, as well as long-term efforts to raise awareness among parents, caregivers and early childhood educators about the many steps they can take to ensure improved language development in young children. (p. 3)

Children in the study will require continued vigilance by their teachers and families to help them develop the skills and abilities that will enhance their school and their life success.

As Jamieson and Tremblay (2005) state:

Good language and literacy skills lay the foundation for social, academic, economic, personal and national success. Moreover, such skills are cumulative-success builds on success while falling behind at an early age creates increasingly difficult challenges. (p. 1)

The findings of this report, as well as earlier reports, indicate a strong commitment to laying just such a strong foundation for these and other children. It is our hope that the final year of the study will demonstrate how all of the children involved in the study were able to make progress toward success.

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APPENDICES

Appendix A

School Social Behaviour Scales (*SSBS- 2*)

Description of *School Social Behaviour Scales (2nd ed.) (SSBS-2)*

The *SSBS-2* includes two scales: the Social Competence scale and the Antisocial Behaviour scale. Both scales include 32 items which describe behaviours that are likely to lead to specific outcomes.

In the case of the Social Competence scale, the behavioural outcomes are positive. These include:

- Peer Relations (establishing positive relations and gaining social acceptance)
- Self-Management/Compliance (cooperation and compliance with school rules and expectations)
- Academic Behaviour (academic performance and engagement).

In the case of the Antisocial Behaviour scale, the behavioural outcomes are likely to lead to negative social consequences. Included in this scale are:

- Hostile/Irritable (self-centred, annoying relations to peers)
- Antisocial-Aggressive (violation of school rules and possibly harm to others)
- Defiant/Disruptive (disrupting activities and placing excessive demands on others).

The *SSBS-2* is designed to be completed in school by teachers who know students well. The teacher rates the specific behaviours of each student over a period of time and in several social situations (e.g., in the classroom, at recess, in the gym, etc.). Rating is not done during one specific time of observation (e.g., observing a particular child on a given morning). Consequently, the *SSBS-2* allows for more precise measurement of behavioural frequency and intensity.

Higher social competence scores indicate greater levels of social adjustment; thus, high scores on this scale are desirable and good, whereas low scores indicate a lack in social adjustment. On the other hand, higher antisocial behaviour scores indicate greater levels of social-behaviour problems; thus, high scores on this scale may indicate cause for concern, whereas lower scores here are desirable as this would indicate fewer social problems.

Appendix B

School Social Behaviour Scales (*SSBS- 2*)

Scale A: Social Competence

Table B1

SSBS-2 Scale A - Social Functioning Level- Number of children

	High Functioning		Average		At Risk		High Risk	
	IPG	CG	IPG	CG	IPG	CG	IPG	CG
Peer relations	5	4	36	9	7	2	0	0
Self-Management/Compliance	12	4	25	9	8	2	3	0
Academic Behaviour	10	4	33	8	3	3	2	0
SOCIAL COMPETENCE TOTAL	5	4	33	9	9	2	1	0

Although the number of children in the study is fairly small (63) and the number of the IPG (48) is slightly more than triple that of the CG (15), a comparison can be drawn by translating the numbers into percentages, as follows below.

Table B2

SSBS-2 Scale A - Social Functioning Level- Percentage of total number of children

	High Functioning		Average		At Risk		High Risk	
	IPG	CG	IPG	CG	IPG	CG	IPG	CG
Peer relations	10	27	75	60	15	13	0	0
Self-Management/Compliance	25	27	52	60	17	13	6	0
Academic Behaviour	21	27	69	53	6	20	4	0
SOCIAL COMPETENCE TOTAL	10	27	69	60	19	13	2	0

On the **Peer Relations** subscale, a minimal percentage of children (IPG – 10%; CG – 27%) were rated as *high functioning*. The majority of both groups scored in the *average* level (IPG – 75%; CG – 60%). None of the children in either group was regarded as *high risk* in this subscale; however, 15% of the IPG and 13% of the CG children were given an *at-risk* rating. These results indicate that teachers found the majority of the children able to establish positive relationships with peers and gain social acceptance from them as well.

On the **Self-Management/Compliance** subscale, approximately one fourth of both groups (IPG – 25%; CG – 27%) of children were rated as *high functioning*. The majority scored in the *average* level (IPG - 52%; CG - 60%). The remainder scored at the *at-risk* level (IPG – 17%; CG

– 13%) and the *high risk* level (IPG – 6%; no CG here). These results show that teachers perceive the majority of their students have *average* or *high functioning* social skills related to self-control, cooperation and compliance with the demands of school rules/expectations. At the same time, there are a number of individuals (8 IPG and 2 CG) whose skills are *at-risk* and 3 IPG children and no CG children who are at *high risk* in such situations.

On the **Academic Behaviour** subscale, the majority of children scored in the *high functioning* (IPG – 21%; CG – 27%) and *average* (IPG – 52%; CG – 53%) levels. Three children in both groups were rated *at-risk* and two of the IPG children scored at the *high risk* level. These results indicate that the majority of children have acquired average or better skills related to competent performance and engagement in academic tasks. Results also indicate that a small number of children (3) in both groups lack such skills and that two IPG children's lack is significant.

Appendix C

School Social Behaviour Scales (*SSBS-2*)

Scale B: Antisocial Behaviour

Table C1

SSBS-2 Scale B - Social Functioning Level- Number of children

	Average		At Risk		High Risk	
	IPG	CG	IPG	CG	IPG	CG
Hostile/Irritable	34	12	9	3	5	0
Antisocial/Aggressive	35	12	7	3	6	0
Defiant/Disruptive	32	11	11	4	5	0
ANTISOCIAL BEHAVIOUR TOTAL	32	12	19	3	6	0

Once again, in order to make a comparison between the two groups in the study, because the number of children in the IPG (48) is greater than that in the CG (15), the results are shown using percentages.

Table C2

SSBS-2 Scale B - Social Functioning Level- Percentage of total number of children

	Average		At Risk		High Risk	
	IPG	CG	IPG	CG	IPG	CG
Hostile/Irritable	71	80	19	20	10	0
Antisocial/Aggressive	73	80	15	20	12	0
Defiant/Disruptive	67	73	23	27	10	0
ANTISOCIAL BEHAVIOUR TOTAL	67	80	21	20	12	0

On the **Hostile/Irritable** subscale, the majority of the children (IPG – 71%; CG – 80%) scored at the *average* level. There were 19% of the IPG and 20% of the CG children *at-risk* on this subscale and 10% (5 children) of the IPG at the *high risk* level. From these results, it seems that the majority of the children in both groups show no serious hostile or irritable behavioural concerns. A small group of children, however, demonstrate behaviours likely to lead to rejection; (e.g., blaming, arguing, not sharing, being cruel, etc.).

On the **Antisocial/Aggressive** subscale, most children scored in the *average* level (IPG – 73%; CG – 80%). Percentage-wise, more CG children (20%) than IPG children (15%) scored in the *at-risk* level; however, number-wise this was 7 IPG children but only 3 CG children. No CG children scored in the *high risk* level; 12% (6 children) in the IPG were rated *high risk* on this

subscale. From these results, it appears that teachers are not concerned about the majority of their children in relation to the behaviours identified in this subscale. They are, however, concerned with 13 IPG children and 3 CG children because of their overt/covert violation of school rules and their intimidating/harming others.

On the **Defiant/Disruptive** subscale, 67% IPG and 73% CG children scored at the *average* level. Percentage-wise, 23% IPG and 27% CG scored at the *at-risk* level; number-wise, this was 11 IPG and 4 CG children. No CG children scored in the *high risk* level but 5 IPG children did. These results seem to indicate again that teachers are not concerned about the majority of the children's behaviour and do not find it defiant or disruptive. However, teachers identified one third (16 of 48) IPG children *at-risk* or at *high risk* and almost one fourth (4 of 15) CG children *at-risk* of behaviours that are likely to disrupt ongoing school activities and/or place excessive and often inappropriate demands on others. Almost one tenth of the IPG children (5 children in all) scored at the *high risk* level.

Appendix D

Math Year-End Curriculum Assessment

Description of the Math Year-End Curriculum Assessment

This assessment is actually based on the provincial curriculum objectives for Grade 2. These objectives are divided into five strands: problem solving, data management and analysis, numbers and operations, geometry, and measurement. The total assessment is based on a score of 128.

In the Numbers and Operations (N) strand, the emphasis is on students developing "number sense" by searching for and understanding the many patterns and relationships among numbers. The assessment included adding, subtracting, number word recognition, estimating and verifying, place value – tens and ones. The total score for number sense was 16 and for operations, 24. However, on the score sheet Problem Solving was included in Numbers and Operations, for a total score of 49.

The Problem Solving (P) strand aims to raise questions or concerns that are relevant to students' present and future world. Problem Solving helps students develop concepts, skills and strategies that can be applied to a variety of other problems; for example, understanding the problem, planning and executing a strategy to solve it, reflecting upon the plan and explaining the strategy. In all, a total score of 9 was allotted for problem solving on the assessment.

The Geometry (G) strand in Grade 2 introduces students to geometric concepts and space awareness through actively manipulating, drawing, constructing and creating geometric shapes and objects. In all there was a total score of 4 for geometry on the assessment.

The Measurement (M) strand intends to develop students' "measurement sense" by actively engaging them in the processes of comparing, estimating, and measuring – length, area, capacity, mass, time, temperature, money. Questions included telling time, ordinal numbers, temperature word recognition, calendar questions, fractions $\frac{1}{3}$ and $\frac{1}{2}$, measuring in centimeters, counting money – pennies, nickels and dimes. On the assessment, there was a total score of 21 for measurement.

Data Management and Analysis (D) includes three main phases: collecting data (materials, information), organizing and displaying it (through picture graphs, charts or lists), and summarizing and interpreting it. This mathematical strand helps students learn the processes of data management in order to solve many problems of daily life. In all, a total score of 10 was allotted for data management on the assessment.

A pencil-and-paper activity, the Math Year-End Curriculum Assessment is 12 pages in length. The present version has been used for the past 3 years and is a revision designed by teachers to be teacher and student friendly.

Appendix E

Reading Running Records Assessment

Description of the Reading Running Records Assessment

This assessment is designed to support first- and second-grade reading instruction and uses five general areas as guidelines: vocabulary, print, predictability, illustrations, and complexity of concepts. The 20 levels it includes are intended to determine children's stages of reading development and comprehension throughout the Grades 1-2 period.

Ideally, all students receive reading instruction using texts at their *instructional* reading level; that is, a text in which a child can read 90-95% of the words easily. Texts that are easier are considered to be at the child's *independent* reading level. More difficult texts are considered to be at that child's *frustration* level and will require additional teaching support.

As the reading level increases, so does the complexity of vocabulary, language, comprehension, etc. For example, Levels 1, 5, 9 and 10 are described as follows:

"Level 1 books have one or two words on each page to describe illustrations of familiar concepts, such as a ball or the moon. This text should be accessible to any child who knows enough about English print to read from left to right and front to back, and who has the vocabulary base to identify the illustrations."

"By Level 5, rather than simply labelling pictures, there is a storyline which is usually highly predictable. There is more text on the page and there may be dialogue among characters."

"In Level 9, the books take on the characteristics of a "real story," often with a surprise twist at end. The story line continues to be predictable, but has begun to demonstrate a little more sophistication. The books are longer,, usually 16 pages. Most of the text consists of high frequency words, but more new vocabulary is introduced with less repetition."

"Level 10 books contain more unfamiliar words. There may be full pages of text, but it is still likely to be enlarged print. There are more compound sentences. The concepts still pertain to events familiar to most children: going to school, having a birthday party, etc. Books with less text, but more poetic language and syntax may be found at Level 10."

Grade 1 teachers receive a set of benchmark books representative of the levels from 1 - 10 and in-service sessions about running records, analyzing miscues and assessing comprehension. Grade 2 teachers receive the same for Levels 11 – 20.

Appendix F

Classroom Environment Rating Scale

Classroom Environment Rating Scale

In the first 2 years of the Prekindergarten Longitudinal Study, a classroom observation, the **Early Childhood Environment Rating Scale (ECERS-R)**, was completed in each classroom by an external observer. *ECERS-R* is designed to be used with children up to, but not beyond, the age of 5. This particular tool was most beneficial in helping to determine the components of a high-quality childcare environment. A high-quality program must provide for the three basic needs all children have:

- protection of their health and safety
- building positive relationships
- opportunities for stimulation and learning from experience.

According to *ECERS-R*, each of these components of high-quality care is **tangible** in the classroom's environment and **can be observed**. Either you see it or you don't; either it is there, or it is not.

Teachers of both prekindergarten and kindergarten recommended the continuation of environment rating. Since there was no comparable environment rating scale available for primary grades, the researchers devised a comparable environment rating loosely based on the original *ECERS-R*; this Classroom Environment Rating Scale was revised between the Grade 1 and Grade 2 years of the study. There is one major difference in the administration of these two environment ratings: An external observer did the *ECERS-R* rating in the Pre-K and K classrooms; the classroom teachers in Grades 1 and 2 completed their own Classroom Environment Rating Scale.

Description of the Classroom Environment Rating Scale

The scale itself is a checklist that is relatively easy to use; completion takes about 10 – 15 minutes. The checklist items are similar to the *ECERS-R* criteria. *ECERS-R* defines “environment” in a broad sense and includes:

- the arrangement of **space** both indoors and outdoors
- the **materials and activities** offered to the children
- the **supervision and interactions** (including language) that occur in the classroom
- the **schedule** of the day, including **routines and activities**
- the **support offered to parents and staff**.

The Classroom Environment Rating Scale version has five subscales with two or more item descriptors:

- space and furnishings
- materials and activities
 - includes the areas of the Grade 2 curriculum: Arts Education, Language Arts, Health, Technology, Math, Physical Education, Science and Social Studies
 - Culturally Appropriate Practices are noted
- supervision and interactions
- schedules and routines
- support to parents.

There are also four short answer questions related to a child-centred learning environment.

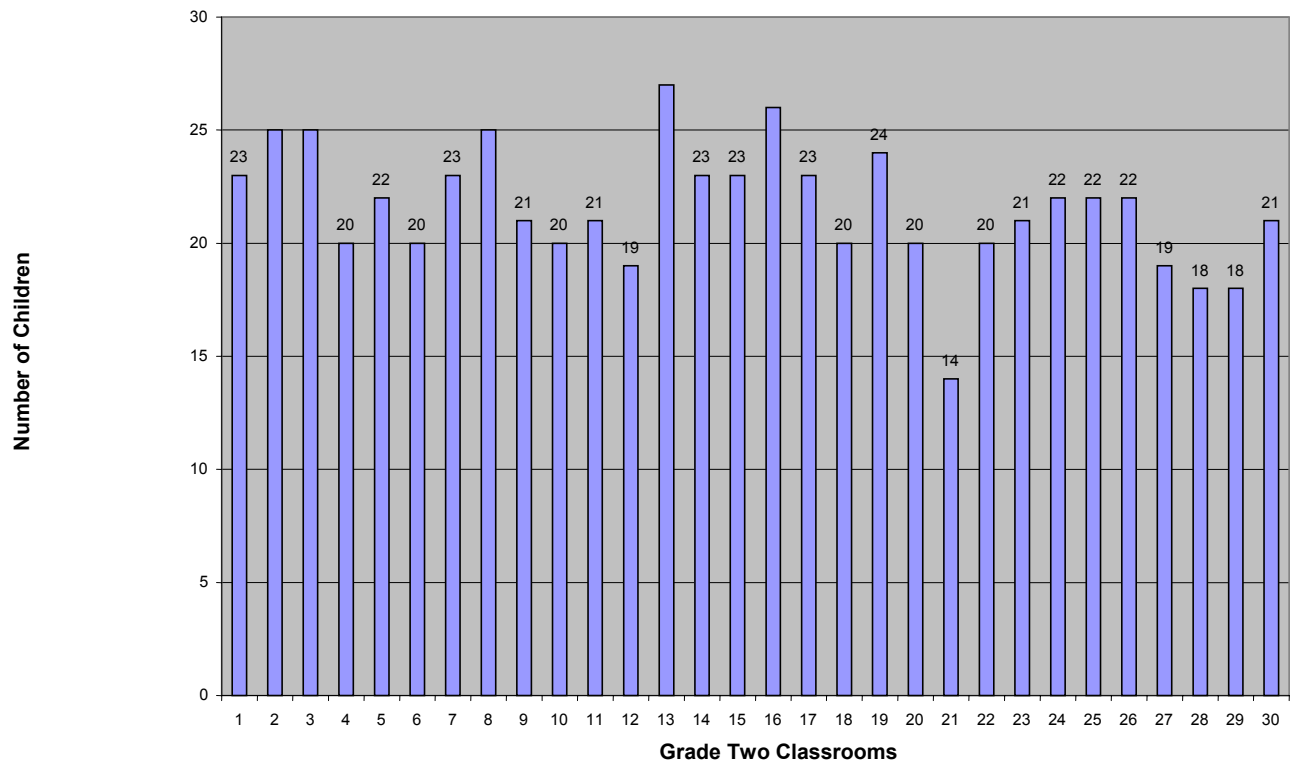


Figure F1. Classroom Environment Rating Scale – number of children in Grade 2 classrooms

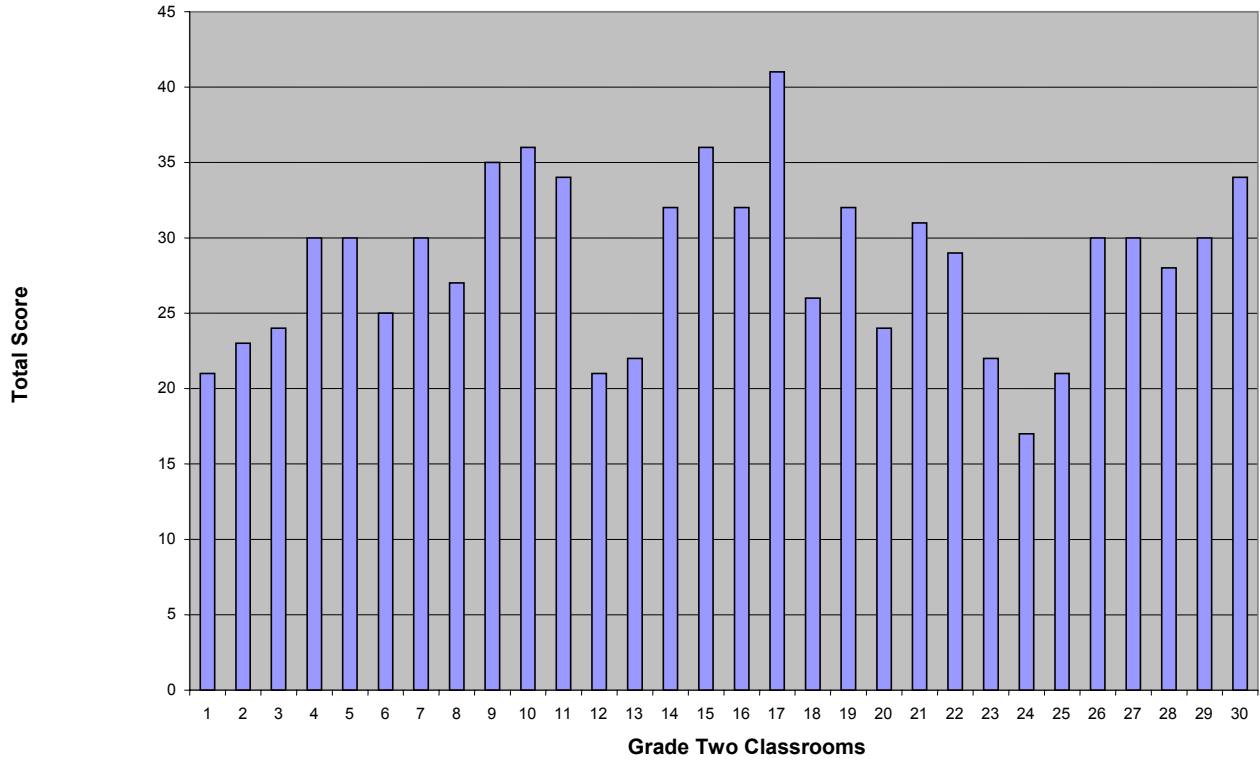


Figure F2. Classroom Environment Rating Scale – space and furnishings – total scores

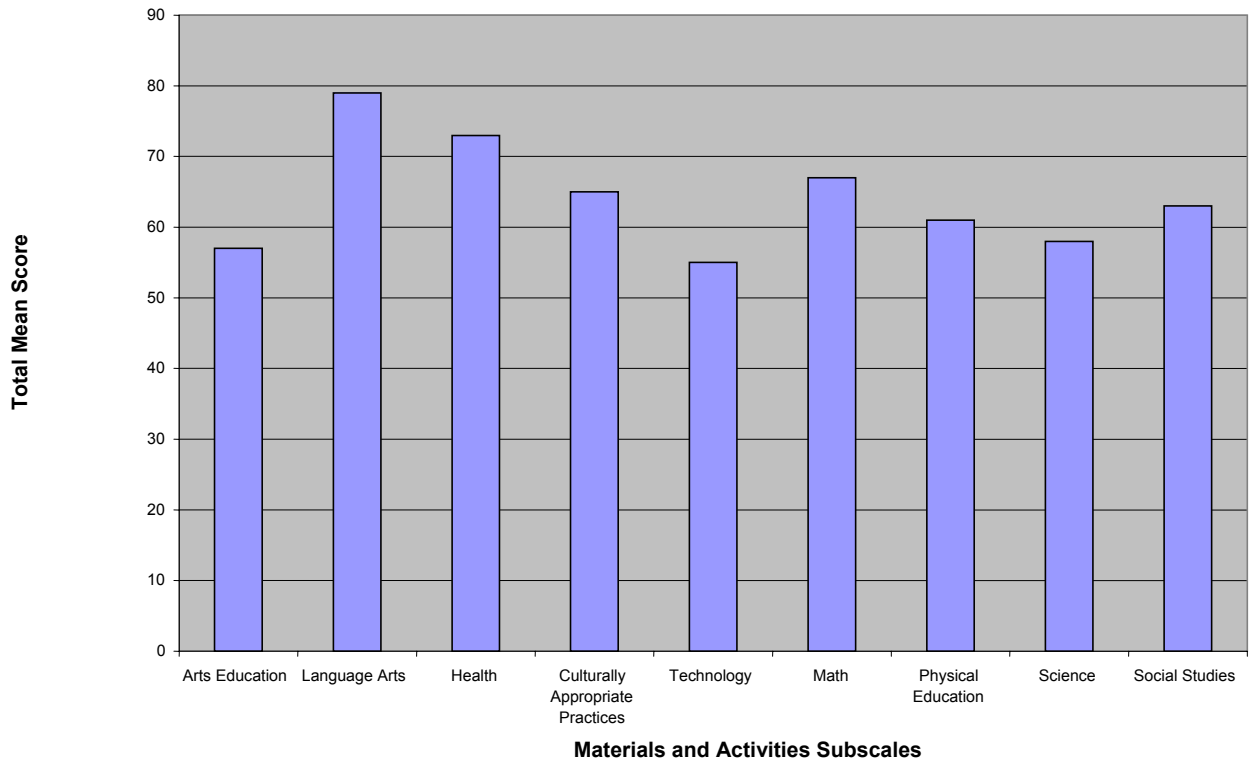


Figure F3. Classroom Environment Rating Scale – materials and activities – total mean scores

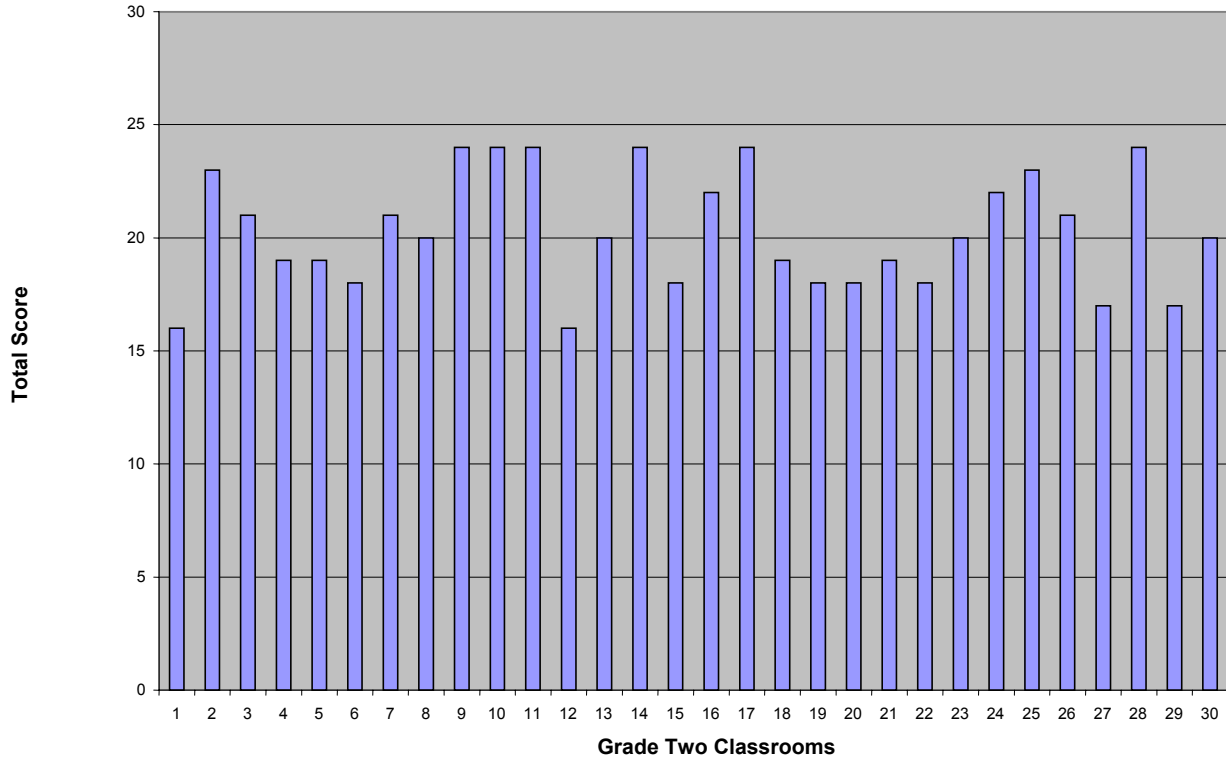


Figure F4. Classroom Environment Rating Scale — supervision and interactions - total scores

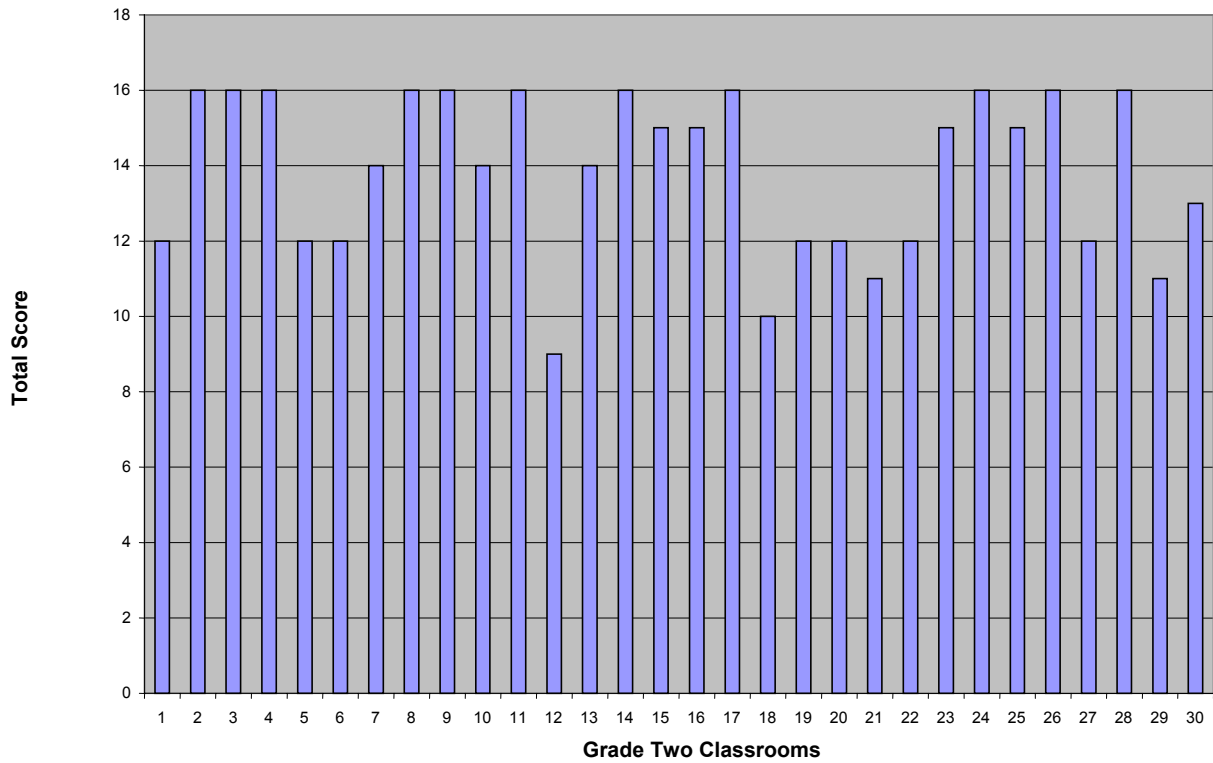


Figure F5. Classroom Environment Rating Scale — schedules and routines – total scores

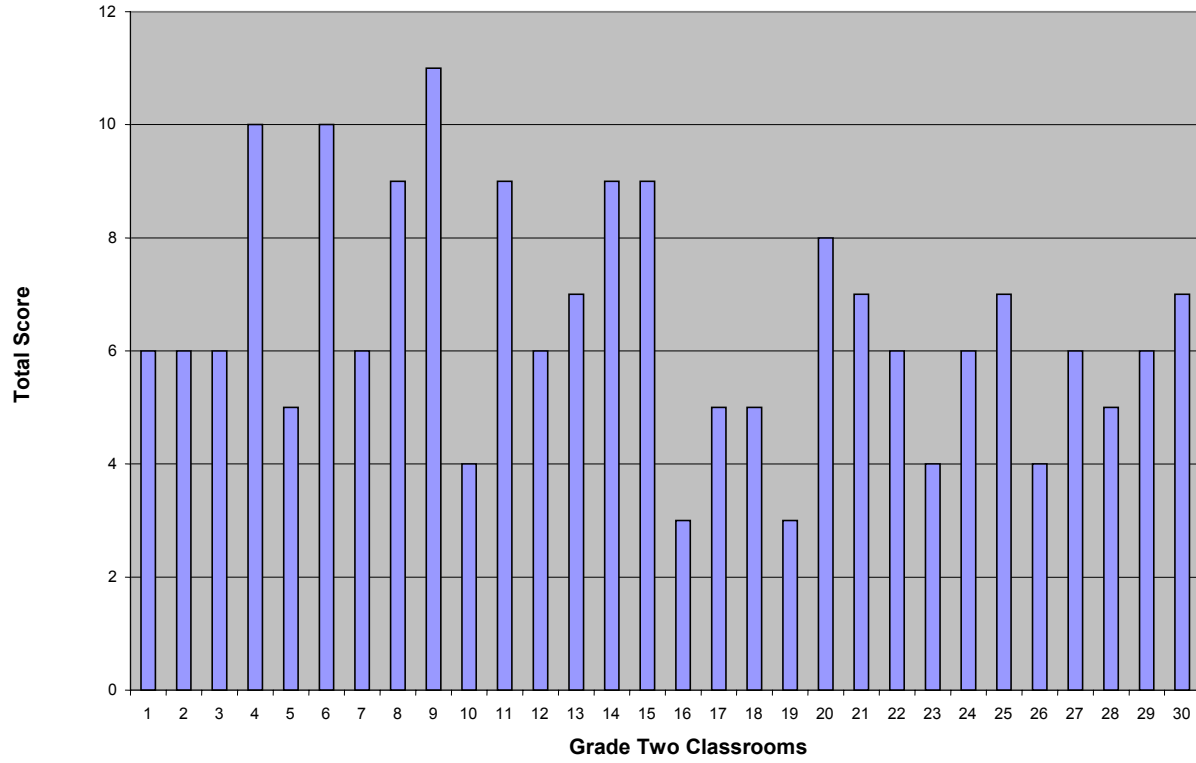


Figure F6. Classroom Environment Rating Scale - support to parents - total scores

In addition, teachers were asked to respond to the following question: **“Are there any special features of your classroom area that you would like to mention?”**

Seventeen of the 30 teachers listed several special features of their classroom related to the physical space, the setup, the activities, the adult helpers and the children themselves. Physical space features included:

- small closet and several cupboards in room is great for storage
- extra space includes a small conference room next door available for small groups (reading, art projects, discussion groups, storage of leveled reading materials) and an adjacent spare room is classroom library used for quiet time, free time and testing
- large windows in classroom – provides brightness (3 teachers mentioned)
- space is inviting (2 teachers mentioned)
- location in school is convenient
- counters, sink, lockers are at appropriate height for Grade 1-2 students.

The setup features included:

- seating setup is changed every 2 months
- classroom works in table groups and students are free to choose their own space elsewhere. if they prefer
- seating cannot be in groups because of small size of classroom and large number of students
- class moves into groups for various activities – at tables or on floor and in adjoining conference room
- centres set up
- classroom is structured based on student choice and activities
- special classroom arrangement from *Tools for Teaching Book* is very good for access to students quickly
- computers are on periphery of classroom; different students use these at different times.

Features related to activities included:

- computer minilab of 5
- Internet-based program (“Blackboard”) promoted by Saskatchewan Learning is used
- classroom has mice in a cage
- literacy groups available - groups of children having book experiences with adult leader daily
- tape/book reading program organized by Learning Assistance Teacher is available to each child daily at his/her reading level
- students reflect/evaluate their behaviour daily
- students have learned to work independently and collaboratively with technology and through classroom routines.

Special classroom features related to the children themselves included:

- Classroom includes children from Grades K to 5; an associate school with RPB. Students work at their own pace; individual help given as needed throughout the day
- Grade 1-2 split
- Four special needs (JARP – Junior Adaptation Resource Program) are integrated into classroom. Three other students receive medicine for ADHD. One student has full-time aide because of behaviour and medical concerns

- Some children are in the Alternative Resource Program (ARP)
- Four adaptation students join classroom each afternoon – one is autistic; the other 3 are low functioning with behavioural concerns. Two other possible candidates for this special placement are also in classroom all day. Very little assistance available for large numbers of high-needs students
- Two children were integrated from structured learning
- Large number of special needs ranging from academic to social to emotional to behavioural
- Difficult to meet all needs continually as well as Board/curriculum expectations/requirements
- Difficult to teach at Community School with poor attendance due to constant moving in/out of many students
- Special needs child with a chair
- Two teachers mentioned that their number of children changes often.

The classrooms' adult helpers that were identified by teachers included:

- Teacher Associate [4 teachers]
- Teacher's Aide in class full-time (2 teachers)
- Teacher Assistant full time
- Teacher Assistant full time for autistic child
- Teacher Assistant full time for designated child
- Teacher Assistant [untrained and inexperienced] for designated student.
- Teacher Assistant for special-needs child ½ days
- Teacher Assistant ½ days
- Teacher Assistant 1 hour per day
- Teacher Associate – 1 ½ hours per week, if available
- Teacher Associate – 4 hours per week
- Aide for visually impaired child – 4x per week for 1 hour
- Teacher Assistant helps to monitor children morning and afternoon
- Teacher Assistant works in classroom ½ hour, 4x per week
- Teacher Assistant works with designated student 3x per week
- Teacher Assistant works in classroom 3x per week (2 teachers)
- Teacher Assistant gives some time with reading groups
- Teacher Assistant – last 10 minutes each day to help adaptation students organize selves for home
- Speech/Language Pathologist works with small group 2x per week
- Speech Therapist – ½ hour once a week
- Learning Assistance Teacher works with small group 3x per week
- Learning Assistance Teacher – ½ hour, 2x per week
- Learning Assistance Teacher helps with reading groups
- Learning Assistance Teacher
- Paraprofessional Assistant
- Classroom Associates

- Teacher-Librarian
- French Language Monitor

- Preinterns, work-placement individuals

- Parent readers
- Parents come to help with daily reading and during centres
- Parent helps weekly in library
- Once a month, parents come for classroom activity

- Teacher's own mother – 1 afternoon per week to work with small groups of children
- University student volunteers for 1 ½ days per week
- Adult volunteer from community – 1 hour per week to work with small group
- Adult volunteer 2 ½ days per week
- Volunteer one afternoon per week to hear children read
- Retired teacher volunteers 2 mornings per week to read with student
- Teacher's own father and friend help out periodically with students
- Various “drop-ins”

- None (6 teachers).

Appendix G

**Year 5 Focus Groups
with Grade 2 Teachers**

**LONGITUDINAL STUDY OF PREKINDERGARTEN
2004 - 2005**

Teacher Focus Group with Grade 2 Teachers

Children's Experiences

What do you think is the major contribution that the Grade 2 program offers to children? In what ways did this impact upon families?

In what ways have you seen your children grow and develop this past year?

How do you ensure the physical health/well-being of your children daily?

What features of your classroom and your practices have contributed to your children's hands-on, active learning this year?

What differences have you noticed between the children in your class who attended the Prekindergarten program and those who did not?

Family Involvement

How did you ensure initial and ongoing communication with your children's families?

How were families able to be involved in the Grade 2 class (or school) activities this past year?

What provision is available to support your children's families and to encourage their own development and learning?

What value do you see in family involvement in the Grade 2 program?

Your Experience

How have you benefited from being involved in this Prekindergarten study?

In your experience, do you have sufficient opportunity to network with other Grade 2 teachers?

What additional information, support or resources would enable you as a Grade 2 teacher to deliver a higher quality program in your classroom?

If you were given more funding for your Grade 2 program, how would you use it?

What sort of professional development would be beneficial to your growth as a Grade 2 teacher?

Did you have community/other partnerships this year? How did these work? What would you do differently?

Additional comments

Appendix H
Parent Questionnaire

Year Five Prekindergarten Study Parent Questionnaire

Please check one of the following:

- My child **attended** the Prekindergarten program, with the Regina Public School Division.
 - My child **did not attend** the Prekindergarten program, with the Regina Public School Division.
-

1. Which school experiences promoted your child's growth and learning in Grade 2?

2. List the activities in which you participated:

a) in the school -

b) in the Grade 2 classroom -

3. How did your child's experience this year compare to Grade 1 experiences?

4. Is there anything you would add or change to improve your child's Grade 2 experience?

School

Parent/Guardian.....