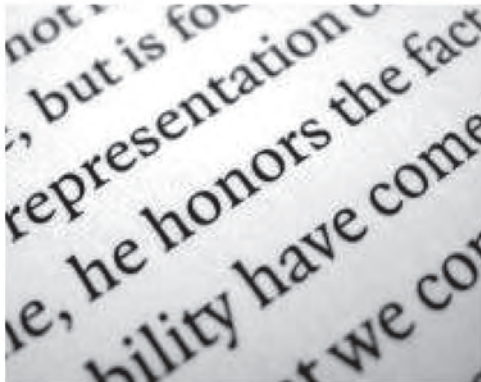
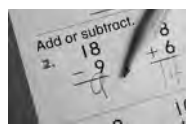


JCSP Literacy and Numeracy Initiatives Evaluation

2006-2007

Junior Certificate School Programme Support Service
October 2007



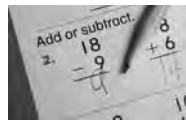


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Published in 2008 by

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The Junior Certificate School Programme and the JCSP Literacy and Numeracy Strategy is funded by the Teachers Education Section Department of Education and Science and the European Social Fund.

The Junior Certificate School Programme is a national Programme sponsored by the Department of Education and Science and the National Council for Curriculum and Assessment.

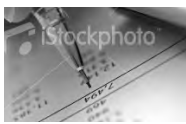
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Edited XXXXXXX







1. Introduction

In recent years the concept of “adolescent literacy” has been identified and investigated as a key to ensuring positive educational outcomes and addressing social exclusion. Adolescent literacy is seen as crucial because “To participate fully in society and the workplace in 2020, citizens will need powerful literacy abilities that until now have been achieved by only a small percentage of the population...Being literate in contemporary society means being active, critical, and creative users not only of print and spoken language but also of the visual language” (Vacca, 1998, p.5). Research has shown that traditionally, the focus of pedagogical concern has been on early childhood and adult literacy with active reading education ending at the primary school level (Bean and Readence, 2002; Damico, 2005; Moje, 2002). Since 1998 the Junior Certificate School Programme (JCSP), as an integral component of its whole school approach to literacy, has supported the creation, evolution, and expansion of initiatives that directly address the literacy needs of students. The impact of established JCSP literacy initiatives such as the Reading Challenge, Readalong, and Who Wants to be a Word Millionaire, is evident not only in students’ improved reading test results, but also by the number of schools that continue to use and develop these interventions from year to year. The scope for a creative approach to general literacy is illustrated by the array of new JCSP initiatives that schools have been encouraged to try this year, including Drop Everything and Read and Digital Storytelling.

In JCSP the development of literacy skills is coupled with empowering children to become numerate. The importance of addressing numeracy is highlighted not only by the extensive range of everyday life activities that require calculation skills but also by the evidence of an increasing rate of developmental dyscalculia in schools throughout Europe (Chinn, 2004). JCSP numeracy interventions offer a variety of strategies for developing students’ numeracy based on the position that arithmetical and numerical knowledge can only be achieved through the balanced integration of procedural and conceptual knowledge (Baroody, 2003; Resnick, 1982; Van Lehn, 1990).

Research suggests that an informal approach to numerical concepts and procedures results in more effective learning (Copley, 1999; Nunes, 1992). Mathematical games and active instructional interventions, components of the JCSP numeracy initiatives, have been shown to have a range of benefits including increasing children’s motivation, supporting positive attitudes towards mathematics, allowing student’s to try new strategies and stimulating logical reasoning (Blum and Yocum, 1996; de la Cruz, Cage and Lian, 2000).

Since 1997 schools participating in the Junior Certificate School Programme have enhanced their students’ experience of the Junior Cycle through the use of initiatives. The initiatives programme provides schools with support to run and measure the effectiveness of innovative teaching strategies. The evolution of JCSP initiatives during the past ten years and the documented impact of these on students and teachers alike, reflect the range of elements considered to be integral to developing a culture of life-long learning. The JCSP initiatives offer teachers the opportunity to adapt or devise teaching strategies that entail active learning and that focus on whole child development. The procedure built into the programme whereby teachers review the process of conducting initiatives and disseminate their findings through evaluation reports and in-service seminars has created a JCSP knowledge network that encompasses, supports and provides for students, teachers, and schools, as well as for the wider community.

This report provides an analysis of the impact of the JCSP Literacy and Numeracy Strategies in participating schools for the academic year 2006-2007. The effects of these strategies on JCSP students is primarily drawn from quantitative and qualitative data provided by teachers who have described and evaluated literacy and numeracy initiatives run in their particular schools this year.

2. Background Information

At their annual start of term in-service meetings in September 2006, JCSP co-ordinators were given information about the range of over fifty initiatives that schools could make applications to run during the academic year 2006-2007. Amongst the fifty were twenty-eight that are classified as Literacy or Numeracy Initiatives. The range of literacy and numeracy initiatives included:

1. Keyword
2. Curiosity Packs
3. Author in Residence
4. Drop Everything and Read
5. Digital Storytelling
6. Disposable Camera Storytelling
7. Paired Reading
8. Paired Reading Top up
9. Pen-pal
10. Book Review
11. Primary Picture Books
12. Readalong
13. Readalong Top up
14. Reading Challenge
15. Reading Challenge Top up
16. Reading Corners
17. Reading Programme in the English Classroom
18. Spelling Challenge
19. Storytelling
20. General Literacy
21. JCSP Readathon
22. Word Millionaire
23. Make Your Own Opoly
24. General Numeracy
25. Paired Maths
26. Cross Age Paired Maths
27. Maths Games
28. Flashmaster

Following the receipt of applications from co-ordinators, in November 2006 JCSP Support Services approved Literacy and Numeracy initiatives for the following schools:



Keyword

Selected schools organise keywords and key spelling challenges across subject areas over six-week periods. In addition to funding for the initiative the schools are provided with materials to support the work including Keyword notebooks, Keyword wall charts, Keyword folder inserts, Keyword wall magnets, Keyword bookmarks, and Key Spelling Bookmarks

Riversdale Community College
 St Kevin's College
 Comprehensive School
 Our Lady of Mercy Secondary School
 Letterkenny Vocational School
 CBS Westland Row
 Mater Christi
 (7)



Curiosity Packs

This initiative allows schools to develop their own particular approach, an example often cited is to develop a "story sack" containing a story written by the students and associated items to compliment their writing.

Oaklands Community College
 St John's College De La Salle
 Breifne College
 (3)

Author in Residence

Schools running this initiative are able to link with Poetry Ireland Writers in Schools Residencies Scheme. This scheme is based on the idea of a short residency by a writer to a school, working closely with one teacher and with the same class or group of students. The participation of a key teacher and the development of a working alliance between the teacher and writer are fundamental to this initiative. Often students' literary work, emanating from this initiative are publicly displayed at the Make A Book exhibition.

St Columbas College
 St John's College De La Salle
 (2)

Drop Everything and Read

The aim of this initiative is to promote reading across the whole school or year group. The idea is that at a set time everyday for a week everyone stops what they are doing and reads for fifteen minutes. The funding for this initiative can be used to organise boxes of books, magazines, and newspapers per class, for the staffroom, office and all other shared areas of the school.

Mercy Secondary School
 Colaiste Bride
 Mercy College Coolock
 Rosmini Community School
 Athy Community College
 Galway Community College
 (6)

Digital Storytelling and Oral Development

A new initiative this year, funding is made available for schools to develop Digital Storytelling and purchase relevant equipment or software.

Breifne College
 St Mary's School for Deaf Girls
 Vocational School
 Mercy Secondary School
 Central Remedial Clinic
 Colaiste Eoin
 (6)



Disposable Camera Storytelling

This initiative enables schools to purchase a set of disposable cameras, plan opportunities for students to take photos and develop their films. It is anticipated that the photography will contribute to students' creative writing and project work in English.

St Dominic's Secondary School
 Davis College
 Patrician College
 St Augustine's YEP School
 North Presentation Secondary School
 (10)

Nagle Community College
 St Oliver's Community College
 St Joseph's JEC
 Colaiste na Trocaire
 Abbey Community College

Paired Reading

An established literacy initiative in JCSP schools, Paired Reading can be run in a range of ways. For example, JCSP students can act as tutors to a primary school class, or senior cycle students are reading tutors for a JCSP class or parents work with students as reading tutors. Schools running a Paired Reading initiative receive support materials including Paired Reading teacher guidelines, Paired Reading tutor training video 'Everyone Reads', Paired Reading student achievement certificate, Paired reading tutor achievement certificate, a variety of bookmarks, and a list of recommended books and book suppliers.

St Declan's Community College
 Castleblaney Special School
 Largy College
 Moyle Park College
 Riversdale Community College
 Scoil Mhuire
 Colaiste Eoin
 Arklow Community College
 Colaiste Dhulaigh
 Synge Street CBS
 St Joseph's School for the Deaf
 O'Carolan College
 Pobalscoil Chloich Cheannfhaola
 Letterkenny Vocational School
 Tullamore College
 (15)





Paired Reading Top-up

Schools that have run Paired Reading in past years are able to apply for funding to “top up” materials required for the initiative. Support materials, as listed above for Paired Reading, are also made available to schools.

Deelee College Desmond College Terence MacSwiney Community College (3)	
---	--

Pen-Pal

This initiative provides JCSP students with the opportunity to link with JCSP students in another school. Letters are prepared in class and sent to pen pals either by post or email.

Our Lady of Mercy Secondary School Patrician College Ardee Community School Deansrath Community College St Patrick’s Community College Mulroy College Desmond College Oaklands Community College Colaiste na Trocaire Arklow Community College Central Remedial Clinic (11)	
--	--

Book Review

Schools are supplied with book tokens for each student in their class. Students are brought on a school trip to a book store to purchase books. The students read, discuss and write reviews of their books. In addition to book tokens, schools are also supplied with a Book Review Booklet for each participating student.

Abbey Community College Desmond College St Kevin’s College Arklow Community College St Joseph’s Secondary School St Augustine’s School Largy College Deansrath Community College (8)	
--	--

Primary Picture Books

Schools running this initiative link with a local primary school class and choose an appropriate picture book for JCSP students to read with the primary students. The students visit the primary school and each student is assigned a reading partner to whom they read the book. On completion of the event, each JCSP student presents the book to his or her primary school reading partner.

Deelee College Rosmini Community School Firhouse Community College Mulroy College (4)		
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Readalong

Another well established JCSP literacy initiative, Readalong is a short-term reading intervention where students read while listening to the book being read on tape or CD. Students can also review the books and track their reading. Schools running Readalong are provided with support materials including Readalong Guidelines, a catalogue of Readalong materials, Reading Project Achievement Certificate, a variety of bookmarks and a list book suppliers.

Henrietta Street School Nagle Community College Arklow Community College Presentation Secondary School Terence MacSwiney Community College St David’s CBS Gorey Community School Galway Community College Colaiste Eanna St Tiernan’s Community School Letterkenny Vocational School (11)	
--	--

Readalong Top-up

Schools that have run the Readalong initiative in past years are able to apply for “top up” funding to update materials required to run the initiative. Support materials, as outlined above for the Readalong initiative are also made available to schools.

Deelee College Causeway Comprehensive School St Thomas’ Community College St Paul’s YEP Comeragh College	Athy Community College Ringsend Technical Institute Tallaght Community School Newcourt Special School (9)
--	---



Reading Challenge

A popular JCSP literacy initiative, Reading Challenge is a short-term literacy intervention that introduces an element of healthy competition into the reading process. Students are challenged over a period of several weeks to compete with their peers in reading as many books as they can. Schools are provided with support materials to run this initiative including ‘Reading Challenge’ teacher guidelines, Students’ book review ‘Reading Challenge’ booklets, Reading Challenge student achievement certificates, Reading Challenge bookmarks, and Reading Challenge wall posters. Also provided is a list of recommended titles and book suppliers.

Arklow Community College Summerhill College Abbey Community College St Peters Special School Desmond College Moyle Park College Deansrath Community College Beaufort College Mercy College Coolock Henrietta Street School O’Carolan College St Kevin’s College Killinarden Community School Scoil Mhuire Plunket College Ringsend Technical Institute Causeway Comprehensive School St Aidan’s Community College St Joseph’s JEC Carndonagh Community School St Colman’s Community College Tallaght Community School Collinstown Park Community College CBS Westland Row Tullow Community School Mater Christi Templemichael College (27)	

Reading Challenge Top-up

Because Reading Challenge has been such a popular and effective literacy intervention, many schools run the initiative each year. Funding is available for these schools to “top up” their book supplies and prizes to support the continued running of Reading Challenge. Additionally support materials for this initiative, as described above, are also available to schools.

St Joseph’s Secondary School O’Faich College Jobstown Community College St David’s CBS St Joseph’s School for the Deaf St Anne’s Senior Traveller Education Centre, Killarney (11)	The Donahies Community School Marino College Riversdale Community College Gorey Community School Colaiste Eanna	
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Reading Corners

This initiative enables schools to create a classroom reading corner with shelves that have books on a variety of topics, written at a range of reading levels and reflecting a wide range of genres. It is stipulated that the reading corners must be located in mainstream locations, as opposed to learning support/resource or special education rooms. Beanbags and walkmans can also be a feature of the classroom reading corner.

Killarney Community College Colaiste Mhuire Synge Street St Joseph's Secondary School Desmond College St Alibe's School Vocational School Colaiste an Chraoibhin	
Arklow Community College Firhouse Community College St Aidan's Community College St David's CBS Ennis Community College Tallaght Community School North Presentation Presentation Secondary School	
Mayfield Community School St Nessan's Community College Colaiste Eoin Presentation Secondary School (20)	

Reading Programme in the English Classroom

Schools are provided with the funding to purchase the SRA reading laboratory.

The SRA kit is for use in the English classroom exclusively. Additionally schools are provided with support materials to help run this initiative including "Suggestions for using the SRA Kit in the JCSP Classroom", a catalogue of SRA Materials, a list of suppliers, and a "Record of Student Progress" to be returned with teachers' evaluations of the initiative.

The Donahies Community School Presentation Secondary School Riversdale Community College Ardee Community School Scoil Bernadette St Oliver's Community College Davis College Colaiste na Trocaire Deansrath Community College Rosmini Community School Cobh Community College Bush Post Primary School North Presentation Galway Community College St Nessan's Community College (15)	
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Spelling Challenge

Schools are provided with resources to organise and run a spelling challenge including spelling journals and spelling tests to be administered at the beginning and end of the initiative.

Desmond College Jobstown Community College St Kevin's College Colaiste Dhulaigh Our Lady of Mercy Secondary School Breifne College Letterkenny Vocational School Colaiste Eanna Vocational School (8)	
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Storytelling

This initiative provides schools with the opportunity to organise a storytelling event with an outside storyteller / seanacháí who will introduce JCSP students to the art of storytelling. In the past, this initiative has been used in some schools as part of a wider project involving students creating and telling their own stories. These projects have often been a part of the Make a Book exhibition. Schools are provided with a booklet containing storytellers' contact details. Schools are also able to source local storytellers for the initiative.

Mount Carmel Secondary School St Joseph's JEC St Aidan's Community College Newcourt Special School Presentation Secondary School Patrician College Deelee College St Tiernan's Community School Galway Community College Colaiste an Chraoibhin Terence MacSwiney Community College St Ailbhe's School (12)	
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General Literacy

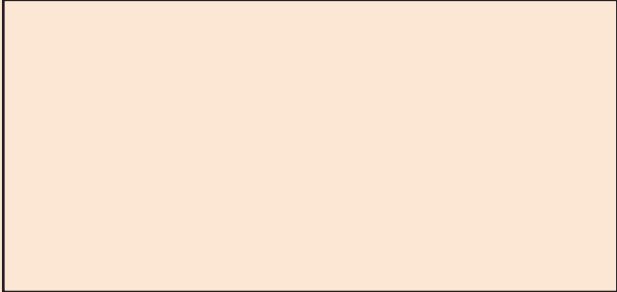
This initiative provides resources for schools to develop their own creative response to the literacy difficulties that they are encountering among their students.

Colaiste Eoin Templemichael College (2)

JCSP Readathon

Schools running a JCSP Readathon organise events to enable students to experience a variety of reading activities including silent reading, paired reading, invited guests to read to the students with some writing tasks. Students are provided with a variety of reading material such as fiction, non-fiction, tapes, magazines, newspapers, and laptops with reading software. School are given a list of book titles that have proved successful with students and contact names of book suppliers.

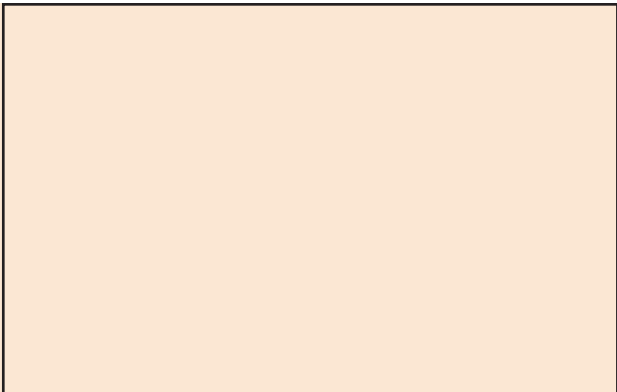
Colaiste Dhulaigh
 Mulroy College
 Galway Community College
 Comeragh College
 Deele College
 Wexford Vocational College
 St Alibe's School
 (7)



Word Millionaire

A short term reading intervention, this initiative challenges JCSP students to read a million words. Schools running Word Millionaire are provided with support materials including "Who Wants to be a Word Millionaire?" teacher guidelines, achievement certificates, bookmarks, advertising posters, tracking posters (Trend Graph and Thermometer) for entering the cumulative totals of words read to date, a list of popular teenage literature and the names of some educational suppliers

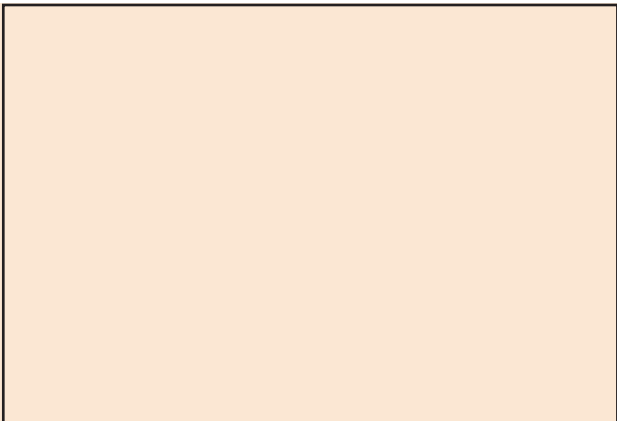
Synge Street CBS
 School of the Divine Child
 Patrician College
 Scoil Mhuire
 Comprehensive School
 Colaiste an Chraoibhin
 Presentation Secondary School
 Newcourt Special School
 Central Remedial Clinic
 St Brendan's Education Centre
 (10)



Make your own opoly

A new initiative this year, schools are provided with resources to purchase "Make Your Own Opoly" starter packs. Starter packs can be purchased in most toy/game shops and in some larger bookstores. "Make Your Own Opoly" is based on the popular "Monopoly" boardgame. Schools running this initiative are additionally given "Make Your Own Opoly" Workbooks, "Computational Clocks" posters and folder-inserts, and maths achievement certificates.

Wexford Vocational College
 St Declan's Community College
 Larkin Community College
 Salesian Secondary School
 St Joseph's JEC
 Firhouse Community College
 St Mary's School for Deaf Girls
 Catherine McAuley School
 St Kilian's Community School
 Bush Post Primary School
 St Nessan's Community College
 (11)





General Numeracy

Schools running General Numeracy initiatives are able to acquire age-appropriate experiential resources and games in mathematics and numeracy and to use these materials to develop creative approaches to the teaching of mathematics and numeracy to JCSP students. The JCSP provides additional support materials for this initiative including “LUVE 2C You” bookmarks and posters, “Computational Clocks” posters and folder-inserts and maths achievement certificates. Information on the France Test is also provided together with a list of recommended mathematical resources, useful websites and the names of some educational suppliers.

Largy College Plunket College Athy Community College St Columbas College St Alibe’s School Mid West School Deansrath Community College Our Lady’s Traveller Training Centre Galway Community College (9)	
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Paired Maths

Similar to the Paired Reading Initiative, Paired Maths is a numeracy initiative in which Fifth Year/Transition Year/LCA students (or parents) work with JCSP students in order to support the development and enhancement of their mathematical and numerical competencies. Schools running the Paired Maths initiative are provided with a range of support materials including an extract from Keith Topping’s guidelines on how to develop and implement a Paired Maths programme, “LUVE 2C You” bookmarks and posters, “Computational Clocks” posters and folder-inserts, and maths achievement certificates. Information on the France Test is also provided together with a list of recommended mathematical resources, useful websites and the names of some educational suppliers.

Killarney Community College Presentation Secondary School Jobstown Community College Mulroy College Scoil Mhuire Colaiste Dhulaigh Rosmini Community School Gorey Community School (8)		
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Cross Age Paired Maths

Related to the Paired Maths initiative, Cross Age Paired Maths is a numeracy project whereby second year JCSP students work with second class primary school students in order to support the enhancement of mathematical and numerical competencies in both tutor and tutee. Schools running the Cross Age Paired Maths receive support materials as outlined above.

Caritas College (1)

Maths Games

Schools that have applied for the Maths Games initiative are provided with funding to source and acquire age-appropriate maths games and/or maths activity packs and to use these resources to support the development of mathematical and numerical understanding among JCSP students.

School of the Divine Child Presentation Secondary School Riversdale Community College St Kevin’s Community College Colaiste an Chraoibhin Ardee Community School Ringsend Technical Institute Mulroy College Ennis Community College Cobh Community College Carndonagh Community School St Fanahan’s College (12)		
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Flashmaster

A new numeracy initiative this year, The Flashmaster is a handheld device that looks like a calculator but does much more. It allows students to practise their maths facts - Multiplication Tables, Division Tables, Addition Tables, and Subtraction Tables - in a fun way. Students can set goals for speed and accuracy at different levels in any of the 4 table areas. Teachers can monitor and customise the Flashmaster to practise particular skills or revisit special problem areas. The Flashmaster can be set to ‘remember’ the areas that cause difficulty. Pre and post testing is not required as the device records the student’s progress.

Henrietta Street School St Enda’s Community School St Oliver’s Community College Marino College Crannog Nua Special School St Dominic’s Secondary School St Patrick’s Community College Catherine McAuley School CBS James Street St Joseph’s School for the Deaf Mercy Secondary School Cobh Community College Mullingar Community College Bush Post Primary School St Paul’s YEP St Kilian’s Community College Inver College Colaiste Chathail Naofa Scoil Ruain (19)	
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In total the JCSP supported the running of 267 literacy and numeracy initiatives throughout schools for the academic year 2006/2007. As a means of measuring the degree of impact the initiatives have had on JCSP students this year, teachers running each initiative were asked to complete and submit an evaluation report (Appendix A) and for some initiatives, where appropriate, to conduct pre and post testing with participating students.



3. Analysis of Evaluation Reports

Over the years, the feedback received from teachers who have run JCSP initiatives has offered evidence of the positive benefits of these interventions for their students, but as well has provided documentation of the rich and varied approaches taken with initiatives in individual schools. Dissemination of this wealth of material through in-service, JCSP newsletters and publications has enabled other teachers to experiment with initiatives in their schools, often developing their own unique and creative approaches to literacy and numeracy interventions. The evaluation procedure additionally has led to the development of new JCSP initiatives across the years.

Because the feedback from teachers is, on so many levels, critical to the evolution of the JCSP Literacy and Numeracy Strategy, a decision was made prior to the beginning of the academic year to adapt the format for evaluation in order to assist teachers in completing reports that would accurately reflect the work they had done as well as to ensure a degree of systematic data collection across all participating schools. The new evaluation format (Appendix A) was developed to obtain both quantitative and qualitative data. It was anticipated that the former would provide a general picture of the impact of initiatives in areas such as academic skills, attendance, behaviour, self-esteem, and social skills. The new form, similar to previous evaluation report formats, also seeks qualitative information from teachers whose experiences and observations about particular initiatives can be disseminated to other educators in the programme.

3.1 Quantitative Evidence

3.1.1 Pre and Post Testing

While the use of standardised pre and post testing would not be relevant or appropriate in the context of certain initiatives, others lend themselves to this type of evaluation, and in such cases those schools are encouraged to administer pre and post tests to the JCSP students participating. In these instances the JCSP Support Service recommends the use of the GAP Reading Test for literacy initiatives and the France Test for numeracy initiatives, however schools have used alternative tests. Data provided by teachers from the 166 evaluation reports submitted to the JCSP Support Service by the end of June 2007, reveal the following extent of pre and post testing that took place in running literacy and numeracy initiatives this year:

Table 1: Literacy Initiative Testing 2006/2007

Were pre-tests applicable to the initiative?

	Frequency	Percent
No answer	6	5.0%
Yes	40	33.6%
No	73	61.3%
Total	119	100%

Were pre-tests conducted?

	Frequency	Percent
No answer	6	5.0%
Yes	35	29.4%
No	78	65.5%
Total	119	100%

Were post-tests applicable to the initiative?

	Frequency	Percent
No answer	6	5.0%
Yes	40	33.6%
No	73	61.3%
Total	119	100%

Were post-tests conducted?

	Frequency	Percent
No answer	6	5.0%
Yes	31	26.1%
No	82	68.9%
Total	119	100%

Table 2: Numeracy Initiatives Testing 2006/2007

Were pre-tests applicable to the initiative?

	Frequency	Percent
No answer	4	8.5%
Yes	16	34.0%
No	27	57.4%
Total	47	100%

Were pre-tests conducted?

	Frequency	Percent
No answer	5	10.6%
Yes	10	21.3%
No	32	68.1%
Total	47	100%

Were post-tests applicable to the initiative?

	Frequency	Percent
No answer	5	10.6%
Yes	17	36.2%
No	25	53.2%
Total	47	100%

Were post-tests conducted?

	Frequency	Percent
No answer	5	10.6%
Yes	10	21.3%
No	32	68.1%
Total	47	100%

Therefore over a quarter of evaluated literacy initiatives this year conducted pre and post tests with participating JCSP students with over 20% of reported numeracy initiatives employing similar measurements.

While teachers are requested to include photocopies of their students' test results along with the evaluation reports, the submission of this information to the JCSP Support Service is often erratic. For example, while it was reported that approximately 40 pre and post tests measurements were carried out this year, results submitted to the Support Service by the end of June totalled 15. While in most cases, the number of students being tested both prior to and after the running of particular initiatives in order to measure a comparison is limited, a presentation of the standardised test results for selected literacy and numeracy initiatives, as submitted by teachers this year, is as follows:

Literacy Initiatives

Table 3: Reading Challenge

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	35	76%
Same Result	3	7%
Decreased Result	8	17%
Total	46	100%

Table 4: Paired Reading

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	17	94%
Same Result	1	6%
Decreased Result	0	0%
Total	18	100%

Table 5: SRA

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	15	47%
Same Result	4	12%
Decreased Result	13	41%
Total	32	100%

Table 6: Readalong

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	10	91%
Same Result	1	9%
Decreased Result	0	0%
Total	11	100%



Table 7: Word Millionaire

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	8	62%
Same Result	5	38%
Decreased Result	0	0%
Total	13	100%

Table 8: Spelling Challenge

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	9	100%
Same Result	0	0%
Decreased Result	0	0%
Total	9	100%

Numeracy Initiatives

Table 9: General Numeracy

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	9	82%
Same Result	0	0%
Decreased Result	2	18%
Total	11	100%

Table 10: Maths Games

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	8	75%
Same Result	2	17%
Decreased Result	1	8%
Total	11	100%

Table 11: Paired Maths

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	4	44%
Same Result	4	44%
Decreased Result	1	12%
Total	9	100%

Table 12: Flashmaster

Comparison Pre and Post Test Results	Number of Students Tested	Percentage
Increased Result	8	62%
Same Result	2	15%
Decreased Result	3	23%
Total	13	100%

Therefore, while pre and post-testing, as reported by teachers, was not in many instances appropriate for particular literacy and numeracy initiatives, the results that were submitted indicate that the majority of JCSP students were able to develop either their literacy or numeracy skills by taking part in an initiative this year.

3.1.2 Quantitative Findings

In addition to the data regarding pre and post testing, the evaluation report provided teachers with an opportunity to systematically identify a range of outcomes for both students and teachers through conducting and participating in initiatives this year (**Appendix A**, pp. 3-4). These data will be presented both in textual, tabular, and graphical form below.

3.1.2.1 Student Participation

Teachers were asked to identify the number of JCSP students who had participated in each initiative. This varied considerably depending on the nature of the initiative undertaken. However, the following statistics may provide some indication of the extent of initiative impact on numbers of students in JCSP schools.

Table 13: Student Participation

Initiatives	Minimum	Maximum	Mean	Mode
Literacy	5	420	29.77	12
Numeracy	2	46	14.76	15

Thus while certain initiatives undertaken this year, ex. Drop Everything and Read, involved whole school populations, the most common student target groups for literacy and numeracy initiatives this year were between 10 to 20 students. Based on the data from the submitted reports 4,237 students participated in literacy and numeracy initiatives this year, although this figure does not allow for students’ involvement in more than one initiative.

3.1.2.2 Staff Involvement and Cross-Curricular Characteristics

The evaluation form additionally requested that teachers provide an indication of the number of teachers that were involved in running their initiatives and, in their view, the number of subject areas that were addressed in the course of the initiative.

Table 14: Number of Teachers Involved in Initiative

Initiatives	Minimum	Maximum	Mean	Mode
Literacy	1	40	3.35	2
Numeracy	1	5	1.93	2

Table 15: Number of Subject Areas Addressed in Initiative

Initiatives	Minimum	Maximum	Mean	Mode
Literacy	1	10	1.92	1
Numeracy	1	3	1.19	1

Again, because the nature of certain initiatives required whole staff support, the mean figure for staff involvement in literacy initiatives is somewhat deceptive compared to that for numeracy initiatives. A more meaningful estimation, in this instance, would be taken from the mode figure for both literacy and numeracy initiative, e.g., that the most frequently identified number of teachers involved in the running of initiatives this year was two. Overall, based on the data from the 166 evaluation reports submitted to the Support Service, 490 teachers participated in the running of literacy and numeracy initiatives this year.

Similar to the statistics for staff involvement, the figures for the cross-curricular aspect of the initiatives this year is related to the whole school nature and involvement of some literacy initiatives. While the mode figure indicates that the most teachers viewed only one subject to be addressed in the running of their initiatives, the statistics, as well as the qualitative accounts (Section 4), do indicate that teachers are exploring ways to incorporate cross-curricular elements into the literacy and numeracy strategies.

3.1.2.3 Outcomes for Students

The quantitative section of the evaluation report asked teachers to assess the impact of the initiatives on participating students in a range of areas including academic skills development, attendance, behaviour, self-esteem, motivation, etc. For certain questions, respondents were asked to select from either a “yes” or “no” option, or were provided with a range of five possible choices (ex. All students, majority of students, half of the students, a few of the students, and none of the students). The data derived from the 166 returned evaluation reports are presented below in both tabular and graphical representations.



3.1.2.3.1 Development of Academic Skills

Literacy Initiatives

Table 16: Did initiative contribute to students’ literacy skills?

	Frequency	Percent
No answer	4	3.4%
Yes	114	95.8%
No	1	.8%
Total	119	100%

Figure 1: Initiatives’ Contribution to Students’ Literacy Skills

Did initiative contribute to students’ Literacy skills?

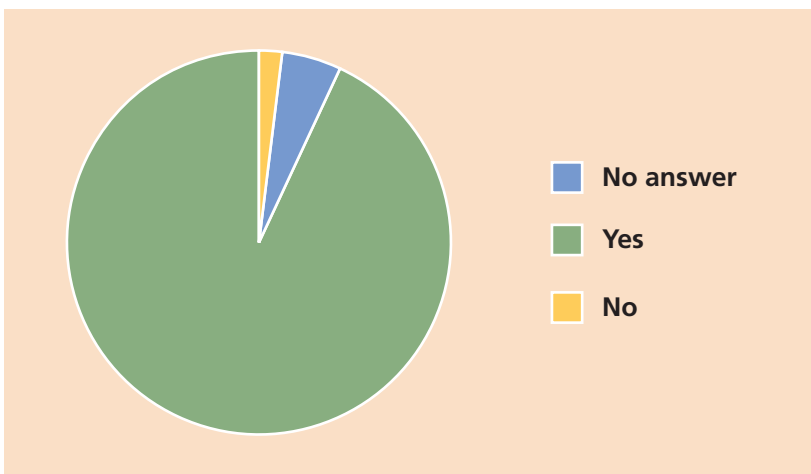


Table 17: Did the initiative contribute to students’ cross-curricular knowledge?

	Frequency	Percent
No answer	5	4.2%
Yes	73	61.3%
No	41	34.2%
Total	119	100%

Numeracy Initiatives

Table 18: Did initiative contribute to students’ numeracy skills?

	Frequency	Percent
No answer	3	6.4%
Yes	44	93.6%
No	0	0%
Total	47	100%

Figure 2: Initiatives' Contribution to Numeracy Skills

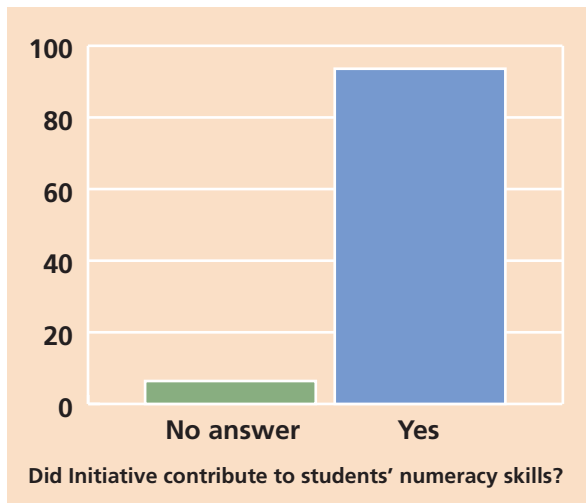


Table 19: Did initiative contribute to students' cross-curricular knowledge?

	Frequency	Percent
No answer	3	6.4%
Yes	14	29.8%
No	30	63.8%
Total	47	100%

Therefore, despite the limited data from the results of standardised pre and post testing that took place this year, teachers overwhelmingly concluded that through participation in the initiatives, their JCSP students had developed both their literacy and numeracy skills. It is interesting as well to consider that despite the rather low figures for the number of subjects addressed in the running of the initiatives (Table 15), over half of the teachers (52.4%) indicated that their students had developed their cross-curricular knowledge through participation in literacy and numeracy initiatives.

3.1.2.3.2 Development of Academic Skills

3.1.2.3.2.a Independent and Co-operative Work

Teachers were asked to evaluate the extent to which the initiatives provided their students with opportunities to develop skills in working independently. Additionally the questionnaire requested that teachers indicate whether the initiative had encouraged their students to work co-operatively with their peers.

Literacy Initiatives

Table 20: Did the initiative allow students to work independently?

	Frequency	Percent
No answer	4	3.4%
Yes	108	90.8%
No	7	5.9%
Total	119	100%

Table 21: Did the initiative encourage students to work co-operatively?

	Frequency	Percent
No answer	6	5%
Yes	94	79%
No	19	16%
Total	119	100%



Numeracy Initiatives

Table 22: Did the initiative allow students to work independently?

	Frequency	Percent
No answer	4	8.5%
Yes	40	85.1%
No	3	6.4%
Total	47	100%

Table 23: Did the initiative encourage students to work co-operatively?

	Frequency	Percent
No answer	4	8.5%
Yes	35	74.5%
No	8	17.0%
Total	47	100%

In summary, the data from the submitted evaluation reports indicate that initiatives made a contribution to developing students' individual and interpersonal working skills with 89.2% of teachers reporting that students were afforded the opportunity to work independently and 77.7% of responding that the initiatives encouraged their students to work co-operatively with their peers.

3.1.2.3.2.b Impact of Initiatives on Students' Attendance and Behaviour

Literacy Initiatives

Table 24: Did students' attendance change during the initiative?

	Frequency	Percent
No answer	5	4.2%
Yes	26	21.8%
No	88	73.9%
Total	119	100%

Table 25: Did students' behaviour change during the initiative?

	Frequency	Percent
No answer	5	4.2%
Yes	79	66.4%
No	35	29.4%
Total	119	100%

Numeracy Initiatives

Table 26: Did students' attendance change during the initiative?

	Frequency	Percent
No answer	1	8.5%
Yes	7	14.9%
No	36	76.6%
Total	44	100%

Table 27: Did students' behaviour change during the initiative?

	Frequency	Percent
No answer	3	6.4%
Yes	35	74.5%
No	9	19.1%
Total	47	100%

Thus while the data demonstrate that only 19.9% of teachers reported that their students' attendance had improved over the course of running the initiatives, 68.7% stated that overall JCSP students' behaviour in the classroom improved over the course of the initiatives.

3.1.2.3.2.c Self-esteem

In addition to questions related to academic skills development, work strategies, and behaviour, teachers were requested to assess the impact of the initiatives on their students' overall self-esteem. In order to measure this element, teachers were asked to consider a range of variables that would contribute to the development of young people's self-esteem.

Enjoyment of Initiative

Teachers were asked to give an indication of the number of students who had enjoyed participating in their particular initiative. The results are presented both for literacy and numeracy initiatives in **Tables 28** and **29**.

Literacy Initiatives

Table 28: Did student participants enjoy the initiative?

	Frequency	Percentage
No answer	4	3.4%
A Few of the Students	4	3.4%
Half of the Students	2	1.7%
Majority of Students	44	37.0%
All of the Students	65	54.6%
Total	119	100%

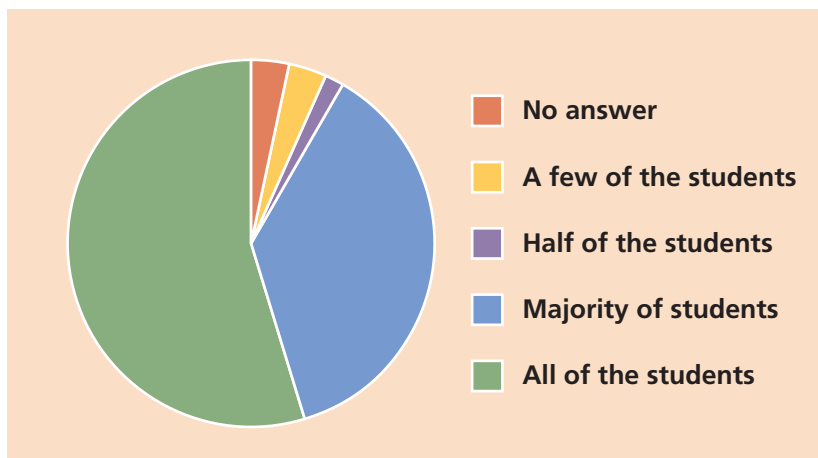
Numeracy Initiatives

Table 29: Did student participants enjoy the initiative?

	Frequency	Percentage
No answer	3	6.4%
A Few of the Students	0	0%
Half of the Students	1	2.1%
Majority of Students	18	38.3%
All of the Students	25	53.2%
Total	47	100%

Figure 3 presents the combined data from teachers assessing their students' enjoyment of the literacy and numeracy strategies this year. Overall, 54.2% of teachers reported that all of their students enjoyed participating in the literacy and numeracy initiatives this year, with 91.5% indicating that the majority of students had enjoyed taking part.

Figure 3: Students' Enjoyment of Literacy and Numeracy Initiatives 2006/07



Confidence

Additionally the teachers were asked to assess whether the initiatives had enabled their students to develop confidence during the course of the interventions. The following tables and graphical representation present the data collected for both literacy and numeracy initiatives with respect to the development of students' confidence:

Literacy Initiatives

Table 30: Did students' develop confidence through participation in the initiative?

	Frequency	Percentage
No answer	18	15.1%
A Few of the Students	4	3.4%
Half of the Students	8	6.7%
Majority of Students	40	33.6%
All of the Students	49	41.2%
Total	119	100%

Numeracy Initiatives

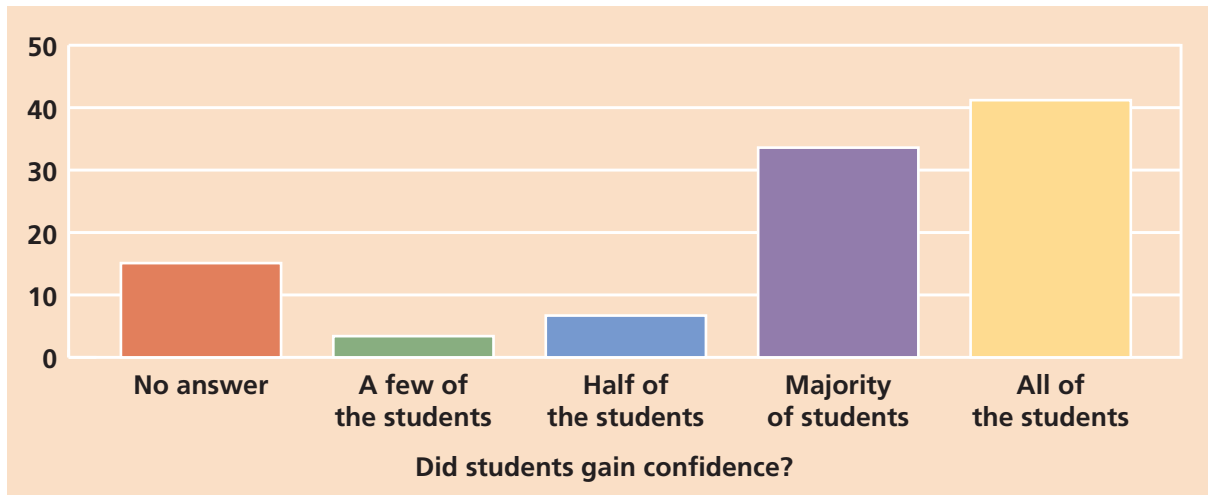
Table 31: Did students' develop confidence through participation in the initiative?

	Frequency	Percentage
No answer	6	12.8%
None of the Students	1	2.1%
A Few of the Students	1	2.1%
Half of the Students	3	6.4%
Majority of Students	18	38.3%
All of the Students	18	38.3%
Total	47	100%



Figure 4 presents a graphical representation of teachers’ views of the confidence literacy and numeracy initiatives enabled their students to develop this year.

Figure 4: Students Confidence Development/Literacy and Numeracy Initiatives



Overall when responding to this part of the questionnaire, in considering the literacy and numeracy initiatives they ran this year, 81.9% of teachers responded that half to all of their students benefited from participating in initiatives in terms of gaining confidence in themselves from the experience.

Attitude and Motivation

As well as reporting on their students’ enjoyment of the initiatives and the extent to which they were able to build their confidence through participation in the interventions, the teachers were asked to assess whether their students demonstrated positive attitudes and motivation during the course of the initiatives. The data from the 166 submitted reports is presented as follows:

Literacy Initiatives

Table 32: Did students demonstrate positive attitudes and motivation?

	Frequency	Percentage
No answer	5	4.2%
A Few of the Students	2	1.7%
Half of the Students	4	3.4%
Majority of Students	59	49.6%
All of the Students	49	41.2%
Total	119	100%

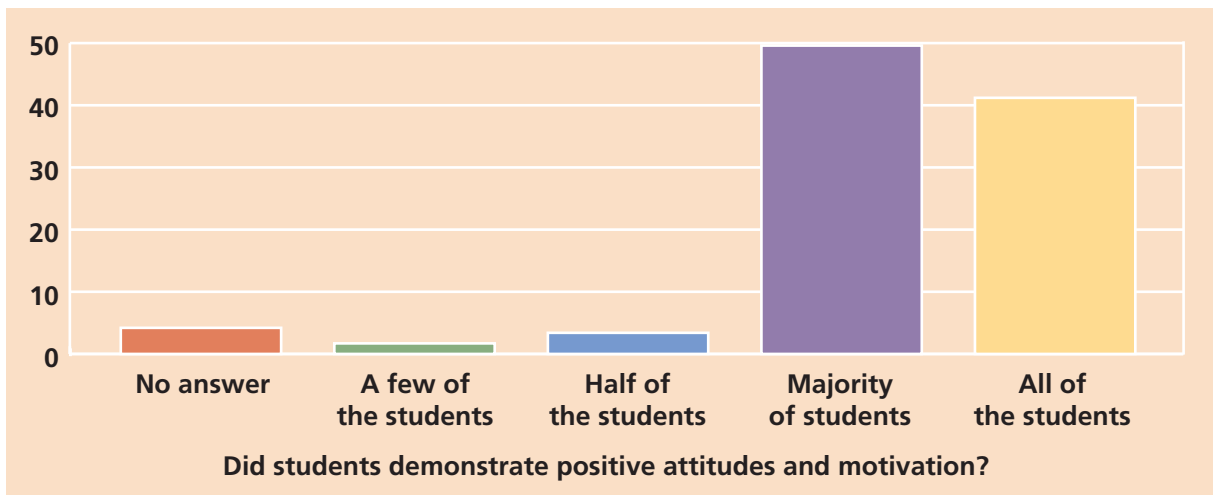
Numeracy Initiatives

Table 33: Did students demonstrate positive attitudes and motivation?

	Frequency	Percentage
No answer	3	6.4%
None of the Students	1	2.1%
A Few of the Students	1	2.1%
Half of the Students	1	2.1%
Majority of Students	22	46.8%
All of the Students	19	59.6%
Total	47	100%

Frequency analyses of the combined sets of data from reports related to the literacy initiatives and those concerning the numeracy initiatives demonstrated that 149 (N=166) or 89.8% of teachers felt that the majority, if not all, of their students had shown positive attitudes and motivation during the initiatives this year. A graphical representation of this finding is illustrated in **Figure 5**.

Figure 5: Positive Attitudes and Motivation



Sense of Achievement

Finally, in terms of outcomes for students who had participated in literacy and numeracy initiatives this year, the quantitative section of the evaluation report requested teachers to indicate whether they believed that their students had gained a sense of achievement either during the course of, or on completion of the initiatives.

Literacy Initiatives

Table 34: Did students gain a sense of achievement?

	Frequency	Percentage
No answer	7	5.9%
A Few of the Students	1	0.8%
Half of the Students	4	3.4%
Majority of Students	48	40.3%
All of the Students	59	49.6%
Total	119	100%

Numeracy Initiatives

Table 35: Did students gain a sense of achievement?

	Frequency	Percentage
No answer	3	6.4%
A Few of the Students	1	2.1%
Half of the Students	3	6.4%
Majority of Students	12	25.5%
All of the Students	28	59.6%
Total	47	100%

It is evident from the data presented in **Tables 35** and **36** that students who participated in the literacy and the numeracy initiatives for the most part gained a sense of achievement from the experience. This trend is graphically represented in Figure 6.

Figure 6: Students' Sense of Achievement

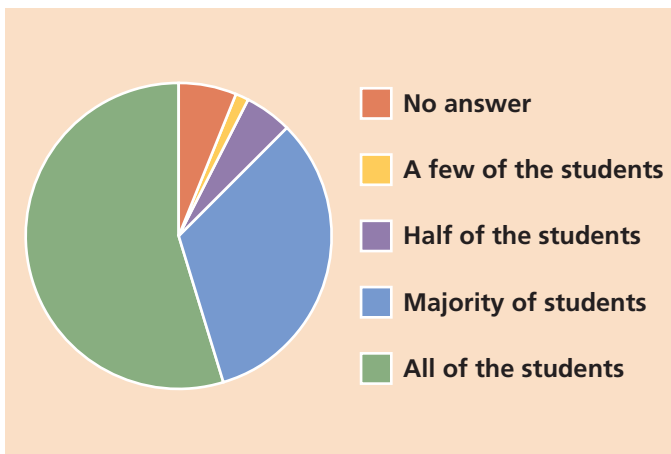


Figure 6 illustrates the findings from a frequency analysis of the combined data sets for literacy and numeracy evaluation reports with respect to the number of students' who gained a sense of achievement from participating in literacy and numeracy initiatives during the academic year 2006-2007. From the submitted evaluation forms, 147 (N=166) of the teachers (88.5%) indicated that they believed that between most and all of their students had gained a sense of achievement from participation in the literacy and numeracy this year.



3.1.2.4 Teachers' General Views

In addition to providing quantitative information about the number of participants in the initiatives and the range of student outcomes, the teachers were asked to answer a number of questions that would provide data indicating their general assessments of the initiatives they conducted this year. In answering these questions, the teachers provided the following results:

Numeracy Initiatives

Table 36: Was there enough time to run the initiative?

	Frequency	Percent
No answer	8	4.8%
Yes	144	86.7%
No	14	8.4%
Total	166	100%

Table 37: Would you run the initiative again?

	Frequency	Percent
No answer	11	6.6%
Yes	151	91.0%
No	4	2.4%
Total	166	100%

Table 38: Would you recommend the initiative to other teachers?

	Frequency	Percent
No answer	12	6.6%
Yes	150	90.4%
No	4	2.4%
Total	166	100%

The results presented in **Tables 37** and **38** indicate that the majority of teachers who conducted literacy and numeracy initiatives were positive about the experience to the extent that they would be interested in repeating the initiatives and had no aversion to recommending their use to fellow educators.

3.1.2.4 Teachers' General Views

In addition to providing quantitative information about the number of participants in the initiatives and the range of student outcomes, the teachers were asked to answer a number of questions that would provide data indicating their general assessments of the initiatives they conducted this year. In answering these questions, the teachers provided the following results:

“It was a great confidence booster for the JCSP students. Some students who had to be coaxed to take part really shone on the day. The primary students really enjoyed the experience and were disappointed to hear that it was a once off occurrence. I’d like to do it once a term, and have the primary students come to visit us.”

“My students in full uniform. I can honestly say that I was very impressed at, and proud of, the way they sat with their little groups of first class students and read 2 books to them. One of our students was so nervous he was literally shaking but he was delighted with himself. They were MODEL students and were very pleasant to the younger ones. One girl comes to mind. She has some behavioural problems and can be hostile. However on that day she managed her group (which could have been lively) in a firm, positive way. I would definitely do this again. Can I also add that the parents of the primary students thought that this was a fantastic event and the principal has requested that we do it again.”

3.2 Qualitative Findings

The first section of the initiative evaluation form (**Appendix A**) requested teachers to outline the main activities of the initiative in order to provide them with a forum to share their experiences of running particular initiatives this year. From the 166 teachers who did submit evaluation reports on literacy and numeracy initiatives, a rich narrative depicting the variety of pedagogical approaches adopted and the nature of the outcomes emerged. While evaluation reports were received for the 28 literacy and numeracy initiatives, this document will explore, from the qualitative data, the methods and outcomes reported for a selection of initiatives. The following initiatives have been chosen for inclusion in this report either because of the number of schools running the initiatives, the extensive return of detailed reports, the novelty of the initiatives, or a combination of these factors.

3.2.1 Primary Picture Books

This literacy initiative, in which schools link with a local primary school class and choose an appropriate picture book for JCSP students to read with the primary students, while only run by four schools this year, provided evidence of the range of positive outcomes that are possible through participation in innovative approaches to building students' literacy skills. Two teachers provided the following accounts:

3.2.2 Reading Programme in the English Classroom

This year 15 schools were provided with the funding to purchase the SRA reading laboratory kit for use in the English classroom exclusively. The majority of teachers reported that the initiative had a significant impact on their students' literacy skills as evidenced in the following accounts:

"Students organisational skills, communication skills, as well as reading skills, hugely improved over this session."

"This series is excellent for developing students' confidence in their reading particularly reading aloud as the levels are suited to their abilities."

"Students were tested straight after the initiative. Some students' reading ages improved while other stayed the same. Few students' reading ages ever decreased."

"The series is also highly effective in developing vocabulary, improving spelling and generating an understanding of how words are formed."

"The writing exercises have also been very effective in encouraging students to write and develop their creative writing skills."

"This series has had a very positive impact on my students' abilities in terms of reading and writing and I am confident that it will continue to be an invaluable resource for these and future classes."

In addition to helping students to develop their literacy skills, the evaluation reports demonstrate that this initiative also contributed to other aspects of the students' development including confidence, motivation and oral skills. Teachers highlighted the range of impacts from participating in the Reading Programme in the English Classroom initiative in the following ways:

"It certainly increased their levels of reading and awareness of comprehension language and answering questions."

"The students were glad with the change of methodology of the normal classroom lesson. They enjoyed being able to check and rate answers themselves and move on to a new work page once they had completed one. Initially I corrected and marked their work but by the end of the third week they were able to do this themselves under supervision."



"Most students took the SRA programme really well and participated enthusiastically and liked being able to move ahead themselves once answers were corrected. I think they enjoyed the autonomy and the responsibility that they could work away on their own."

"I believe it gave them confidence to see that we trusted them to work independently."

"I think the SRA programme is a fantastic tool and an added bonus to the classroom lesson. It provides the student with the opportunity to participate in independent study and encourages that student to take responsibility for his own learning. He can progress at his own pace and does not have to feel under pressure from other students in the class. For the more able students it gives a great sense of achievement. And because the cards become more demanding it provides the student with a challenge, which in turn helps to hold their interest."

While most teachers responded positively to many aspects of this initiative, there were a number of critical observations that were shared by teachers in completing their evaluations forms.

These included the following:

"Although the SRA is a wonderful resource, I feel it is far too complex for one teacher to run by him/herself. Team teaching is a must for this initiative."

"Please note SRA Reading Laboratory uses a lot of American spelling e.g. Favorite, honor, program etc which we choose to ignore!"

"Unfortunately we had two students in this class who have a reading age of six / seven and this level 2C was too advanced for them to read on their own. We do not have any other levels and so these boys were assisted to read and answer the questions on their own. Interest was difficult to maintain under these circumstances. They were very reluctant readers as expected. Apart from these two students the whole exercise was very successful and I certainly mean to continue using the SRA in the future."

As with all of the returned evaluation report forms, insights from teachers into how they would run the Reading Programme in the English Classroom initiative differently in future are helpful in terms of disseminating these experiences to other teachers who may be interested in running this initiative in the years to come. The following extracts provide a summary of the most widespread conclusions that were drawn by teachers running this initiative this year:

"I'd do it with less students. Next year two other teachers now know how to use the SRA kit and so we could all do it independently."

"I would make sure it was a group of 10 max, and it would have to be a team teaching exercise from the start."

"I would strongly recommend that we would START the school year with this task as a means of settling the students into the world of English studies. Also the various reading assignments could be used as a valuable springboard into other activities later in the year - a hugely inter-textualised resource!"

Wider selection of books

- Include graphic novels/magazines
- Change environment from classroom to somewhere more comfortable
- Allow more time, and run it only once a week last class in the evening or when students would have finished classwork to allow them to use it.

3.2.3 Reading Corners

This initiative, enabling schools to create a classroom reading corner with shelves that have books on a variety of topics, written at a range of reading levels and reflecting a wide range of genres, was run in 20 schools this year. The following three accounts provide qualitative evidence of the positive impact of reading corners not only for JCSP students but for the school community as a whole:

“Students really enjoyed their visits to the ‘bean-bag’ room and a lot of quality reading time was had by all involved. It has become the success story of JCSP in our school so far.”

“The corner attracts and creates an interest in reading for the students. It provides an opportunity for students to make their own selection in reading materials. To discuss reviews and share common characters and authors. It is opening up a new world for them in a comfortable, colourful surrounding and with the addition of background music and now reading is no longer regarded as school work but something to be enjoyed.”

“In order to ensure the books purchased for the JCSP students were of interest to them, we held an ‘Open Book fair’. The students thoroughly enjoyed selecting the books for themselves and their own shelves. It was a great success and as a result the students felt a sense of ownership and positive interest in the books chosen. Going to the library for a reading period is now seen as a reward, with frequent requests to go to the library – a very positive outcome. Tables, chairs and electrical points were put in place so that a whole class can use readalong headphones. No need for batteries and replacements. We have plenty of empty shelf space still, which we would hope to fill!”

While it is clear from the evaluation reports that the Reading Corner initiative is a beneficial intervention in schools, there were a number of issues that were raised by some teachers with respect to setting up and implementing reading corners in their schools. A number of teachers described initial difficulty obtaining a suitable location within their schools for reading corners. Additionally others observed that they encountered many delays in getting the reading corners fully operational as a result of problems with ordering and receiving stock, materials and equipment. All of the teachers who related this issue in their reports, were confident that the reading corners would be functioning completely from September 2007.

3.2.4 Flashmaster

As indicated above, Flashmaster was a new numeracy initiative this year and was a popular choice amongst teachers who were interested in focusing on numeracy skills with initiatives. Many of the evaluation reports document the flexibility that the Flashmaster provides teachers in terms of developing different methods of using the device within classrooms and for allowing both individual students and teachers to monitor the development of their mathematical skills. Teachers adopted different approaches some using the Flashmaster as a reward for good work during a lesson, others establishing it as part of the scheduled weekly work taking place within the classroom. With the exception of one teacher, who felt that the Flashmaster did not challenge secondary level students adequately, all of the evaluation reports indicated that both teachers and their students had shared positive experiences in participating in this numeracy initiative. One teacher explained the value of the Flashmaster for her students in this way:

“The majority of students in the classes selected would have difficulty with tables: a necessary core skill in Maths and their confidence in the subject are greatly affected as a result. They see it very much as a primary skill and it’s very hard to develop it at second level, without lowering student’s self-esteem. Accordingly all the teachers were eager to get involved in this initiative.”



The students were equally enthusiastic and excited when they laid eyes on these devices. They thought they were 'cool' and were very receptive to using them."

She continued to describe the long-term benefits of the initiative for her students as follows:

"With the Flashmasters the students were able to work independently on different levels and at their own speed. Consequently all students were able to experience success. The potential of these devices was seen predominantly while observing one student. This particular young man has a learning difficulty; he's rebellious, poorly motivated and would find tables especially challenging. He really enjoyed using the Flashmaster and was absolutely thrilled when he got 100% in a test, he proudly told the others in the class and the students were surprisingly very supportive, largely due possibly to the non-competitive nature of this initiative. Overall the students really enjoyed the initiative and ask regularly to use them."

While the general consensus was overwhelmingly positive about this initiative, teachers did share their thoughts on how they would adapt their methods in the future when using the Flashmaster with their JCSP students. The following quotations provide a flavour of the reflections teachers had on piloting this initiative this year.

"The Flashmaster is a very useful initiative for JCSP students. It can be set at different levels to suit the ability of the student. It is very important to allow students begin at a low level and achieve a score between 80-100%, this encourages them and gives them great confidence to continue. Students can keep a record of their scores and they enjoy the feedback from this."

"Frequent use is important to make sure you are not starting from the beginning again. Students like to compete against each other to see if they can score higher than their friends. Students enjoy using it because it is a lot different than the normal calculator."

"As a teacher I could keep a record of the students' success and see if they were making any progress."

"I would allocate more time to the initiative so that all the various functions could be effectively explored."

"We would pre-test students using the relevant section of France maths and post test them. We intend to use it on a rolling basis with all JCSP classes next year."

"I would post-test after each session addition, subtraction etc..."

"I would run the initiative on one afternoon per week, rather than on consecutive days. As it was late in the year when I got the Flashmaster I had no choice."

Teachers were generally in agreement that the Flashmaster is most effective when run for short periods in order to maintain the novelty of the initiative and sustain students' interest. A recurring observation from the Flashmaster evaluation reports was that teachers would in future implement pre and post testing in order to gain more extensive evidence of the impact of the initiative on their students' numeracy skills.

3.2.5 Maths Games and General Numeracy

Along with Flashmaster, Maths Games and General Numeracy were popular initiatives this year with 21 schools applying for and receiving funding to run these initiatives with their JCSP students. While the funding provided is to enable schools to source or develop age-appropriate maths games and/or maths activity packs, qualitative data from the evaluation reports indicate that teachers developed creative and interesting methods to support the development of mathematical and numerical understanding among their students through a range of activities. The following are examples of two different approaches that were taken this year:

"We wanted the programme to be fun, to improve mental arithmetic and to encourage parent's to participate in their child's learning. The programme consisted of a 6 week programme sheet which gave students and parents different mathematical tasks to do each night, such as - Tangrams, calculator worksheets, maze puzzles, addition and subtraction picture puzzles, card games, tower of Hanoi (woodwork teacher and HSCLO made these) At the same time they also had to spend an imaginary 1million euro and create a scrapbook and running tally showing their spending. Each student was given a ring-binder with all materials supplied and also a handbook detailing all the activities. In school students were taught several card tricks and numeracy tricks which they performed for parents at the Christmas celebration. This was a very worthwhile programme, making students use their minds add, subtract, multiply and divide. All became a little quicker doing mental arithmetic!"

"A 1st year JCSP class was chosen as the target group for this initiative. The students in this group certainly find maths challenging resulting in poor concentration; lack of motivation and confidence that in turn affects learning in this subject. It was anticipated that these students would certainly benefit enormously from this initiative, nurturing these behaviours/ characteristics, which would hopefully foster a better learning environment and an interest in mathematics.

Prior to the initiative, the seven students were tested using the 'mathematics competency test' (Hodder and Stoughton). A wide range of games covering a number of areas in mathematics was purchased from Carroll Education Limited following a search of the internet and catalogues from various suppliers. It was decided to run the initiative over a period of six weeks, with one class being used per week. The sessions were on different areas in maths, with the games being categorised under these. The attached sheet indicates clearly the layout of these sessions and the games used in each. The participating teachers completed comment sheets for each session, remarking on attendance, participation, social interaction, enjoyment, behaviour, and learning. These were compiled and served as a project journal for the initiative."

The evaluation reports provided data indicating that JCSP students had benefited from participating in Maths Games and General Numeracy initiatives this year. Participation in the initiatives enabled students not only to develop their numeracy skills and understanding but as well contributed to their self-esteem, interpersonal skills, and confidence, as demonstrated in the two following accounts:

"Games were introduced to our first year JCSP class. They became very engaged very quickly. The games highlighted their weaknesses and their dependencies on calculators. Students didn't lose interest, they were finding maths fun! The initiative was very beneficial for their mental arithmetic and for basic understanding of symbols. It was also very helpful for their social interaction with peers and teachers. Students were divided into groups, they had to answer questions independently but work co-operatively with rules. Needed to move groups to allow social interaction. It allowed them to see teachers in different light."

"Both teachers and students eagerly participated in the Maths Games Initiatives. They clearly welcomed and enjoyed this new active learning technique in the subject. Improvements were seen on all areas cited on the comment sheet. The majority of the games required working in smaller groups, thus encouraging the students to work cooperatively while developing their social skills and ultimately their confidence/self esteem."

As with the Flashmaster reports, the evaluations submitted by teachers for the Maths Games and General Numeracy initiatives provided insights into the reflections of the teachers having run these initiatives and their observations into ways that methods could be improved in the future. In general, their comments pertained to time allocation, planning, resources, and assessment, as demonstrated in the following extracts:



“The ‘different approach’ to maths had a greater impact on my 1st years than the other 2. They were more open and less set in their ways. I think this initiative should be launched earlier in the year so that resources can be put in place for the September for incoming 1st years.”

“Buy some different games which might have reading and Numeracy and adventure involved. Build up cross-curricular games. Need a good supply of different games. Begin it at start of the year, one day a week.”

“Longer time frame - over one year, to supplement learning, used at the end of the topic, or 10 minutes during a class.”

While a number of teachers reported that in future they would introduce pre and post testing to the initiatives, one teacher, who had done so this year, made the following observation:

“ Following the initiative the students were again tested using the mathematics competency test’. Unfortunately the results do not reflect the true success and benefits of this initiative. In all only one student improved, while little or no difference was observed for others. I believe this is largely due to a number of factors, which firstly includes the duration of the initiative. It is impossible to detect an obvious increase in results over such a small time frame. Certainly if it took place over the course of the year, the results would have undoubtedly been significantly different. In addition it is important to note that the real benefits of successes of this initiative cannot be measured using this particular test or any formal testing. These don’t measure motivation, participation levels, behaviour, interest in the subject, confidence or social skills. They don’t reflect the positive change in the learning environment, the enthusiasm, enjoyment and self-esteem in a subject which many students find tedious and challenging. In the future I hope to continue using these maths games regularly to enhance teaching and learning.”

3.2.6 Make Your Own Opolly

In addition to Flashmaster, Make Your Own Opolly was an additional numeracy initiative that was piloted this year with 11 schools receiving funding to run the initiative. With these resources schools were able to purchase “Make Your Own Opolly” starter packs based on the boardgame “Monopoly”. Reactions to this initiative were varied, some teachers, while acknowledging initial difficulties, reported positive outcomes, as expressed by one teacher as follows:

“There already was a cross age support programme ready with 1st years and 4th years, so I enlisted the help of the 4th years. They helped by simplifying the rules, helped with photos and maps of local areas. The 1st years themselves chose a name for their games - we bought five – we also practised addresses by being involved in the penpal initiative Louise Vegas and her boys – We also attended a musical gospel in our local theatre – the Mermaid theatre and we took photos of the local shops on the board e.g.: KFC, McDonalds etc. This photo shoot involved buying a camera, advice was given by one of the 4th years mother who was a professional photographer, she helped us when there was a problem with the camera. The spin off was that when the other students saw the JCSP students playing the game they wanted to play it and some of our disabled students were in the library due to modified curricular wanted to make their own sets. As a thank you the 4th years were brought to the cinema as a treat. The students enjoyed the project and I was happy with the outcome. However, I didn’t use the maths workbook attached because it seemed to put students off. I might use it next year. The social aspect of the project was a winner.”

Other teachers did not share similar positive experiences, several reporting difficulties in accessing and setting up materials to run the initiative, as in this extract:

“This initiative proved the most difficult and although the games were eventually located..... This took weeks to get then. They are not available in most toy shops and could only be got on line. When they eventually arrived I realised you needed to use the computer to modify them. My computer skills are limited, however, I did try to proceed with it. The next problem was that the computer to be used by teachers wouldn't load the disc. I used my laptop to modify them. As a result the programme has not yet been initiated. I will begin the programme in September.”

Despite various experiences in running the Make Your Own Opoly initiative, teachers were certain that their students had enjoyed the initiative and were confident that they would try running it again during the next academic year.



4. Conclusion

It is evident, based on both the quantitative and qualitative data collected this year that the JCSP Literacy and Numeracy Strategies are operating effectively in schools that participate in the programme. While it is clear that there is variation in the degree to which individual schools are implementing the strategies, there is evidence that in some schools literacy and numeracy initiatives are an on-going process with certain interventions being run each year as a matter of standard practice. Teachers are provided with the opportunity to evaluate and reflect on the methods they have used to work with their JCSP students and this has enabled them to, over the course of a number of years, develop and refine their pedagogical approaches to delivering the literacy and numeracy strategies. This aspect of professional development, that is inherent in the programme, allows as well for the dissemination of methodologies and practices to assist and inspire other teachers to develop their own creative approaches to improving the literacy and numeracy skills of their students.

Appendix A - References

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