Executive Summary


School of Psychology
Queen’s University Belfast
Stranmillis University*

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1. Scope of the Report
This report presents an overview of findings from the first four years (Phase 1) of the Early Years Enriched Curriculum Evaluation Project (EYECEP) which was conducted in schools in Northern Ireland since September 2000. For the first group of six schools (nine classes) in the Greater Shankill area (Belfast Education and Library Board), the evaluation covers the period September 2000-June 2004 and the children involved have now completed Key Stage 1 or their first four years of primary schooling. For the second group of six schools (8 classes), called the Contrasting Area Schools (from other Education and Library Boards), the evaluation covers the period September 2001-June 2004 and the children have now completed three years of primary schooling. The evaluation was initially commissioned by CCEA in August 2000 for one year only, and funding was then extended for another three years. From the beginning it was recognised that any positive effects of the Enriched Curriculum (EC) could be expected only in the longer term, hence the commitment to a longitudinal design and to a continuation of the project.

2. Background and Aims of the Enriched Curriculum
The EC is a pioneering curriculum that was devised jointly by the Northern Ireland Council for Curriculum, Examinations and Assessment (CCEA) and the Belfast Education and Library Board (BELB) to address perceived problems in the formal traditional curriculum, particularly in disadvantaged areas. It is characterised as a developmentally appropriate curriculum and is more play-based and activity-led than the pre-existing curriculum. Significantly, in Primary Years 1 and 2, it involves postponing the introduction of formal reading schemes to concentrate on oral language and emergent literacy activities, and postponing formal recorded arithmetic in favour of activities that lay the foundations for understanding basic mathematical concepts. A primary focus is to remove the early experience of learning failure.

3. Purposes of the Evaluation
3.1 To assess the short- and longer-term impact of the Enriched Curriculum on children’s learning dispositions and on their progress in literacy and numeracy in two samples: the
initial cohort of children in the Greater Shankill up to the end of Year 4, and the children from the Contrasting Areas schools up to the end of Year 3.

3.2 To investigate the perceptions of teachers and parents about the appropriateness of the revised curriculum for children as they progressed through the early primary school years.

3.3 To collect information on some of the factors that impact on the effectiveness of curriculum implementation, for example, teacher in-service training, external support and resourcing.

3.4 To examine the processes of implementation and collect information on programme integrity through structured classroom observations.

As well as providing annual summative evaluations on the children’s progress, the scope of the evaluation provided formative feedback to CCEA and the other major stakeholders on emerging issues related to the development and delivery of the EC. Suggestions and recommendations were made at the end of each year.

4. Design, Sample, Measures and Method

With regard to pupil outcomes, the general design of the evaluation was a longitudinal pre/post quasi-experimental design with carefully selected comparison groups. Baseline measures were collected when the children entered school in their first year and outcome measures were collected at the end of each school year for four years (Shankill Schools) and for three years (Contrasting Area Schools). A strategy was adopted to use year-ahead and two-year ahead classes from the same schools as control samples.

Nine hundred and forty-three children (477 boys and 466 girls) participated in the evaluation study, either in the EC sample or in a control class; although sample sizes were substantially smaller for some of the statistical analyses.

At the heart of the battery of psychometric tests that evaluated pupils’ learning outcomes over time was PIPS (Performance Indicators in Primary Schools) - a suite of tests that included baseline literacy and numeracy measures, end-of-year reading and mathematics attainment tests, and measures of children’s general level of ability. Additional age-
appropriate measures of oral language, basic mathematical concepts, and written expression were used at various points in the study. Measures of children self-concept and dispositions for learning were also collected.

The Quality of Learning Instrument (QLI) is a classroom observation schedule and was used to assess how well the quality of learning in the classroom aligned with the principles and practices of high quality early years’ education. It gives an index of programme integrity.

All teachers (N=59 over 4 years) were interviewed each year, and surveyed by questionnaire, to get information about their experiences of teaching the curriculum, their perceptions of children’s progress, and issues relating to training and resources. In addition, parents’ views were elicited each year to find out their impressions of the new curriculum and how it was affecting their child’s educational progress. The parents’ response rate per year was low (between 12%-42% for various subgroups) but we are confident that at least 50% of parents responded at some point over the four years.

5. Results
5.1 Pupil Outcomes
There were substantial differences between the Shankill and Contrasting Areas schools on a variety of measures - eligibility for free school meals (62% vs. 16%), baseline literacy and numeracy scores and measures of children’s general ability (PIPS proxy IQ scores). Initial differences between children’s performance on these measures accounted largely for differences in the children’s learning outcomes in the two clusters of schools (exceptions are noted below).

On the more traditional indices of attainment, evidenced by PIPS reading and mathematics scores, the main finding was that the EC children’s performance was depressed relative to the controls in the first two years of primary school but they improve in Years 3 and 4 such that there was no substantial difference between the two groups in Year 4 for the Shankill schools and in Year 3 for the CA schools. As the EC curriculum deliberately postponed teaching the more formal aspects of reading and mathematics that PIPS assesses, it is not
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It is surprising that attainment differences occur in the earlier stages. Despite this postponement, the differences have disappeared by the end of Key Stage 1. The catch-up differences between the two school groups are due almost entirely to differences in the initial ‘developed’ resources (baseline and ability) that the children bring to school.

The above pattern was confirmed statistically through multi-level regression model analyses. In addition, it was clear that the post-Year 2 improvements were evident for all levels of ability (grouped into High, Medium, and Low proxy IQ groups). There was some evidence (not statistically significant) that high ability children in the EC group were beginning to outperform children with comparable high ability in the control sample, particularly in mathematics. And this pattern held for higher ability children in the Shankill as well as in the CA. But even the weakest pupils in the sample, with low scores on initial baseline measures and low ability (more typical of the Shankill schools than the CA schools), show a post-Year 2 improvement and math their controls by the end of Year 4.

No differences were found between the Shankill and the CA schools in mathematics attainment when baseline scores and proxy IQ scores were taken into account. However, even after taking these into account, differences remained between the two groups of schools in reading attainment, indicating that Shankill children are likely to encounter specific problems in progressing their literacy skills.

Several variables affected reading and mathematics attainment across the whole sample and did not interact with participation in the EC. Boys and girls performed equally well in mathematics, but girls outperformed boys in reading (3.9 standardised points higher). Children’s age in a single class can vary by up to 12 months and there was a significant relationship between month-of-birth for both mathematics and reading attainment (.26 of a standardised point per month in maths and .17 for reading). Also, one or two schools produced particularly high performances in either reading or mathematics (or both) when the effects of other relevant variables were accounted for.
Additional measures were included in the testing battery as developmentally more appropriate and more closely matched to the learning goals of the EC. EC children showed slight advantages on these measures compared to controls, although we are cautious about this conclusion given the psychometric difficulties we encountered with some of these measures and the incomplete dataset.

For example, in Years 1, 2 and 3, both for oral language skills and mathematical concepts development, the EC children made good progress relative to the control group, such that the EC children were performing at the end of Year 2 at a similar level to the controls who were tested either several months later (maths concepts) or one year later (oral language). In Year 4, a test of narrative and expressive writing was introduced. Although we have data for the Shankill schools only, it does appear that the EC children are superior to the control group on this test, and particularly on aspects of organisation and coherence in their writing, and on vocabulary measures. It should be noted that scores on this test were very low and that EC children’s performance as well as control performance was not impressive.

5.2 Quality Learning in the Classroom
The most important finding from the classroom observation schedule – the Quality Learning Instrument (QLI) - was that it clearly differentiated the teachers in the Enriched Curriculum from traditional classes, with Year 1 and 2 EC classes (in particular) getting an experience that is consistent with the principles and practices of high quality early years’ education. The findings from Year 3 and 4 were not so clear – mainly due to variability in training for this cohort of teachers and an incomplete dataset. QLI scores improve as teachers get more experienced in the second year of teaching the EC, indicating that, in subsequent years, the quality of classroom learning should align even more closely with EC principles than it does when teachers are doing it for the first time.

5.3 Teachers’ Views
From the interviews and the surveys, teachers provided extensive information on their experience of the new curriculum, their perceptions of children’s progress, and on related
issues to do with resources and training. This information presented a rich picture that helped elaborate on pupil outcome measures and on the classroom processes observed in the QLI. Teachers embarking on the EC changed their practices, slowly, gradually and incrementally. Teachers remained committed and enthusiastic about the new curriculum across the 4 years, although Year 1 teachers were still the most enthusiastic. There were clear differences between the experiences of Year 1/2 teachers and Year 3/4 teachers with regard to the availability of training and resources, particularly among the Shankill cohort of teachers. Workload became an issue in Year 2. In addition, the interviews showed that there was a lack of agreement about the essential constituents of the EC and various aspects of good practice as children progress through the curriculum. The training and resource issues have clear consequences for the programme implementation and for the quality of learning experienced by the children in the classroom.

5.4 Parents’ Views
As indicated earlier, the response rate to the parents’ questionnaire was low, especially from the Shankill group of schools. Overall, parents had a very positive response to the EC and very few parents expressed criticisms of the whole curriculum. In particular they welcomed the lack of pressure on children in Years 1 and 2, and noted the enjoyment their children had going to school and the development of the children’s oral language skills. Many parents expressed concern that their children were not reading fluently in Year 1 but a sizeable minority reported dramatic improvements in either Year 3 or 4. Parents were generally pleased with progress in mathematics. A small number of parents were openly opposed to the new curriculum. An area of dissatisfaction which stood out was that parents felt they had not been kept adequately informed by the schools about the EC over the course of its implementation.

6. Conclusions
Two main conclusions will be highlighted:
Despite the postponement in formal teaching in reading and mathematics for almost two years, the children who were participating in the EC showed no significant differences in traditional measures of reading and mathematics attainment at the end of Year 4 (Shankill
children) and the end of Year 3 (Contrasting Areas). In cognitive domains that were more closely matched to the processes and outcomes of the EC (oral skills, mathematical concepts, narrative writing), the EC children were showing some learning advantages. In addition, although the developmentally appropriate curriculum had been initially conceived as best tuned to socially-deprived or low achieving children, it was emerging that high ability children might be ones who were benefiting most. But, even the weakest children in the sample in terms of their ‘developed’ resources when starting schools did as well in Year 4 as children who were following the pre-existing curriculum.

The issue of preparing teachers adequately, in terms of training, resources and school leadership, emerged as crucial for the successful implementation of the Enriched Curriculum.

A final point – this is a longitudinal project and, although we have paused after 4 years to examine the summative effects so far, we have no reason to believe that 3 or 4 years is a sufficient amount of time to reach sensible conclusions about the eventual effects of the EC on children’s learning. In these kinds of projects, time lag effects can be very long.