Extended Abstract

(6) Essential Learning Competencies of Pupils in Key Stage 1 at Primary School Level

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The new Educational Reforms were introduced to primary grades in all schools in Sri Lanka in 1999. The key features of the Primary Education Reforms were,

1. The integrated curriculum,
2. The focus on the development of 40 essential competencies in all children,
3. Student-centred methods of teaching,
4. A teaching-learning process which is enjoyable and meaningful,
5. Organization in three key stages, 1,2,and 3,
6. The same teacher being in charge of the two grades, 1 and 2,
7. Gradual transition from guided play and activities to desk work,
8. Quality inputs to make implementation feasible.

The first macro-level study of a representative sample of 200 schools, which was supplemented by a survey of 10 per cent of all primary schools in the country (997 schools) was undertaken by the National Education Research and Evaluation Centre (NEREC), University of Colombo. This paper presents the findings of this study related to one of the components, Mastery of Essential Learning Competencies.

The Educational Reforms envisage the development of 40 Essential competencies in children undergoing education at primary school level. Detailed guidelines and samples of instruments to be used in assessment have been provided to teachers implementing the curriculum and training in respect of assessment of these competencies also has been done in two phases. The National Institute of Education (NIE) which developed the curriculum for the primary school level has trained the In-Service Advisers on the implementation of the curriculum and the In-Service Advisers, in turn, have trained the primary school teachers, through short training workshops. The teachers maintain records of assessment so that monitoring of the development of individual children can be done and the weaker students who lag behind can be given further attention. For the study undertaken by NEREC researchers focused only on 15 competencies which were more summative in nature and could be assessed at one particular visit.

The research team with the help of the curriculum developers at NIE, constructed the instruments to assess the 15 identified competencies. The research assistants drawn from a pool of staff of three universities, Masters students and Master Teachers serving the university Departments of Education were trained at a workshop on using the instruments. The sample for the assessment by teachers was 2443 students while the sample for the assessment by researchers in 200 schools was 872.

The objective of the paper is to present and analyze the data on development of the 15 competencies as recorded by the teachers and by the researchers. The analysis compared the percentages gaining mastery as assessed by the teachers and the researchers and further probed regarding the relationship between the mastery in competencies and background variables, such as sex, school type, and district.

Percentages of students who had gained mastery in the assessed competencies were categorized under four categories: 0-6, 7-09, 10-12 and 13-15, and these were cross-tabulated by school type, sex and district, separately for teacher assessments and researcher assessments.

The study found that there was a discrepancy in the assessment by teachers and researchers.

Table 1

Percentage Gaining Mastery by Competency (Researcher & Teacher)

Competency	Mastery (%)(Researcher	Mastery (%) (Teacher)
Answering questions	70.5	97.2
Adding numbers	75.0	92.0
Categorizing into groups	55.0	88.4
Copying in sequence	62.0	94.5
Counting and writing	87.7	95.3
Dictation	56.4	94.0
Identify Coins	90.5	88.2
Identify shapes	47.7	92.0
Measures units	68.0	88.0
Picture sequence	73.8	99.5
Picture variation	75.3	98.3
Reading aloud	63.0	91.4
Reading numbers	74.4	91.1
Subtract numbers	55.7	91.4
Writing sentences	55.9	98.8
Total (N)	872	2443

Noteworthy differences were.

1. Identify shapes 47.7 and 92.0
2. Dictation 56.4 and 94.0
3. Subtract numbers 55.7 and 91.4

Only in 'identify coins' was teacher assessment lower (90.5 for researchers and 88.2 for teachers).

It should be noted that the same sample was not used for the assessment, even though the sample assessed by the researchers was included in the larger sample assessed by teachers.

When the data on mastery in competencies was categorized under four categories according to levels of mastery also the same picture emerges (Table 2).

Table 2
Mastery in Competencies (Teacher & Researcher)

Category	Teacher	Category	Researcher
0-10	03.2	0-6	11.8
11-20	8.3	7-9	9.0
21-30	12.5	10-12	12.5
31-40	76.1	13-15	66.6
Total (N) Competencies	40	Total (N) Competencies	15
Total (N) Pupils	2443	Total (N) Pupils	872

The only variable for which a significant difference emerged was school type, that too for the researcher assessment. In researcher assessment, the percentage gaining mastery in the lowest number of competencies was lowest in 1AB schools (9.2 %) and highest in Type 3 schools (23.5 per cent). It was significant at .001 in researcher assessment. Mastery by school type in teacher assessment was not significantly different. This was understandable as in teacher assessment the percentage gaining mastery in all competencies had been assessed as very high.

Table 3

Mastery (4 Category Level of competency) (%) by School type (researcher evaluation)

School type	0-6	7-9	10-12	13-15	Total (N)
1AB	9.2	23.1	29.2	38.5	65
1C	14.3	11.1	26.5	48.1	189
2	21.5	21.1	25.3	31.9	316
3	23.5	20.2	23.2	33.1	302
Total (%)	19.7	18.8	25.1	36.4	872
Total (N)	172	164	219	317	872

Chi-square = .001

The comparison of percentages gaining mastery in competencies by sex yielded a very interesting finding. The percentage attaining mastery was greater for girls than for boys in all competencies, but there was no significant difference in mastery by sex. This finding is in conformity with the situation in general education in Sri Lanka where in most areas girls outperform boys and remain longer in schools.

Table 4

Mastery (%) by Sex (Researcher)

Competency	Female	Male
Answering questions	76.1	65.3
Adding numbers	80.6	69.7
Categorizing into groups	59.1	51.2
Copying in sequence	68.1	56.3
Counting and writing	89.6	85.9
Dictation	65.0	48.3
Identify Coins	92.4	88.9
Identify shapes	50.8	44.8
Measures units	69.3	66.8
Picture sequence	75.7	72.6
Picture variation	78.2	72.6
Reading aloud	71.1	66.6
Reading numbers	76.4	72.6
Subtract numbers	58.9	52.8
Writing sentences	62.6	49.7
Total No.	423	265

The mastery in competencies was cross-tabulated against district, but there were no significant differences for both teacher and researcher assessments.. This probably was because the number of schools in each district was very small, either ten or less.

Table 5
District by 4 Category Mastery (Teacher)

District	0-6	7-9	10-12	13-15	Total (%)	Total (N)
Colombo	6.5	8.2	10.6	74.7	100	245
Gampaha	14.3	7.1	3.6	75.0	100	84
Kalutara	04.5	04.5	09.0	82.0	100	89
Kandy	46.3	26.8	06.1	20.7	100	82
Matale	21.2	15.5	18.7	44.6	100	193
Nuwara Eliya	29.4	05.9	29.4	35.3	100	17
Galle	10.4	06.3	02.1	81.3	100	48
Matara	04.9	04.4	12.0	78.7	100	225
Hambantota	1.2	07.2	22.7	59.0	100	251
Anuradhapura	05.9	04.7	11.8	7.6	100	170
Polonnaruwa	17.4	15.4	14.4	52.8	100	195
Monaragaala				100	100	06
Badulla	18.6	36.0	02.3	43.0	100	86
Kurunegala	10.4	06.3	14.6	68.8	100	96
Puttalam	05.0	05.5	14.4	75.1	100	181
Ratnapura	16.0	00.0	8.0	76.0	100	50
Kegalle	01.4	01.4	07.1	90.0	100	70
Ampara	18.8	08.0	14.1	59.2	100	213
Trincomalee	01.3	05.3	08.0	85.0	100	75
Batticaloa			04.5	95.5	100	67
Total	11.8	09.0	12.5	66.6	100	2443
Total (N)	289	221	306	1627		2443

Chi-square = NS

Table 6

District by 4 Category Mastery (Researcher)

District	0-6	7-9	10-12	13-15	Total (N)
Colombo	8.0	16.0	26.0	50.0	50
Gampaha	20.8	22.9	27.1	29.2	48
Kalutara	34.0	12.8	29.8	23.4	47
Kandy	6.0	22.0	28.0	44.0	50
Matale	25.0	12.5	27.1	35.4	48
Nuwara Eliya	22.2	26.7	24.4	26.7	45
Galle	9.1	18.2	13.6	59.1	44
Matara	4.5	13.6	15.9	65.9	44
Hambantota	22.0	16.0	28.0	34.0	50
Anuradhapura	27.1	22.9	29.2	20.8	48
Polonnaruwa	35.4	27.1	25.0	12.5	48
Monaragaala	26.7	13.3	22.2	37.8	45
Badulla	02.9	23.5	35.3	38.2	34
Kurunegala	24.4	20.4	28.6	30.6	49
Puttalam	30.0	26.0	18.0	26.0	50
Ratnapura	40.5	08.1	29.7	21.6	37
Kegalle	05.5	20.0	15.0	60.0	40
Ampara	10.00	18.0	26.0	46.0	50
Trincomalee	25.7	14.3	22.9	37.1	35
Batticaloa	10.0	20.0	50.0	20.0	10
Total	19.7	18.8	25.1	36.4	100
Total (N)	172	164	219	317	872

Chi-square = NS

The study indicates areas in which improvements can be made with regard to the assessment of competencies. Even though it does not enable us to arrive at a definitive conclusion about over-rating by teachers, this appears as a possibility. Teachers may feel threatened that punitive action may be taken against them if their students fail to attain the required level of competency. It is also possible that the time constraints and the burden of assessing a large number of competencies (40) with some classes having more than the stipulated number of 35 students also make the teachers approach the task more mechanically and negligently in making their assessment. On the whole, the study indicates the need for better monitoring and supervision of teachers by In- Service advisers to whom this task has been assigned.