

Curriculum Reform Implementation Project Impact Study Two. Review of the Catch-Up Bridging to English Workshops

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LOCATING THE STUDY

The Curriculum Reform Implementation Project (CRIP) delivered a series of workshops in 2001 for lower primary school teachers, which were designed to provide lower primary teachers with bridging knowledge and teaching strategies to assist children moving from learning in a vernacular language at elementary school to learning in English in a primary school.

The workshops involved the initial training of a small group of trainers (TOTs) who subsequently trained a larger group of trainers (TTTs) who proceeded to run workshops for Grades 3-5 lower primary school teachers, throughout Papua New Guinea.

Teacher Workshops

CRIP conducted 66 workshops for Grades 3-5 primary school teachers using the graduates from the TTT workshops. Each workshop had a ceiling of 30 participants and ran for five days. CRIP had specific criteria for selection purposes that targeted Grades 3-5 teachers who:

- are currently teaching elementary graduates;
- have not had any previous training in 'bridging';
- have access to lower primary curriculum materials and resource documents; and
- with a view to gender balance and the inclusion of teachers from rural areas.

A sample of 33 teacher workshops was selected to make up the study and eleven of those workshops were visited by one of the research team. Three questionnaires were developed by NRI for teachers, to be administered at the start of each workshop, at the end of each workshop, and six weeks after the completion of the workshop, respectively. Workshop facilitators were asked to complete a separate questionnaire as well. An observation sheet was designed for use by the research team, when visiting workshops. The visits also allowed focus group discussions to be held with participants, as well as interviews with workshop facilitators and other stakeholders from provincial education offices.

A total of 468 teachers completed pre-workshop questionnaires, 492 teachers completed end-of-workshop questionnaires and 228 teachers completed post-workshop questionnaires. Twenty-three facilitators completed questionnaires as well.

UNDERSTANDING THE DATA

Six focus questions guided the study as it attempted to understand the strengths and weaknesses of the catch-up, inservice workshops. They were:

1. To what extent did the train the trainer workshops prepare trainers to deliver the catch-up inservice course?

The TOT refresher workshop experience was positive for most participants and they enhanced their knowledge and skills. The content of the workshops was suitable, but two days was insufficient time even on the understanding that it was a refresher program for trainers who had done a longer course within the past twelve months.

There was a need to extend the duration of the TTT workshops to enable adequate and in-depth coverage of content areas. A two-week long workshop was considered as a minimum length, on the basis of the data from the study, and three to four weeks was the preferred workshop length.

2. What strategies were used to implement the teacher inservice by trainers, and were they appropriate and successful?

Time Constraints

All teacher workshop facilitators referred to the time constraints that they worked under in the workshops. Comments were made such as 'good understanding achieved in the time that was available', 'participants just need extra time to fully complete their work', and 'needs to have more time to design term or yearly programs'. Facilitators developed a number of strategies to cope with the heavy workload:

- taught all content areas within the time allocation, regardless of understanding;
- taught content areas until understanding is achieved and disregarded the time allocation;
- omitted content areas in which the facilitator lacked confidence;
- omitted content areas that the facilitator thought would be too difficult for participants to grasp easily; or
- increased the amount of workshop time by using night-time sessions.

Facilitators made independent decisions about the amount of time, or the depth to which they treated the major content areas. As a result, teachers experienced different combinations of content areas, and different amounts of allocated time.

The majority of facilitators reported that they omitted sub-topics of work. The sub-topics most often omitted were:

- Unit 1: The New Lower Primary Curriculum, particularly sub-topics of choice cards, child-centred and teacher directed activities, and evaluation time using KWL;
- Unit 3: Management of a Child-Centred Classroom, particularly sub-topics of small group teaching and learning, identifying different types of groups, group role time, five stages of group work time, and assessment activities; and
- Unit 4: Resources, particularly sub-topics of production of resources time, human resources time, making big books, and language activities.

Concepts in Units 1 and 3, such as child-centred teaching, and grouping, were perceived by facilitators to be familiar to many primary teachers, although the actual skills to realise these concepts were lacking in many teachers. According to teachers, activities to enhance skills in these areas would have added to the learning outcomes of the workshops.

Teachers also reported that sub-topics in Unit 2: New Approaches to Teaching and Learning Language, such as use of genre in language programs, and planning an integrated theme were given inadequate time to allow for sufficient understanding.

Some facilitators simply ran out of time. For example, the topics of assessment and evaluation, assessment in the primary curriculum, and assessing learning in theme plan were mostly timetabled for Friday morning by facilitators. By the fifth day of the workshop, facilitators were invariably behind with their presentations; teachers were behind in completing activities such as big books and theme webs; and teachers were directed to read the workshop material at a later time.

Resource Production

The omissions from Unit 4: Resources were consistent with the overall teacher responses that this unit, in particular the production of resources, was inadequately covered during workshops. It was an area in which teachers required further assistance.

The Resources omissions may have been the result of inadequate materials or the facilitators' own lack of competency in this area. However, it was more likely the amount of time allocated to this area. The identification of material resources and the production of resources were time consuming and these were often the first content areas to be passed over by facilitators. Some facilitators timetabled resource production as a Friday morning activity, and were unable to give it adequate attention.

Facilitators' Competencies

Twelve of the 23 facilitators who completed surveys commented that they were poorly or inadequately prepared to lead the teacher workshop on the basis of their own TTT participation.

The facilitators were generally critical of the shortness of their own training programs and their lack of in-depth knowledge of the content areas. The majority of facilitators suggested that a two-week TTT program would have been more appropriate, and that more time could have been given to programming in two languages, teaching about genres, the production of resources, and assessment practices.

Some facilitators recognised their own weaknesses in content knowledge and skills. They invited local resource people to workshops, such as Summer Institute of Linguistics staff, to talk about the whole language approach or orthography development, CDD staff to explain the overall reform curriculum and the content of new subjects, and elementary teachers to talk about big book production.

The researchers who visited several workshops found that some facilitators were using terms such as genre, bilingual education, and integrated theme, which were not properly explained to teachers. At times, this was because of the facilitators' own uncertainty about the meaning of these concepts, or simply an inability to explain the concept well enough. There were several possible responses to this issue:

- additional training for facilitators by CDD and CRIP;
- provision of a printed glossary of terms by CDD and CRIP;
- development of video programs by CDD and CRIP;
- use of practical demonstrations by facilitators; and
- simulation and role play activities by facilitators and participants.

3. To what extent did teacher participation in the workshops increase their understanding of the reform curriculum in the area of bridging to English?

The pre-workshop and end-of-workshop surveys that were completed by teachers contained two questions which were identical in order to measure the growth or decline in knowledge and skills of participants over the period of the workshop. The questions focused on:

- knowledge of the reform curriculum; and
- knowledge of reform subjects.

Knowledge of the Reform Curriculum

All participants indicated a much higher level of understanding of the reform curriculum by the end-of-the workshop than at the commencement of the workshop.

Table 1: Teacher ratings of knowledge of reform curriculum at pre-workshop and end-of-workshop

	Male		Female	
	Pre-Workshop %	End-of-Workshop %	Pre-Workshop %	End-of-Workshop %
poor	22.7	0.0	25.5	0.0
insufficient	14.3	5.1	24.0	4.4
sufficient	48.7	49.0	46.9	54.2
very sufficient	9.2	35.7	2.6	24.1
excellent	5.0	10.2	1.0	17.2
	N=197	N=202	N=271	N=290

Knowledge of Reform Subjects

Teachers were asked to list the subjects in the reform curriculum at the start and at the end of the workshop. The responses were assessed in terms of 'yes': the teacher was able to list all of the reform subjects, or 'no': the teacher was unable to list all of the reform subjects. Tables 2 and 3 show the poor level of knowledge by participants at the start of the workshop and the change by the end of the workshop, for both males and females.

Table 2: Pre-workshop rating of knowledge of reform subjects

	Male	Female
	%	%
yes	29.7	32.5
no	70.3	67.5

Table 3: End-of-workshop rating of knowledge of reform subjects

	Male	Female
	%	%
yes	67.5	74.3
no	32.5	25.7

Knowledge of Workshop Content

Teachers were asked to rate the level of their knowledge of the major workshop content areas at the end of the workshop. Table 4 shows the mean ratings given by male and female teachers on a five-point scale.

Table 4: Mean ratings for knowledge of teaching strategies, classroom management techniques, and resources, by the end of the workshop

	End-of-workshop					
	Male			Female		
	Mean	N	SD	Mean	N	SD
Knowledge of whole language approach	3.75	199	0.88	3.81	286	0.80
Knowledge of big books	4.21	200	0.92	4.40	289	0.75
Knowledge of programming in two languages	3.68	199	0.93	3.71	287	0.86
Knowledge of integrated theme	3.97	200	0.89	4.00	287	0.80
Knowledge of use of a variety of genres	3.73	198	0.94	3.72	289	0.87
Knowledge of grouping	4.13	196	0.88	4.36	281	0.72
Knowledge of timetabling	3.95	196	0.91	4.12	280	0.97
Knowledge of subject time allocation	4.05	198	0.88	4.09	280	1.00
Knowledge of planning a weekly theme	3.91	197	0.96	4.00	281	0.87
Knowledge of assessment	3.63	198	0.96	3.65	276	1.04
Knowledge of organising a classroom	4.03	201	0.88	4.39	287	2.32
Knowledge of material resources	3.62	201	1.02	3.83	287	0.92
Knowledge of production of resources	3.60	201	1.04	3.79	287	0.93

The means for female teachers were higher than the means for male teachers for all content areas, except knowledge of the use of a variety of genres.

The means for knowledge of Big Books by the end of the workshop were high, and reversed the finding that 80 percent of teachers at the start of the workshop had no experience of big books.

Appropriateness of the Reform Curriculum

Table 5 shows the mean ratings that participants, coming in contact with the reform curriculum and bridging strategies for more or less the first time, allocated to the major content areas of the workshops.

Table 5: Mean ratings for the appropriateness of teaching strategies, classroom management techniques, and resources, by the end of the workshop

	End-of-workshop					
	Male			Female		
	Mean	N	SD	Mean	N	SD
Appropriateness of whole language approach	3.39	194	1.13	3.75	277	1.10
Appropriateness of big books	3.53	196	1.22	3.91	277	1.15
Appropriateness of programming in two languages	3.35	194	1.14	3.72	275	1.15
Appropriateness of integrated theme	3.48	192	1.17	3.81	277	1.15
Appropriateness of a variety of genres	3.43	194	1.17	3.82	277	1.07
Appropriateness of grouping	3.75	198	1.09	3.98	287	0.98
Appropriateness of timetabling	3.72	197	1.09	3.87	279	1.10
Appropriateness of subject time allocation	3.72	195	1.08	3.87	276	1.11
Appropriateness of planning a weekly theme	3.75	195	1.07	3.80	281	1.07
Appropriateness of assessment	3.50	198	1.14	3.50	276	1.20

Appropriateness of organising a classroom	3.78	193	1.01	3.90	273	1.06
Appropriateness of material resources	3.45	194	1.05	3.57	277	1.17
Appropriateness of production of resources	3.46	194	1.07	3.54	274	1.15

The consistency of the means indicated that the majority of participants considered the major content areas of the workshops to be appropriate or very appropriate for their lower primary classrooms, by the end-of-workshop.

Participants’ Assessment of Their Understanding of Workshop Activities

Teachers were asked at the end of the workshop to rate the amount of future assistance that they would need to successfully implement the reform curriculum in relation to the following areas:

- the syllabus;
- assessment;
- reporting;
- bridging to English;
- developing classroom resources;
- planning and programming themes;
- planning and programming multigrade teaching; and
- monitoring student progress.

Approximately two-thirds of respondents reported that they would require ‘some’, ‘a little’, or ‘nil’ assistance to implement the reform curriculum. The remaining one-third of respondents reported that they would require ‘sufficient’ or ‘a lot’ of assistance in the future.

Facilitators’ Assessment of Participants’ Understanding of Workshop Activities

Facilitators were asked to make an assessment of the ability of participants to implement the knowledge and skills covered during the workshop. Only two facilitators were confident that all of their workshop participants would be able to successfully implement the reform curriculum.

Table 6: Facilitators’ assessment of likelihood of participant implementation of the reform curriculum

Rating	Number	Percentage
none	-	-
some	-	-
most	13	56.5
almost all	8	34.8
all	2	8.7
Total	23	100.0

The remaining facilitators stated that the majority of workshop participants would be able to successfully implement the curriculum provided that there were curriculum reform materials in their schools.

Facilitators commented that teachers would be capable of passing on knowledge and skills from the workshop to other teachers, but the majority of participants would need more time and professional support to cope properly with the demands of the reform curriculum.

Facilitators nominated programming, integrated themes, use of a variety of genres, timetabling and weekly programs, assessment, and resource production, as the areas in which teachers would require further professional development.

4. To what extent did teachers change their teaching practices as a result of participating in the workshops?

The end-of-workshop and post-workshop surveys contained a number of identical questions, which allowed some consideration of the degree to which teachers understood that they had changed their practices, as outcomes of the workshops.

Table 7 indicates that there had been a small decline from the end-of-workshop to the post-workshop rating of knowledge of the reform curriculum.

Table 7: Teacher ratings of knowledge of reform curriculum at end-of-workshop and post-workshop stages

	Male		Female	
	End-of-workshop %	Post-workshop %	End-of-workshop %	Post-workshop %
poor	0	2.7	0	5.9
insufficient	5.1	8.1	4.4	5.9
sufficient	49.0	45.9	54.2	58.8
very sufficient	35.7	29.7	24.1	21.6
excellent	10.2	13.5	17.2	7.8
	N=202	N=98	N=290	N=130

It was a positive sign that many of the participants rated their knowledge of the reform, as much the same over the course of the surveys.

Table 8 shows mean ratings for male and female respondents for knowledge of teaching strategies, classroom management techniques, and resources. In every case, the means had declined from the end-of-workshop to the post-workshop.

Table 8: Mean ratings of knowledge of teaching strategies, classroom management, and resources, at end-of-workshop and at post-workshop

	Male				Female			
	End-of-workshop (N=202)		Post-workshop (N=98)		End-of-workshop (N=290)		Post-workshop (N=130)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Knowledge of whole language approach	3.75	0.88	3.69	0.93	3.81	0.80	3.44	0.89
Knowledge of big books	4.21	0.92	4.08	0.86	4.40	0.75	3.85	1.06
Knowledge of programming in 2 languages	3.68	0.93	3.35	0.75	3.71	0.86	3.40	1.04
Knowledge of integrated theme	3.97	0.89	3.73	0.80	4.00	0.80	3.66	1.07
Knowledge of a variety of genres	3.73	0.94	3.49	0.87	3.72	0.87	3.43	0.87
Knowledge of grouping	4.13	0.88	3.76	1.01	4.36	0.72	3.74	1.04
Knowledge of timetabling	3.95	0.91	3.76	1.04	4.12	0.97	3.60	1.12
Knowledge of subject time allocation	4.05	0.88	3.84	1.01	4.09	1.00	3.58	1.17
Knowledge of planning a weekly theme	3.91	0.96	3.49	1.02	4.00	0.87	3.50	1.11
Knowledge of assessment	3.63	0.96	3.35	1.09	3.65	1.04	3.04	1.11
Knowledge of organising a classroom	4.03	0.88	3.61	1.13	4.39	2.32	3.57	1.01
Knowledge of material resources	3.62	1.02	2.92	1.16	3.83	0.92	3.10	1.02
Knowledge of production of resources	3.60	1.04	2.86	1.15	3.79	0.93	3.02	0.93

Table 9 shows the level of confidence that male and female participants had to use teaching strategies, classroom management techniques, and resources in the classroom.

Table 9: Mean ratings of confidence with teaching strategies, classroom management, and resources, at end-of-workshop and at post-workshop

	Male				Female			
	End-of-workshop (N=202)		Post-workshop (N=98)		End-of-workshop (N=290)		Post-workshop (N=130)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Confidence of whole language approach	3.77	0.82	3.71	0.93	3.82	0.81	3.34	0.94
Confidence of big books	4.18	0.85	4.05	0.94	4.31	0.78	3.67	1.15
Confidence of programming in 2 languages	3.66	0.90	3.43	0.80	3.70	0.87	3.34	1.09
Confidence of integrated theme	3.95	0.94	3.68	0.88	3.97	0.79	3.53	1.07
Confidence of a variety of genres	3.70	0.93	3.57	0.90	3.72	0.85	3.40	1.04
Confidence of grouping	4.13	0.85	3.73	1.10	4.28	0.73	3.70	1.12
Confidence of timetabling	4.03	0.88	3.78	1.06	4.06	0.96	3.67	1.13
Confidence of subject time allocation	4.03	0.92	3.70	1.05	4.04	0.94	3.71	1.13
Confidence of planning a weekly theme	3.95	0.89	3.54	0.99	3.96	0.88	3.56	1.04
Confidence of assessment	3.67	0.94	3.35	1.06	3.53	1.04	3.23	1.08
Confidence of organising a classroom	4.10	0.85	3.64	1.27	4.24	0.77	3.62	1.08
Confidence of material resources	3.70	0.92	3.25	1.30	3.93	0.85	3.36	1.16
Confidence of production of resources	3.64	0.93	3.14	1.22	3.87	0.89	3.26	1.02

The means for female teachers are higher on most of the content areas than those for male teachers, at the end of the workshop. All means declined by the time the post-workshop data were collected, but the means declined more in the case of female teachers.

Table 10 shows the post-workshop means for male and female participants concerning the usefulness of the content areas of the workshop.

Table 10: Post-workshop means for male and female participants for the usefulness of the content areas of the workshop

	Post-workshop					
	Male			Female		
	Mean	N	SD	Mean	N	SD
Usefulness of whole language approach	3.84	98	0.90	3.38	129	0.90
Usefulness of big books	3.97	98	0.87	3.50	128	1.20
Usefulness of programming in 2 languages	3.73	98	0.90	3.34	129	1.06
Usefulness of integrated theme	3.81	98	0.94	3.53	129	1.10
Usefulness of a variety of genres	3.59	98	0.86	3.42	129	0.95
Usefulness of grouping	4.03	97	0.97	3.85	129	1.13
Usefulness of timetabling	4.03	97	1.00	3.72	129	1.10
Usefulness of subject time allocation	3.94	97	1.01	3.70	129	1.08
Usefulness of planning a weekly theme	3.89	97	0.95	3.64	129	1.09
Usefulness of assessment	3.64	97	1.02	3.36	129	1.16
Usefulness of organising a classroom	3.91	96	1.09	3.63	127	1.13
Usefulness of material resources	3.54	96	1.24	3.31	127	1.21
Usefulness of production of resources	3.57	96	1.22	3.29	127	1.14

The means were strong indicators that participants perceived the workshop content to be relevant and useful for the classroom. Male teachers reported marginally higher means for all content areas, in comparison to female respondents.

Table 11 considers the means for the success or otherwise of applying workshop content in the classroom. Male and female teachers reported positive application of what was learned in the workshops, except for assessment in the case of women, and material resources and production of resources for both male and female teachers.

Table 11: Mean ratings for the application of teaching strategies, classroom management, and resources, in the classroom

	Post-workshop					
	Male			Female		
	Mean	N	SD	Mean	N	SD
Application of whole language approach	3.36	94	1.03	3.26	126	1.03
Application of big books	3.55	94	1.03	3.31	125	1.23
Application of programming in 2 languages	3.15	94	1.03	3.18	125	1.09
Application of integrated theme	3.24	94	1.06	3.35	125	1.09
Application of a variety of genres	3.18	94	1.01	3.22	126	0.86
Application of grouping	3.53	96	1.24	3.58	128	1.13
Application of timetabling	3.44	96	1.26	3.35	128	1.19

Application of subject time allocation	3.38	96	1.23	3.42	128	1.21
Application of planning a weekly theme	3.26	96	1.16	3.25	128	1.17
Application of assessment	3.12	96	1.15	2.94	128	1.02
Application of organising a classroom	3.43	97	1.14	3.56	126	1.01
Application of material resources	3.03	96	1.19	3.10	126	0.99
Application of production of resources	3.00	96	1.21	3.16	126	0.96

The teachers gained knowledge and skills from participation in the workshops. This statement was qualified by the generally accepted point, by all stakeholders in the catch-up workshops, that more could have been achieved if the content demands were consistent with the availability of time for workshop activities.

It is not so much what takes place in the catch-up workshops that influences change in classroom practices, but more so the contexts that teachers return to in their schools. Respondents in the study referred to the lack of materials, support in schools from colleagues, and language issues, which precluded change from taking place, no matter how positive the outcomes of the catch-up workshop may have been for a teacher.

Teacher Supports

Teachers reported poor levels of support from others to help them implement the reform curriculum. Teachers expressed little confidence in others who were meant to provide professional assistance. Female teachers reported even poorer levels of support than male teachers. Head teachers, senior teachers, and inspectors in schools received low ratings, from female teachers, in particular.

Table 12: Levels of support from others

	Gender							
	male				female			
	head teacher	senior teacher	inspector	peers	head teacher	senior teacher	inspector	peers
	%	%	%	%	%	%	%	%
none	14.3	14.7	18.2	12.1	34.0	43.8	43.8	34.7
a little	8.6	11.8	9.1	9.1	12.0	8.3	6.3	10.2
some	25.7	20.6	21.2	36.4	26.0	25.0	29.2	24.5
sufficient	28.6	26.5	21.2	24.2	20.0	16.7	6.3	16.3
a lot	22.9	26.5	30.3	18.2	8.0	6.3	14.6	14.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The majority of teachers reported little or no support from the community and parents for the implementation of the reform curriculum. A majority of teachers commented that there was positive support from pupils for the new techniques and strategies that they introduced into their classroom activities.

Reform Curriculum Materials in Schools

Teachers are unable to change their practices, even when they want to, if reform curriculum materials are unavailable in schools. The data from this study indicated that some ten percent of participants reported not having the reform materials in their schools.

Language Skills

A taken-for-granted assumption about bridging programs is that teachers are fluent in a vernacular language and are fluent in the language of the children whom they teach. The evidence from this study indicated that the majority of teachers had a vernacular language, but some 25 percent of teachers stated that their reading and writing skills in that language were poor or insufficient for classroom use. As well, some 70 percent of teachers reported that they did not use their own vernacular in the classroom because it is not the language of the children; there was no single language group within the class; the children started education in English; or there were no bridging materials in the school.

Linking Subjects

Approximately 75 percent of teachers reported that they were now linking subjects as a result of the workshop.

Assessment

Teachers also indicated a change in their approach to assessment in the classroom. Although testing was strong, there was an increase in continuous assessment activities in lower primary classrooms. The frequency of testing was also undergoing review by a number of teachers who had been exposed to the reform curriculum, and were de-emphasising weekly testing in preference to daily assessment of student work.

5. What factors inhibited or facilitated teacher participation and learning?

Several provinces did not fulfil their responsibilities in terms of the workshops. As a result, teachers from isolated areas were overlooked or had to meet the costs of travel themselves. This matter was further compounded by provinces preferring to run workshops in provincial centres, rather than locate them closer to teachers at the district level, which discriminated against female teachers.

A number of additional issues constrained the day-to-day effectiveness of the workshops:

- The amount of bridging content to be covered in a one-week workshop was too much, based on the experience of this sample of workshops. Some rationalisation of content areas is required should it not be feasible to increase the length of workshops.
- Provinces need to ensure that workshop facilitators have sufficient unimpeded time to prepare for workshops.

- Workshop facilitators need to ensure that, where possible, participants receive workshop materials at least one week before the commencement of the workshop.
- Bridging manuals should be reviewed to include practical activities, resource production, and suggestions for visual presentations of new concepts.
- Bridging workshops should include practical demonstrations and videos on the use of two languages.
- The facilitators' training manual be rearranged so that assessment and evaluation are covered after Unit One to ensure sufficient time is given to these important areas; theme programming, timetabling, planning daily lessons and assessment are taught as an integrated unit; and answer guides are provided for facilitators.

6. Is the model used to deliver catch-up inservice appropriate for the PNG context?

The current workshop model has added to the overall knowledge and skills of primary school teachers of the reform curriculum. Nonetheless, there are flaws in the model, as identified in this study, that have constrained the outcomes of the workshops. For example, the lack of support for the sole workshop participant who returns to school undermines the intent of the workshop and the reform of the curriculum.

CRIP should consider a district or school-based cluster model of inservice workshops in which local educators, such as head teachers and district supervisors, are trained to provide initial training and on-going workshop activities to cater for the implementation of the education reform.