Introduction of a Wapishana-English bilingual education programme: an evaluation of the early stages

Gomes, A.S.

Chapter 6

Presentation of the findings

6.1 Introduction

In Chapter 5, I presented my sources and explained the methods used in this study. This chapter presents an evaluation of the findings based mainly on the three main methods employed: perusing written documents and conducting interviews, supplemented by classroom observations.

Beginning this chapter, Section 6.2 reflects on the problems and the need to redress them in a bilingual programme. Section 6.3 describes the planning of the programme in terms of the contributions made by several stakeholder groups and addresses the specific research question 1. Section 6.4 describes the actual programme in terms of the curriculum, materials, and teaching/training and addresses the specific research question 2. Section 6.5 evaluates the programme hitherto, with respect to emergent themes and the development of a conceptual framework and addresses the specific research question 3. Section 6.6 summarizes the findings by addressing the main research question.

6.2 The problems and need

It is useful to recollect the main problems identified based on preliminary observations before an evaluation of the findings are presented. The situation for most Wapishana children points to three main problems and the need to redress them:

1   academic underachievement

2   linguistic mismatch

3   declined cultural practices

Firstly, academic underachievement is reflected in children's performance over a period of several years at the National Grade Two Assessment. This was expressed, for example, by a head teacher who said that grade two pupils have scored below the mastery level at the National Grade Two Assessment over the last ten-year period (from Section 2.4.1.2). A similar pattern of underachievement emerged for students attending one of the

secondary schools situated in the Wapishana community. Based on statistics obtained through the Department of Education, results for Caribbean Secondary School Education Certificate showed that children from Aishalton Secondary School obtained the following pass rates of grades 1 to 3 in English (from Section 3.1.5), displayed in the table below.

Table 11. Pass rates of grades 1 to 3 in English
in Aishalton Secondary school
(from the Department of Education, Region 9, 2017).

Year	2012	2013	2016	2017
Per cent pass	12	23	38.4	43

Even though the school's percentage passes in English increased over the years, they have not surpassed the percentage passes at the national level for the same period. When the same subject is considered for 2013, for example, the national pass rates at grades 1 to 3 for girls and boys were 48% and 43%, respectively (Guyana Education Sector Plan 2014–2018: 23, from Section 3.2.2).

Secondly, the head teacher's comment and the pass rates of the secondary students' performance were reasons of concern among stakeholders. They believed that the children's underachievement was rooted in the linguistic mismatch experienced by the children during the foundational years of their schooling. Specifically, children's prior experience in their first language and culture is discontinued in a largely English-only instructional environment (from Section 3.4.1). As a result, most children had trouble in following the teacher's instruction and lesson content because of their limited knowledge of the second language. Consequently, it took longer for the children to achieve their educational goals because they are learning the second language and lesson content in it at the same time. Therefore, stakeholders felt that the Wapishana children's home language and cultural context should be used as an initial strategy in their instructional environment. Eventually, instruction in their second language would follow but at the same time the first language should be maintained.

Finally, stakeholders' perceptions also reflected that their languages and culture were not emphasized enough in the mainstream curriculum (from Section 1.2). A similar perspective was made during the advocacy meeting of stakeholders on 25 April 2015. Community members' comments

reflected a mismatch between the cultures of the community and the mainstream society. Community members commented that the content and pictures of textbooks and workbooks used in the classrooms should be relevant to the culture of the children (from Section 3.4.1). Furthermore, the elders interviewed expressed that those aspects of Wapishana cultural practices were in decline among the younger generations (from Section 2.4.5). The elders cited a decline in skills such as use of bows and arrows to hunt and the spinning of cotton to make hammocks. Stakeholders agreed that aspects of the traditional practices be incorporated in a new curriculum since this will help in the upkeep of Wapishana culture.

In sum, the central message is that the more the curriculum affirms the children's language and culture, the more likely they are to succeed academically. In reflecting on the lessons learned from the Wapishana instruction programme that was intermittently followed from the 1970s to 2002 (see Section 3.3), stakeholders thought that the Wapishana component could be reintroduced, improved, and expanded. Therefore, stakeholders agreed that in redressing the aforementioned problems, a mother tongue-based educational programme should be meaningfully integrated into the mainstream curriculum. Since the pilot programme is still at the early stages, the outcomes of this research would not be sufficient to determine whether or not solutions are found to the aforementioned main problems. Rather, a fuller-scale or longer-term programme would suffice. However, some immediate actions taken such as the instruction in Wapishana and teaching of the culture indicate that the linguistic mismatch is already being addressed; hence, some of the positive short-term outcomes of this research such as more participation and responsiveness by children are expected. The long-term outcomes of a full-scale pilot programme concerning the children's academic achievement and their cultural practices are yet to be realized.

6.3   Planning the programme: research question 1

The resource team met for discussions and training sessions before the actual programme was drafted. They were also in constant dialogue with representatives of the MoE, who advised on the aspects of the programme such as providing recommendations (see Subsection 5.3.1.4) and signing a memorandum of understanding (see Subsection 5.3.1.5). A brief overview of the programme has already been provided (see Subsection 5.31.1).

Prior to the start of the actual programme, teachers and parents attended workshops and subsequently came together with the children at the

schools to participate in trial sessions of the big books. The sessions with the children were specially about practising the given guidelines for the presentation of the big book. The data concerning the perceptions about the planning process of the programme was collected through the one-on-one interviews in Interview 1. The participants included seven individual stakeholders from the community who were part of the resource team: the programme coordinator, two head teachers, two teachers, and two community leaders. Their responses revealed a range of positive comments as well as suggestions in areas for improvement, all of which focused on contributions or involvement by stakeholder groups such as the government, a non-governmental organization, teachers, facilitator/coordinators, community members, and children. The responses/comments about the planning stages together with the components of the programme as contained in the Teacher's Handbooks address the specific research question 1: "What are the perceptions about the contributions of stakeholder groups in the planning stages of the mother tongue-based bilingual education programme?"

In this subsection, I present the most common or common as well as some varied comments about the contribution and involvement towards the planning stages by the following stakeholder groups: the government (Subsection 6.3.1), the non-governmental organization (Subsection 6.3.2), teachers (Subsection 6.3.3), facilitator/coordinators (Subsection 6.3.4), parents/community members (Subsection 6.3.5), and children (Subsection 6.3.6).

6.3.1 Contributions of the government

Five of the seven individual stakeholders commented that the government showed support for the programme generally. This was evident from some of the responses/comments by the following stakeholders taken from Appendix: Interview 1: "They are generally supportive, but nothing yet official" (Stakeholder A); "So far when invited, they are attending" (Stakeholder D); and "The Minister said he fully supports it" (Stakeholder F). The government, through the National Centre for Educational Research and Development, also provided "specialists in literacy and early childhood education" (Stakeholders B and C).

Representatives of the government preferred that instruction be in both Wapishana and English. As Stakeholder G commented, "They would like to see Wapishana and English together." Also, "They preferred to see

the programme in both Wapishana and English (instead of Wapishana first) because they saw it as a bilingual programme" (Stakeholder B).

During one of the meetings with the community members, two pertinent questions were posed by the representatives of the Ministry of Education for consideration: (a) "What happens to the English-speaking child who attends one of the pilot schools?"; and (b) "What happens if a child from the one of the pilot schools is transferred to another nursery (non-pilot) school in the district?" (Stakeholder B).

6.3.2 Contributions of the non-governmental organization

The Jesuit Missions provided most of the resources as evidenced from their responses/comments taken from Appendix D: Interview 1. For example, "They have links in terms of resources" (Stakeholder A); "The NGO provided all transportation, accommodation, and meals for the workshops" (Stakeholders B and C). The Jesuits volunteered to provide the consultant/facilitator. This was realized in the following statement: "The NGO representatives can procure and alternate specialists" (Stakeholder A).

One comment about improvement was in the recruitment of consultants. Two stakeholders made comments related to this: "The NGO should be open to other consultants from other NGOs (e.g. The Summer Institute of Linguistics) that indicate an interest to assist in the programme" (Stakeholders B and C). This comment surfaced as a result of one workshop having no consultant, with only the coordinators leading. Alternatively, "They should get someone to teach this programme in the absence of the facilitator" (Stakeholder D). Also, three stakeholders felt that in the absence of the consultant, there should have been another to continue facilitating the sessions in a professional but specialist capacity.

6.3.3 Contributions of the teachers

Most teachers in the nursery schools are Wapishana and Wapishana-speaking. This is evident in the following comments: "They know the Wapishana language (speaking)" (Stakeholders Band C), but "One teacher cannot speak Wapishana, but can speak Makushi" (Stakeholder F). However, two teachers revealed that they were not proficient in the reading and writing of Wapishana, a needed skill to be more effective in reading and presenting written texts in Wapishana. This was also revealed by the one stakeholders who said that "Some of them are not literate in Wapishana, although they may know how to speak it" (Stakeholder A).

Another comment was on the difference in contributions to the discussions between the trained and untrained teachers. Two teachers, for example, commented that they did not fully understand some strategies or methods as explained at the workshops. As two head teachers commented, "Young teachers do not fully understand the methodologies because some now come on the job" (Stakeholders B and C). Furthermore, when it came to teachers' input during the training sessions, mainly the "trained teachers contribute" to the discussions (Stakeholders B and C). Thus, most teachers felt that with more specialist training and experience, the untrained teachers would gain more confidence in contributing to discussions about the programme.

6.3.4 Contributions of the facilitator/coordinators

On the contributions of the consultant/facilitator, all seven individual stakeholders acknowledged that the consultant/facilitator was indeed a professional trained in pedagogy. A couple of positive comments attributed to the consultant/facilitator were as follows: "Facilitator is world class" (Stakeholder A) and "The consultant had everybody participating in a lively way" (Stakeholder D). However, in the ensuing workshops, the facilitator seemed to be perceived as an "impatient worker" (Stakeholder A) that resulted in participants being discouraged by the facilitator's overt rejection of their work and contributions. As a result, some participants discontinued their participation in workshops.

Another positive comment was about the recruitment of Wapishana as coordinators: "The coordinators can speak both English and Wapishana" (Stakeholder D). It was also the perception of three stakeholders that even though the coordinators were professional in their own fields, they were new to the programme. For example, "The younger persons are not grounded in early childhood education" (Stakeholders B). In other words, they lacked the

professional experience in teacher education and/or early childhood education for leading the sessions as in the case of at least one workshop when there was no consultant.

6.3.5 Contributions of the parents/community members

For their part, the parents and community members showed their general support. This was partly indicated in the following statement: "When parents were asked about the programme, they answered, "Yes, we want it" (Stakeholder B). As observed by one stakeholder, "When community members decide on something it is for a good reason" (Stakeholder A). According to another stakeholder, some parents who attended the training sessions were encouraged to partake in the trial sessions of the big books in an effort to have them more involved in their children's education. Moreover, the fact that some parents were willing to partake in the trial sessions of the big books with their children showed the extent to which they were willing to cooperate. Prior to start of the programme, for example, "Parents willingly came for one week for one hour a day to try out the materials" (Stakeholder E).

Even young community members other than parents participated as local artists and typists. One setback here is that some participants seemed to have expected some sort of compensation for their services, as in the following comment by one stakeholder: "Parents got no money to compensate for their time…" (Stakeholder G). When it was explained that all their services should be voluntary, they left the programme. Further, "Some parents were just not interested, e.g. from a total of 18 parents, sometimes only 3 or 6 came to meetings. Only the same set kept coming" (Stakeholder E). Consequently, the programme leaders asked for more volunteers at subsequent meetings with the community, encouraging them to offer whatever skills they have as support for the programme.

6.3.6 Contributions of the children

During the trial sessions of the big books, the children fully participated. Some interesting observations were made: "Children are familiar with some of the stories" (Stakeholder D) and "They enjoyed the stories" (Stakeholders B and C). In addition, the children were responding and interacting much more as illustrated in the following comments: "They understood the stories because it was in their language" (stakeholder D); "Most responded to questions" (stakeholder D); and "The child who never spoke up dominated

the discussion" (Stakeholder D). However, some pictures were not accurate, and as a result "Some children were not able to recognize some animal characters, such as the eel" (Stakeholder E). Further, "Some pictures could not be identified because they were in 'black and white'" (Stakeholder E).

6.4   The actual programme: research question 2

The preceding subsection described the contributions or roles of the main stakeholder groups pertaining to the planning stages of the programme based on Interview 1. In this subsection, outcomes are presented that concerns the actual programme.

The data about the various aspects of the actual programme were collected mainly through the one-on-one interviews in Interview 2. The participants included three class teachers, three head teachers from the nursery schools, and eighteen parents whose children are part of the programme. The responses/comments about the various aspects of the programme, where appropriate, are also complemented by extracts from classroom observations. All this addresses the specific research question 2: "To what extent have the essential features, components, and best strategies of successful bilingual education programmes been implemented in the introduction of the current programme?"

In this subsection, I present the findings under the following headings: curriculum (Subsection 6.4.1), materials (6.4.2), and teaching/training (Subsection 6.4.3).

6.4.1 Curriculum

The integrated curriculum encompassed language, math, and other activities as mentioned in Subsection 5.3.1.1 (the Teacher's Handbooks) and is set out over two school terms of fifteen and fourteen weeks, respectively.

A majority of teachers and parents felt that the curriculum was progressing satisfactorily, as illustrated in the examples of the following responses: "Yes, it is" (no. 22); "Yes, they said the programme was going good" (no. 23); and "Heard that the people said it is good" (no. 24, from Appendix E: Interview 2).

Some other responses taken from Appendix E also illustrate major constraints faced by teachers in following the curriculum. One teacher commented that adequate coverage of the topics and activities was hindered

by the challenges faced by the teacher in managing a large class of twenty-four. For example, the teacher noted, "Yes, but slowly because of the large class" (no. 22) and a parent added, "The second facilitator observed that the class was too large for the teacher" (no. 23). The large class exceeded the stipulated teacher–pupil ratio of 15:1 at this level. As one teacher commented, "The number in one class is 24. This is too many for one teacher. Now the Ministry of Education says the ratio is 1 teacher to 15 children" (no. 13). Consequently, more individual attention had to be given to children. Sometimes, this resulted in the teacher being unable to properly conclude all learning activities, before moving on to another concept. On how to improve the curriculum, one head teacher noted that "For math concepts, more practice should be done…to master concepts before rushing on to others, e.g. the numeral 3. […] Some children tend to confuse numerals with letters" (no. 6).

Another hindrance to the timely progress of the curriculum, according to a parent is that "Some younger parents do not have interest in the bilingual programme (no. 24). Specifically, the younger parents seemed uninterested when they were invited to meetings to assist in the collection or making of teaching materials. According to one half of the interviewees, community members other than parents of the cohort of the children seemed missing from the meetings (also see Subsection 6.3.5).

One of the concerns of the representative of the MoE according to the teachers was that the curriculum should achieve the required national standards or learning outcomes in the pre-reading, pre-writing, numeracy, and other developmental activities. Three teachers were "unsure" (no. 6) if these learning outcomes were clear or well-matched with the activities while two were certain.

6.4.2 Materials

Based on classroom observations, the main materials associated with literacy activities are the big books with stories (see also 5.3.1.2). Apart from the big books, there are also separate pictorial illustrations of the characters on charts that depict sight words. These are reinforced by a large chart of illustrations, labelled in both Wapishana and English (see Figure 26 below).

Figure 26. Illustrations of animals and a flower with bilingual labels.

As observed, all teachers in the big book presentation completed the first three steps, including inviting children to join in the "reading" of the sentences. These steps are the most straightforward because of the immediacy of the big book as a material. In going beyond these steps, only one teacher attempted inviting children to play the role of characters and retell the story in their own words. First, in demonstrating parts of the story, two children were guided in using paper models of the animal characters. Two children were instructed to hold the models and move them accordingly as the teacher read the story in Wapishana. The main challenge for the children was that they were uncertain when to move the paper models, prompting the continual assistance of the teacher. This caused the demonstration to be done haltingly. Second, for the retelling of the story, the teacher invited children to compose their own oral sentences about each picture through guided questions such as "What is happening in this picture?" Each sentence composed was repeated by teacher who in turn invited the children repeat the sentence. Each oral sentence is then written on displayed flip chart in front of the classroom. This activity was successfully completed as seen in the display of the story in Wapishana and English sentences on a flip chart below (Figure 27).
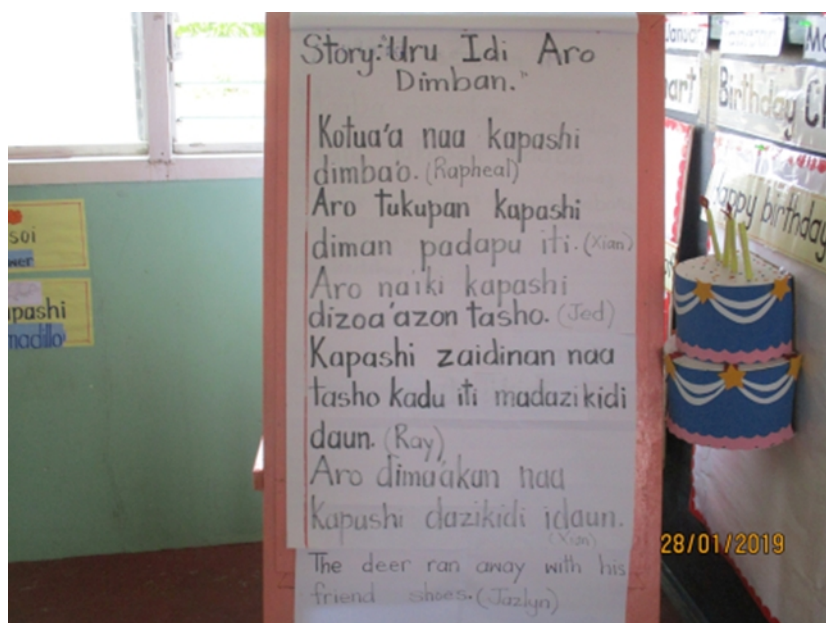
Figure 27. Sentences composed by children written on a flip chart.

Another teacher reported that the retelling of the story was attempted by having children match prepared sentence cards with each picture of the story. This activity proved to be too challenging for the children.

The language experience is one of the strategies employed as observed in children's short visits or trips to nearby places, accompanied by the teacher. There were two short trips made by one class to the village shop and the community health centre, where they listened to the explanation of the roles by shopkeeper and the health worker, respectively. They were also encouraged to ask questions. When they returned to the classroom, they orally reported what they observed through questioning by the teacher. However, the teacher did not employ the writing phase in which the teacher and the children together write sentences based on the reporting back.

For the pre-writing activities, children were seated in the whole class and other times in small groups. In the whole class, teachers demonstrated the formation of letters using large and clear letter cards. They drew the children's attention to the sound of the letters and helped them to name and recognize these letters in both English and Wapishana words. One strong link is this approach is the teaching of letter–sound correspondences related to the words of the story of the week or other stories previously told. The activity is extended to some letters from the English alphabet and related

English words children are familiar with. As noted, "Also, it was observed that both English and Wapishana words were dealt with in the activity" (see pre-writing activities in Appendix H: Classroom Observations). For reinforcement, the letters and words learnt are displayed on charts on the walls of the classrooms (see an example of such a chart in Figure 28 below).

Figure 28. Charts of Wapishana and English words
with a focus on the letter <u>.

In small groups, individual children did a variety of activities such as tracing, pasting, colouring, and shaping outline of letters. Such activities gave children exposure to tactile materials such as seeds, beads, crayons, and play dough. For each group, teachers first gave instructions and demonstrated the activity and assisted individual children to complete the activity wherever possible. For individual work and group work, children use paste, play dough, paper, crayons, seeds and beads, and miniature figures of some animals.

For mathematical activities such as identifying shapes and matching numerals, a list of materials such as beads, seeds, shells, and small smooth stones is obtained from the environment. A CD player and an accompanying audio CD contains recorded short songs or nursery rhymes for the children.

Besides a large chart for shapes, there are large numeracy charts with bilingual labels from 1 to 10 (see Figure 29 below).

Figure 29. Numeral and shape charts.

Other materials are small cardboard-made numeral grids of 1 to 5 (see Figure 30 below) to be filled with beads or seeds accordingly.

1					
2					
3					
4					
5					
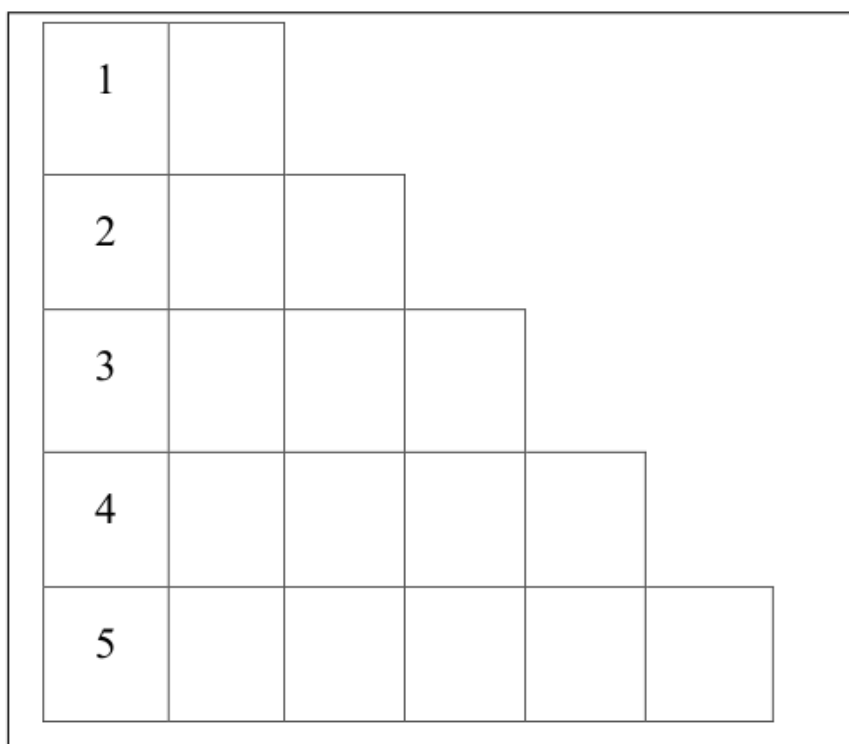
Figure 30. Numeral grid 1–5.

Given smaller numeral grids like the one depicted above, individual children were tasked with matching seeds or beads to numerals by filling in the spaces according to the corresponding numerals. Some children completed incorrectly the activity either because they did not fill all the spaces as indicated by the numerals or they also filled spaces on which the numerals were written.

For other activities, there is a corner for Wapishana artefacts (see Figure 31 as an example of display) contributed by parents and members of the community. Invited community members come to the school as resource people with their traditional materials such as traditional wear, baskets, fish traps, bows and arrows, and farm tools. They demonstrate how traditional activities are carried out.

Figure 31. Wapishana artefacts.

One aspect of the materials most interviewees liked was the quality, as evidenced in one of the responses: "They like the materials" (no. 16, Appendix E: Interview 2. The manipulatives or tactile objects were not only of a variety but also familiar and attractive. The pictures were large, beautiful, and colourful. As one teacher described, "Most of the materials are useful… creative, help to brighten the classroom" (no. 8). It was evident that the children liked the big books, as they can be seen flipping the pages during their spare time.

For improvement of the pictures, three teachers commented that some illustrations of the characters were unclear to the children. For example, one teacher commented, "Some of the pictures gave the children some problems in recognizing the characters, e.g. the artist drew a porcupine but the children say it is a pig" (no. 19). As a result, they had difficulty in identifying the characters. Another teacher felt that "Some pictures are not in proportion" (no.19) to others in some illustrations, while two parents felt that the colouring scheme could be improved and done before hand. For example, one interviewee said that "storybooks need more colouring" (no. 10).

Eighteen interviewees said that the materials were most useful because children can relate to them culturally. When interviewees were asked if they thought the materials represented the culture appropriately, eleven of them answered, "Yes" (no. 27). However, some stories, although relevant to the Wapishana culture and context, had some characters that were unfamiliar to some children. This is because the characters (e.g. the *minau* 'a type of nut') were not found in some villages. Besides, according to one teacher, "Other parents said that their children are not familiar with the materials because they do not take their children to the forest" (no. 16). Therefore, stories about fishing trips in the savannah were also unfamiliar to some children because they had not yet experienced fishing trips with their parents. The other challenge was finding stories that were specific for children. Most of the interviewees felt that the stories were for general audience. As one teacher commented, "mostly adult language used in stories, e.g. rhyming words are lacking" (no. 19).

One parent commented that although the stories are culturally relevant, they hoped that stories "not appropriate" (no. 26) are excluded. In terms of logistics, all teachers commented that the system of producing and distributing the materials was satisfactory. They all agreed that materials such as the big books came on time for the first term, but one teacher added that "in the second term, materials were brought after the term began" (no. 17). Another teacher further commented, "Timely delivery would result in better planning" (no. 18).

6.4.3 Teaching/training

As mentioned in Section 5.2, all three class teachers who teach the cohort of children (Year 1) and the three head teachers are attached to the nursery schools. Only one class teacher and two head teachers trained through the national teachers training programme for nursery teachers. The other two class teachers and one acting head teacher are not yet trained. From the other classes (Year 2), two teachers are on the in-service of the national teachers training programme.

One half of the interviewees felt that all teachers exhibited confidence in switching from English to Wapishana and vice versa in their spoken interaction with the children. For example, one head teacher commented "The teacher has confidence because she can speak both languages" (taken from no. 11, Appendix E: Interview 2). When reading and writing Wapishana was required on their part, two teachers admitted that they were at a disadvantage because they were not familiar with the spelling system of

the language. On whether or not they felt effective as teachers, the responses of teachers were as follows: "Certain words in Wapishana to write, I could not spell because I did not go through the Wapishana literacy course" and "There are times I find it difficult reading certain words in Wapishana in the big book" (no. 11).

Two teachers felt that the workshops assisted them in understanding the methods but not fully. One of the reason, according to one head teacher was that "Miss Elaine joined late… found some aspects difficult" (no. 4). Because the teacher joined the staff after the programme started, she missed valuable information on strategies and methods in the previous sessions. Furthermore, two head teachers were absent from most of the training workshops, especially when the duration of the workshops clashed with the school time. As one head teacher commented, "I never attended the workshop" (no. 3). Another teacher commented, "…I do not have a clear idea of what they expect…for language focusing on the storybook, this time they added 'inquiries, provocation'" (no. 12). On how to improve the programme plan, one teacher suggested, "I think when we go to the workshop, they are not demonstrating to us" (no. 4). On whether or not the training helped teachers understand the teaching methods, one teacher responded, "Not really; just lectures, no demonstrations" (no. 13). Another teacher suggested, "More demonstrations by facilitators would help" (no. 15). Nevertheless, it was the teachers' general perception that their attendance at the workshops helped them in preparing teaching materials. As one head teacher commented, "Yes, the training helps us to be more resourceful" (no. 14).

Besides training, one head teacher felt that "exchange visits to schools by staff" (no. 15) may add to variety in their teaching strategies in terms of sharing ideas on the presentation of materials/resources and the organization of the classroom environment. Further, one teacher suggested, "They always have the workshops in Aishalton. They should have workshops in other villages" (no. 4). Another teacher commented, "There should be exchange of venues for workshops. This would open up avenues for thinking" (no. 15). Another useful suggestion was to bring real life experiences from the field into the classroom via audio or video recording. For example, one head teacher suggested, "We need more audios/videos that are relevant, that would bring real life experiences from the field into the classroom, e.g. a scene of *maradapan* 'cleaning of pond for fish'" (no. 15).

6.4.4 Summary

There was consensus among the teachers and parents interviewed that aspects of Wapishana culture were incorporated into the curriculum. As a result, the programme has progressed satisfactorily, as seen in the increased interaction by children with the use of their home language and culturally relevant materials. However, there was concern by some teachers about the need for the activities to be properly concluded before new concepts are introduced. Most interviewees felt that teachers are confident in speaking both languages to the children. One setback was their unfamiliarity with the writing system of Wapishana which is a needed skill if they are to be more effective in reading, writing, and presenting materials in Wapishana.

Most interviewees liked the quality of materials. Some suggested that some of the illustrations or pictures of the big books need to be better produced. Others suggested that the all the big books should be coloured beforehand.

Most interviewees felt that the training sessions benefitted teachers in terms of being more resourceful. As an added component to the training, most teachers felt that the facilitator should model or demonstrate some of the strategies so that teachers can better apply them in practice. It was found that one teacher who missed the first set of training sessions was at a disadvantage in confidently employing the methods. Similarly, the head teachers who also missed training sessions were not fully aware what transpired. It was also found that teachers favoured other strategies of exchange visits and exchange of venues for sharing resources and ideas. Another suggested strategy was video/audio recording of real-life experiences in the field to show in the classroom.

6.5 Themes and the development of a conceptual framework: research question 3

In Section 6.4 the findings were presented under curriculum, materials, and teaching/training based on information from Interview 2. These findings were supplemented by information from the written sources (see Subsection 5.3) and classroom observations (see Appendix H), wherever relevant. This section attempts to infer from the findings commonalities or common themes that reflect key areas for improvement and upkeep of the programme. Further, I discuss the implications or possible factors that give rise to each theme, citing some essential components or ingredients that are consistent or inconsistent with successful mother tongue-based bilingual education programmes. All this addresses the specific research question: (3) "What

changes can be made for improvement of the current programme so that it meets the needs of the children, their families and their communities?"

This section begins with Theme #1 (Subsection 6.5.1). This is followed by the remainder: Theme #2 (Subsection 6.5.2), Theme #3 (Subsection 6.5.3), Theme #4 (Subsection 6.5.4), Theme #5 (Subsection 6.5.5), Theme #6 (Subsection 6.5.6), Theme #7 (Subsection 6.5.7), Theme #8 (Subsection 6.5.8), and Theme #9 (Subsection 6.5.9). Finally, I summarize the themes in the development of a conceptual framework (Subsection 6.4.10).

6.5.1 Theme #1: *Teachers working in bilingual contexts should have proficiency (oral, reading, writing) in the language(s) of instruction.*

This theme could be inferred from the following verbatim statements (from Appendix D: Interview 1: "Some of them are not literate in Wapishana although they may know how to speak it" (Stakeholder A). "They know the Wapishana language, speaking" (Stakeholder B and C). "Some teachers can speak Wapishana but cannot read and write it" (Stakeholder D). "All teachers talk Wapishana" (Stakeholder F).

More statements that led to the theme above are as follows: (From Appendix E: Interview 2: "We teachers need more training in teaching Wapishana. Ms. Elaine did not go to the WWA Wapishana literacy class which was being run by the WWA before" (DT) (no. 4). "Certain words in Wapishana to write, I could not spell because I did not go through the Wapishana literacy course" (LJ) (no. 11) and "There are times I find it difficult reading certain words in Wapishana in the big book" (EJ) (no. 11).

The following extract that also points to the theme above is taken from my own written observations about teacher–pupil interactions in the classroom:

> On three occasions, the teacher had to turn the big book to herself to make sure she could read the sentence before reading it aloud or just skipping it to go on to the next picture. It seemed that she was unable to "sound out" some words, suggesting that the teacher was not familiar with the written system of the Wapishana language although she knew to speak it well. Afterwards, in the interview she said that she never had the opportunity to attend any Adult Wapishana literacy classes. These classes had stopped in 2014 (Teacher B's Class, The Teacher, from Appendix H).

Although the teachers' ability to speak Wapishana is an asset to the programme, the implication is that they all needed to become familiar with the Wapishana orthographic convention to effectively utilize and present materials in Wapishana. In other words, their reading and writing skills in their children's first language become obvious prerequisites for the pilot programme, given that the stories in the Big Books and some of the instructions in the Teacher's Handbooks are written in Wapishana. They are also required at times to write in Wapishana. Because two of the teachers did not possess the these skills, they also were unable to participate fully in aspects of the training workshops that required them to either read or write Wapishana.

The need for teachers to possess the aforementioned literacy skills in their pupils' first language is underscored for similar contexts. According to Kosonen et al. (2005: 49), a literacy teacher working in such a bilingual situation needs to be able to read and write in the language of instruction to be a good model to the learners of both reading for meaning and accurate reading, in addition to being a fluent speaker of the language of instruction (from Subsection 4.6.2.3). Walter (2016: 1) also holds a similar position (see also Subsection 4.6.2.3) that in culturally diverse contexts where Multilingual Education or Mother Tongue Based-Multilingual Education programmes are implemented, teachers should not only have full oral proficiency but also the indispensable skills of reading and writing the children's first language if they are to provide good instruction to children to read and write in it. By the same token, while it is assumed that teachers should also be literate in the second language, it should not be taken for granted. In this respect, the BICS/CALP distinction (see Subsection 4.7.2.5.1) can be extended to the performance of classroom teachers who need to master ideas or concepts that are linguistically and cognitively demanding to be able to teach them to their students (ibid. 2016: 2). Programme implementers should ensure that teachers also have competence of both the first and second languages at the CALP level.

6.5.2 Theme #2: *Teachers should not only have special training in theories that underpin the strategies but also in some hands-on practice of the strategies.*

The following comments are taken from Appendix D, Interview 1: "However, others still do not fully understand the methodologies. Young teachers do not understand the methodologies because some now come on the job" (Stakeholders B and C).

The following are from Appendix E, Interview 2: "I think when we go to the workshop, they are not demonstrating to us" (EA) (no. 4). Further, on the question on whether or not the training helped teachers understand the teaching method, the following comments came forth: "No. We were just given guidelines…" (LJ) (no. 13). "Not really. Just lectures, not demonstrations" (DT) (no. 13).

On how to improve training, some comments were made: "Facilitator should demonstrate or model how the steps are done" (LJ) (no. 15). "Demonstrations by facilitator would help…" (DT) (no. 15). "More demonstrations by facilitator would help" (EA) (no. 15).

Some key stakeholders seem to believe that had the teachers been trained through the national teacher training programme, they would have contributed more in the discussions during the training workshops. This is because they would already have been exposed to some strategies such as the "top-down" and "bottom-up" approaches to teaching (Wallace 2001: 22, from Subsection 4.7.1.1). Consequently, trained teachers with this knowledge base of approaches to teaching would have benefitted more from the specific training sessions as would untrained teachers who are newly on the job.

Although it would be ideal that all the teachers are trained through the national teacher training programme, teachers could still benefit from training sessions where they observe the demonstrations of a component of a lesson by the facilitator or an experienced teacher. Each teacher would then take turn in practising that component in small groups, discussing the strengths and weaknesses with the facilitator and other participants. Some key stakeholders seem to suggest that since some teachers lacked exposure to the special training, more hands-on training activities such those mentioned above would have been helpful. Teacher confidence in addition to enhanced competence could transform classroom performance by teachers once the facilitator explains, demonstrates the strategies and gives them opportunities for practice in the training seminars (Trammell 2016: 7, from Subsection 4.6.2.3).

6.5.3 Theme #3: *A bilingual programme should reflect an appropriate route that is either sequential or simultaneous based on the linguistic situation of the learners in the specific context.*

On the government's contribution, the following comments were made (From Appendix D, Interview 1): "They preferred to see the programme in both Wapishana and English, instead of Wapishana first, because they saw it

as a bilingual programme. The emphasis was that Wapishana go hand in hand with English, which is difficult to do" (Stakeholders B and C). "NCERD said that the programme should not be in Wapishana alone; there should be English language used. They would like to see Wapishana and English go together" (Stakeholder G).

On whether the programme is helping the children, the following comments were made (From Appendix E: Interview 2): "… Yes, the programme is helping. Especially in English, children's understanding is difficult. When they hear Wapishana, they are more confident. They have the answers but to put it in English, they are not able; they do it better in Wapishana" (EJ) (no. 20). "Yes. The children are responsive. They talk a lot. They talk more freely and openly. With the games, they are more relaxed, but they can't do the activities in English. They rely more on Wapishana" (MA) (no. 20).

The following are extracts from my written observations based on classroom activities from Appendix H: "The teacher used both Wapishana and English throughout the lesson. Such use included questioning of pupils, acknowledgement of responses, instructions for new activities, and instructions for paying attention" (Teacher A's Class, The teacher). "The teacher used mostly Wapishana throughout the lesson. Each time a pupil responded correctly, she repeated their answers, and praised them in English with either 'Very good!' or 'Good job!' When some pupils answered in English, she also repeated their answers and sought to have them give the Wapishana versions" (Teacher B's Class, the Teacher). "The teacher used mostly English for about half of the lesson in discussing parts of the book and the pictures. When she came to the 'reading' part of the activities, she spoke mainly in Wapishana, but also asked pupils to give the English versions of the animals involved in the story" (Teacher C's Class, the Teacher).

One of the decisions by the implementers of the *Quality Bilingual Education Programme for Wapichan Children* was the incorporation of Wapishana and English as languages of instruction from the start of the programme. This decision was based on a recommendation by the representatives of the Ministry of Education (from Subsection 5.3.1.4). However, this recommendation seems more in line with the programme that promotes "literacy in both the L1 and English simultaneously or in close succession in situations where the bilingual children may have varying levels of proficiency in their L1 and English on entry to the programme" (Cummins 1996: 122, from Section 4.3). In the Wapishana situation, the children are largely monolingual in their L1, with several of them speaking a bit of English. On this account, the programme that promotes Wapishana

language in close succession to English seems to be in line with the "early-exit" transitional model of bilingual education, geared towards monolingualism in English. In such transitional models, the L1 primarily helps the children to adjust to dominant national languages and culture.

The decision to simultaneously use both languages for instruction seemed to be based on three specific circumstances: the title of the programme, children speaking some English, and national priorities for assessment. Firstly, according to three key stakeholders, the representatives of the Ministry felt that if the programme is bilingual, it should reflect likewise in the approach employed (from Subsection 6.3.1). As a result, the pre-reading activities in the Teacher's Handbooks, for example, have written Wapishana and English questions to be asked about the stories. Such an approach suggests that the children are developing both languages they already converse in. However, the situation for the children points to most of them being monolingual in their native language. Secondly, several children can be observed speaking some words, phrases or short sentences in English, even though their stronger language is Wapishana. Thirdly, given other influences that determine priorities for action such as preparing children for the English-medium National Grade Two Assessment, it is understandable that the simultaneous use of the languages is preferred. If it were a situation with a fair percentage of English speakers, then both languages should be provided. However, this approach should primarily be for the development of literacy in both languages. According to Baker (1995: 111, from Section 4.3), promoting literacy in both languages simultaneously works best when children already have relatively well-developed oral competencies in both languages. Since the children's stronger language is Wapishana, the simultaneous use of both languages in this situation contradicts what research and experience say. Rather, the sequential route is preferable when one language is stronger than the other (ibid. 1995: 110, from Section 4.3). In this situation, it is advisable that the children's stronger language competence be built first, before moving on to the second language competence, but at the same time maintaining the use of the first language. Recall that if the children are not taught to read and write in their stronger language first, less success and slower development will usually occur (ibid. 1995: 111, from Section 4.3). As was shown in the National Grade Two Assessment, children performed below the benchmarks set by the Ministry of Education (from Subsection 2.4.1.2). A similar pattern of underachievement was reflected in one secondary school where children's pass rates at grades 1 to 3 were below 44 per cent in English at the Caribbean Secondary Education for the years 2012, 2013, 2016, and 2017 (from Subsection 3.2.5).

Furthermore, on the simultaneous use of the two languages, I have observed that teachers employed two strategies. One is code-switching, which occurs when bilingual speakers switch from one language to another in the same discourse, sometimes in the same utterance (Silberstein 2001: 103). Accordingly, when expressing themselves to the children, the teachers switch from Wapishana to English and vice versa. The other strategy commonly used is translating, where the teachers repeat an explanation in one language using the other language. Code-switching works best as a common communication strategy in bilingual/multilingual contexts when all parties are competent speakers of the languages involved (Benson 2004: 3). However, according to Benson, code-switching may be more of a coping strategy for dealing with the new/second language and does not necessarily contribute to second language learning. In a similar vein, the translating strategy may not offer the "bilingual" advantage if the children have not yet developed the requisite conversational skills in both languages. While the translating strategy is helpful in the short term, it may be less helpful in the long term (Cameron 2001: 206). The reason, according to Cameron is that if a first language translation regularly follows an instruction or command in the L2, the children may come to recognize the pattern and stop trying to understand the initial version in the L2. Expressed differently, the children may become programmed to the teachers' translation and may stop listening in their weaker language until the teacher explains the concept in their stronger language.

Beyond code-switching and translating there is an innovative strategy: translanguaging. "Translanguaging in education encourages bilingual performances that in so doing enable students to move simultaneously along the continuum of two socially constructed languages according to the standards of the community and the home, as well as the school" (Garcia and Wei 2014: 69). For Trammell (2016: 5) translanguaging is one recommendation to try to promote a supportive environment, especially as it occurs when multilingual speakers alternate between two or more languages in the context of a single conservation. This strategy seems best to try when learners are already proficient speakers in both languages. That said, the concurrent use of both languages would work best when children already have relatively well-developed conversational skills in the languages. For culturally diverse children, the better alternative points to the sequential approach of using the languages of instruction, beginning with the children's stronger language. It is also consistent with moving from the pedagogical principle of moving from the known to the unknown (Smith 2012: 3, from Subsection 4.72)

A reason for reconsideration of the simultaneous use of languages is that oral L2 should be given careful attention as one of the stages of a mother tongue-based bilingual education programme (August and Shanahan 2006: 4, from Subsection 4.6.1). The introduction of oral L2 is the third of the four stages of progression for a mother tongue-based education programme in minority language communities as pointed out by (Malone 2005: 76, from 4.6.1). According to Malone, the first stage is the development of the children's oral L1, with the language of instruction being L1. The second stage is the introduction of reading and writing, followed by the introduction of oral L2, all conducted in the L1. At the fourth stage of introduction of reading and writing in L2, the language of instruction is L2. Malone notes that the stages may overlap and where the suggested progression is not applicable, it should be adapted. The stress is that importance should be placed on the introduction of oral L2; therefore, it should be taught systematically and entirely as a component (Craig 2004: 8, from Subsection 4.6.1). As can be seen, the progression of stages in this situation clearly points to the sequential use of the two languages.

6.5.4 Theme #4: *Part of early instruction for young learners should focus on rhythmic and repetitive patterns of language since these will more likely be recalled.*

The following comments (from Appendix D: Interview 1) reflects the above-mentioned theme: "First assignment was hard, e.g. we had to find 5 idioms, 5 songs, 5 riddles. Sometimes it is hard to rhyme in Wapishana" (Stakeholder B and C). "Some parents felt that some stories were inappropriate for children" (Stakeholder F).

The following comments were also made (from Appendix E: Interview 2): "Stories were mostly from adults with the adult audience. […] When persons were asked to collect or gather stories, the instructions were not clear about the stories being appropriate for the children. Therefore, some stories collected were long stories. So, they tried to break down and shorten the stories" (LJ) (no. 10). "The written expression needs to be developed. Mostly adult language used in stories, e.g. rhyming words are lacking" (MA) (no. 19).

The following are extracts from my written observations (From Appendix H): "Most times, the children had to hear a sentence repeatedly before they were able to repeat it after the teacher" (Teacher's A Class, The Pupils). "When it was time for the 'reading' of the sentence, the teacher asked the pupils to attempt to 'read' before she read them the correct

sentence. Often they could not 'read' the sentence. Instead, they repeated the sentence after her" (Teacher's B Class, The Class). "When it was the 'reading' part of the sentences, most children could not recall the sentences. So, they had to rely on hearing the sentences read by the teacher more than once before being able to repeat it" (Teacher's C Class, The Pupils).

While the culturally relevant pictures enabled children to predict what could happen next in the story, it was not so in the "reading" of sentences. In almost all the big book activities, when the teachers read the sentences and invited the children to join in, most children could not successfully predict what the words or sentences were. This part of the lesson seemed to be tedious for the children, unless the word or sentences were repeated aloud or read word by word by the teachers (see Figure 32 below for an example of the Wapishana text with English translation in square brackets).

Sowan nai'iki Achimaru

[The iguana and fish]

Sowan ikodan koram wunu paawa'a.

[The iguana found a fruit on the surface of the water]

Sowan zamatan koram.

[The iguana bit the fruit]

Usakotan napain uto'otanuzu.

[It bit and pulled the fruit]

Upu'u Achimaru to'otanuzu kapam.

[At the same time a fish pulled at the fruit too.]

Yawari kawan ukaminkautan sowan.

[The opossum came and helped the iguana]

Sariapa Achimaru dako so'owakan.

[At once the fish's teeth fell off]

Figure 32. An example of a Wapishana story taken from
one of the big books with English translation.

Due to a lack of repetitive lines or phrases, the big books do not lend themselves to predictability of the texts. One of the suggested reasons is that

it seemed difficult to find Wapishana stories that have lots of repetition to aid memorization. The other reason could be that the story collectors and writers edited the long stories to make them shorter and concise. The resulting stories with scarcely any repetitive phrases or storylines may have caused the children to struggle to predict texts or story lines. In order to have stories that have repetitive lines, it seems better to compose short Wapishana stories with repetitive or rhythmic language patterns or adapt stories that have such patterns from outside the Wapishana community. With reference to developing literature for children in culturally or linguistically diverse contexts, Kosonen et al. (2007: 44), from Subsection 4.6.2.6) point out that shell books can be adapted to the first language and context. With this in mind, stories that have similar contexts can be translated to the children's first language. The example below (Figure 33) illustrates how a story composed in English with repetitive phrases can be adapted to Wapishana. The English translation is in square brackets.

Õgaru mani udaru'o kopau

[If I were a big fish]

Õgaru mani udaru'o kopau, wizi'i mani õmadi mashaapan.

[If I were a big fish, my scales would be shiny.]

Õgaru mani udaru'o kopau, doko'o mani õzaka'u tan wun ai.

[If I were a big fish, I would jump high above the water.]

Õgaru mani udaru'o kopau, aonaa mani õzamatakao.

[If I were a big fish, I would never be caught.]

Õgaru mani udaru'o kopau, õkuzota mani kobawu zunaa.

[If I were a big fish, I would cut the fishing lines.]

Õgaru mani udaru'o kopau, naobanai nii mani õgaru wunu ka'azo ii.

[If I were a big fish, I would be like a king in the water.]

Figure 33. An example of an adapted story with repetitive phrases (taken from the Wapishana literacy trials in nursery schools during the 1990s).

The repetitive phrase <Õgaru mani udaru'o kopau> is clearly visible in each sentence of the story above. This story adheres to lots of repetition, one of the principles of writing stories for children at this level. Children may not understand every word in the book, but they will often understand the story line (Baker 1995: 111). As stressed by Hudelson (1994: 144) and Waters

(1998: 163), with repetitions teachers could direct children's attention to particular features of the text. The implication is that stories with repetitive phrases should be used at this level, when introducing literacy activities. As children progress in their reading, stories that have less repetition, as in Figure 32, may then be used.

6.5.5 Theme #5: *Where two different languages use more or less the same roman script, letters with similar sounds can be taught first, followed by letters with distinct sounds.*

The following are extracts from classroom observations (from Appendix H):

"This was a whole class activity. The teacher had a large chart on which was written a big <B> and a small <b>. The teacher used her finger to trace the big <B> and in doing so said that it was the big <B>. The small <b> was treated in like manner. Teacher said that the letter <B> started the Wapishana word *Baudokoru* 'jaguar'. She then brought their attention to the bell by ringing it and asked them to say the English word <bell>. The teacher pointed out that the word started with a <b>. […] Teacher A then asked a parent who was present to bring the balloons, saying that she would each give the children one, once they paid attention. The teacher pointed out that the letter <b> also started the word <balloon>" (B. Pre-writing Activities, Teacher A focusing on the letter <Bb>).

"The teacher then asked children, "What words begin with U?" The teacher asked the question in Wapishana, "Kanom words sakadina'o 'u' di'iki?"

"What is the name of the letter?"

Most gave the sound of the letter. The teacher wanted the name of the letter. The teacher then told them that the name of the letter is <u>. She then gave them the sound of the letter.

Teacher: "Give some words that begin with <U>."

"Pugaa di'itinapa" 'Think'.

1st child: "Umbrella"

2nd child: "Bread"

3rd child: "Table"

The teacher got them to say "under" after prompting them with "under the table".

Teacher: "Where is my hand going? Up."

"What about Wapichan?" Aonaa word nii sakadinao nii Wapichan di'iki?"

"Isn't there a word that starts the same way in Wapichan?"

"   So, what is the sound of this letter? What is the name?" (B. Pre-writing Activities, Teacher B focusing on the letter <Uu>).

"The Teacher wrote <Uu> on the chalkboard. The teacher used the terms 'Upper case U' and 'lower case u'. The Teacher asked the question, 'What word begins with U?' The children could not say a word that begins with <Uu>. The teacher sang 'Up, up go umbrella when it starts to rain.' The teacher told them, 'U is the letter, u is the sound'" (B. Pre-writing Activities, Teacher C focusing on the letter <Uu>).

One difficulty that most children seemed to have was saying words that begin with the letters they learned. This seemed to be the result of teachers presenting the same letters in both Wapishana and English words in the same activity or lesson. Such letters represent different phonemes. Therefore, the question arises whether it is appropriate to conflate the different phonemes of the same letters that occur in both languages. Take, for example, the letter <u> is presented in both *Wapichan Paradan* 'Wapishana words' and English words as observed on the charts (see in Figure 28 as an example).

The letter <u> in Wapishana is always the close central vowel /ɨ/ (dos Santos 2006: 34, from Subsection 3.5.1.2). Therefore, the letter <u> represents the phoneme /ɨ/ as in the words <kanuzu> [ka'nɨz̟ɨ] 'cassava' and <uza> [ɨz̟a̠] 'pet'. In contrast, the letter <u> is the open-mid back vowel /ʌ/ in the following English words: <umbrella> [ʌm'brɛlə]; <under> ['ʌndər]; and <up> [ʌp].

In the case of the letter <b>, the voiced labial plosive /b/ exists in English but not in Guyanese Wapishana. For example, the <b> in the English word <bed> [bɛd] is a voiced labial plosive /b/ whereas the <b> in the Wapishana word <badi> ['ɓadi̥] 'cassava' is a voiced implosive labial plosive /ɓ/. The letter <b> in Guyanese Wapishana always represents the phoneme /ɓ/ (from Section 3.5.2).

As can be seen, the letters <u> and <b> in English and Wapishana represent different phonemes. Even if children are saying both Wapishana and English words that have these letters, one may not be sure if the children can distinguish between the different sounds the letters represent. In the Guyanese Wapishana spelling system, several letter-sounds such as <k>, <m>, <n>, <p>, <s>, <t>, and <w> are similar to English (from Section 3.5.2). In this respect, when using contextual words of both Wapishana and English, it seems better to first teach letters that have similar sounds. Letters with distinct sounds (e.g. <b> or <u>) should be taught separately, beginning with Wapishana first.

6.5.6 Theme #6*: Teachers should challenge learners with cognitively engaging tasks but with the right level of challenge to move the learners forward, both in language and content.*

The following are responses concerning extended activities on a story from the big book from Appendix E, Interview 2: "The big book approach is good. Drama is not done as one would expect them to. The teacher tried to show them" (LJ) (no. 31). "Stories with which they are not familiar, they do not want to act; children tend to be shy to do the role play. Probably the activities are new" (FB) (no. 32). "Most of the sentence strips to match with words seem too complex. Maybe it's because the children are not yet settled. They wanted to cry when asked to do the activities" (LJ) (no. 32).

The following are extracts from classroom observations (from Appendix H):

> The follow up activity was demonstration of parts of the story with two volunteer pupils who moved cut-out models of the two animals as the teacher read the story. […] As the teacher explained parts of the story, two children were guided to where to place the cut-out models (Teacher A's Class, The Class).

> Pupils seemed to enjoy the lesson which involved whole-class activities of answering questions about the pictures and the information contained in the sentences. They also repeated the sentences after they were read by the teacher (Teacher B's Class, the Pupils).

> A few of the children were able to compose their own sentences based on the some of the same words used in the story. These were written on the cardboard sheet which was prominently displayed in front of the class (Teacher A's Class, The Pupils).

The following is an extract concerning the completion of a numerical grid (from Appendix H):

> The teacher demonstrated to the group how to match the number of seeds/beads to given numerals on a grid. The teacher demonstrated up to 3 and then challenged children to do over and complete the grid 1 to 5. One child jumped to 11. Some children had difficulty in using the grid 1 to 5 (C. Maths Activities, Teacher B, reinforcement of numerals, Numeral grid).

Role play or drama seemed to be uncommonly employed by the two teachers in the other classrooms, suggesting that the activities or tasks may be too challenging for the children. Teachers' apparent omission of the step of

retelling the story which involves writing may also be attributable to their lack of knowledge of Wapishana orthographic conventions. Nonetheless, teachers should attempt the steps for the big book presentation that includes drama/role-playing and retelling of the story. The reason is that drama is an effective strategy that facilitates comprehension (Cummins 1996: 79, from Subsection 4.7.2.6). The retelling of the stories stimulates active language use needed for linguistic growth. Both of these instructional techniques provide both cognitive challenge and contextual support and are thus essential for promoting academic growth (ibid. 1996: 60, from Subsection 4.7.2.5.2).

That some children had difficulty in completing the numerical grid suggests that they did not fully understand the task despite the teacher's instructions and demonstrations. Even though the set task was in alignment with activities that are context-embedded and cognitively challenging (Cummins 1996: 37, from Subsection 4.7.2.5.2), it seemed too challenging for some children. In order to assist the children who had trouble in understanding the task, teachers should consider resetting it for them. This involves providing more contextual support that corresponds with the children's "zone of proximal development", which suggests that their intelligence can be better measured with skilled help (Cameron 2001: 7, from Subsection 4.7.2.5.3). For example, for the task on the numeral grid that deals with all five numerals, it may be better to let children begin with a grid that deals with one numeral at a time. After they have mastered this, they may then go on to the more challenging grid.

6.5.7 Theme #7: *The programme implementers should strive to always present a safe or inviting setting for fuller and more robust school staff, parent, and community participation.*

Concerning one of the facilitators, some of the following comments came forth (from Appendix D: Interview 1 **"**Impatient worker. Very strict and stiff. Does not know the culture of the Wapishana People" (Stakeholder A). "They all said they preferred another facilitator" (Stakeholder E). "A little impatient" (Stakeholder F). In addition, the following were made (from Appendix E: Interview 2): "Ms. Elaine had dropped out. The first facilitator did not want ladies with babies to leave the sessions and she felt it" (DT) (no. 23).

On the participation of parents and community members, the following comments were made (from Appendix D, Interview 1): "No compensation for time expended (a week in some cases) by the participants.

Some made big sacrifices to attend." As a result, "a number of people from the resource team withdrew" (Stakeholders B and C). In addition, the following were made (from Appendix E, Interview 2): "Some parents were just not interested, e.g. from a total of 18 parents sometimes only 3 or 6 of them came to meetings. Only the same set kept coming" (Stakeholder E). "Some younger parents do not have interest in the Bilingual Programme" (CE) (no. 24).

The fact that parents or community members said that they needed the programme is matched by several of them joining the resource team as writers, editors, story tellers, cultural experts, artists, and typists. Recruited parents formed part of the resource team under the leadership of the facilitator and coordinators. The team of facilitator and coordinators was part of the core team (from Section 5.2.1). This team corresponds to the implementation team that is responsible for planning and initiating a programme in minority language contexts (UNESCO 2005: 23, from Subsection 4.6.2.3). In this respect, the recruitment of people from within the community suggests a fairly strong combination of human resources. Such a combination reflects an ingredient that is in sync with what should be under "recruitment methods" one of the essential features of strong bilingual education programmes (Malone 2005: 79, from Subsection 4.6.2.3).

The recruited parents were guided in the writing of stories by a facilitator, who was also responsible for training the teachers and drafting the new curriculum. Though the facilitator possessed the requisite specialism and experience needed for the job, his lack of familiarity with the district or region and the culture of the local people seemed to have eventually created a distance between him and some parents and community members. This eventually led to their absence in subsequent training workshops, decreasing the pool of the Resource Team. As noted by Vella (1994: 7), when working with adults, the adherence to working in an environment of safety is a positive force. On this note, adults are more likely to show the willingness and readiness to learn in the creation of an inviting setting.

The call for voluntary services by writers, editors, and artists seemed to have caused some parents and community members to leave the resource team. Given the cash-oriented society in which the programme is situated, some parents and community members seemed perplexed about not being compensated for their services. With more meetings with the leaders of the programme, parents and community members may eventually accept that voluntary services would benefit their own children. This could be remedied by encouraging parents to provide their expertise in the making of materials from the local environment. Parents can be asked to choose which materials they would work on to contribute to the class. Another alternative is to seek

funding that covers the compensation of all workers/participants, including those skilled parents whose expertise is needed.

Parents have also shown interest in the programme by attending the trial sessions of the big books with the children. This attempt to involve parents in this activity seems to be consistent with one of the characteristics of a successful bilingual programme, that is, parental participation is a widely cited factor in successful bilingual programmes (Benson 2004: 4, from Subsection 4.2.5.1). However, their participation would be better facilitated through modelling of the steps in a training session as was mentioned by Trammell (2016: 7, from Subsection 4.6.2.3). This point is supported by the community members' suggestion that "parents are in need of workshops to participate fully in their children's education" (from Subsection 3.4.1). As suggested above, workshops for the collection or construction of materials from the environment can be planned for parents.

6.5.8 Theme #8: *A mother tongue-based bilingual education programme also needs to be intercultural education because the teaching of the language has to have cultural content.*

The following comments were about the cultural stories in the big books (from Appendix D, Interview 1):"They enjoyed the stories" (Stakeholders B and C). "Children are familiar with some of the stories. The child who never spoke up dominated the discussion" (Stakeholder D). "The trial of the big books—they were interested. They understood the stories because it was in their language. Most responded to questions, Most enjoyed the stories. They related to the stories. They enjoyed the songs" (Stakeholder E). "Children know some pictures" (Stakeholder F). "They like the pictures and stories of the locally made books. They can relate to the stories" (Stakeholder G).

Additional responses came from Appendix E, Interview 2: "Yes, culture comes out" (JD) (no. 6). "Yes, culture present" (RC) (no. 6).

The following extract is taken from classroom observations (from Appendix H):

> Teacher A on medicinal plants
> Teacher A began by saying that they would talk about medicinal plants. … She began by asking them in Wapishana what was the name of the grass she displayed and passed it around for them to smell. They were introduced to this part of the plant before. Afterwards, the children gave the correct answer. As they said the correct name, the teacher explained what it was used for and how it was used. The same

was done for the "leaf of life", orange leaf, aloe leaf, lemon fruit, guava leaves and jamoon bark.

At the end of the activity, teacher shared some prepared lemon grass tea with individual children. Afterwards, the teacher asked if they liked tea and they all replied in that they did.

In another session, two parents as resource personnel gave oral presentations and demonstrated how to use traditional implements of hunting and fishing. Some of these traditional implements were given to the school and added to the display of an array of attractive Wapishana artefacts. Each school had its own corner of Wapishana artefacts. It is noteworthy that the teaching of cultural aspects of the Wapishana coincided with the day of the week children are given the option to wear traditional attire. Every Friday, children can wear traditional attire but it was observed that not all children did so.

The use of local plants as remedies for certain common illnesses aligns well with the recommendation of the Ministry of Education that other subjects, such as Science and Social Studies of the national nursery curriculum, be merged into the teaching of Wapishana cultural knowledge and skills (from Subsection 5.3.1.4). This is a reflection of successful thematic teaching, one of the effective strategies that allow the teacher to use the integrated approach to everything taught (Waters 1998: 231, from Subsection 4.7.2.3.5).

Adding to the variety of teaching strategies is the use of resource personnel from the community to give presentations about aspects of the culture. This is an excellent way of motivating more parents to become involved in their children's education. This positive involvement by parents is reflective of the observation by Cameron (2001: 146, from Subsection 4.2.5.1) that parents with the strongest motivation for their children's success have produced the most benefits in terms of the outcomes of a programme. The more benefits are accrued, the more successful the programme becomes.

When parents use the native language to explain aspects of the culture, this linguistic and cultural incorporation provides continuity from the home to the school. In similar contexts, Robert's (1994: 209, from Section 4.2.4) observed that it is the important that the atmosphere is non-threatening and relaxing, so that children are willing to take risks and collaborate with each other. Moreover, the presence of the children's home language and culture in school improves self-esteem of the children, which in turn results in greater learning (ibid. 1994: 209, from Section 4.2.4). In a similar vein, Cummins (1996: 2, from Section 4.2.4) states that when children's developing sense of self is affirmed and extended through their interactions with the teacher, they

are more likely to apply themselves to academic effort and participate actively in instruction.

As further contextual support to the teaching of Wapishana culture, each classroom had a prominent feature of Wapishana artefacts with labels in Wapishana. Such support can augment the effectiveness of the bilingual education programme. According to McLaughlin (1992: 9), "effective education of children from culturally and linguistically diverse backgrounds affirms the values of the home culture and develops in the children a positive emotional attitude toward their background." In the case of the Wapishana children, the Wapishana artefacts displayed communicate a strong message of respect for their language and culture. Furthermore, the inclusion of aspects of Wapishana culture into thematic units of the curriculum and the actual teaching of cultural topics are appropriate ways of partly honouring Wapishana values (mentioned in Section 2.5).

6.5.9 Theme #9: *All staff members of the school, if possible, should be participants in the programme from the beginning.*

The following comment came from a key stakeholder (from Appendix D, Interview 1: "The other head teacher […] was absent sometimes. It is said that the HM of […] is not interested in the programme" (Stakeholder G).

Other comments that complemented the above were made by interviewees (from Appendix E, Interview 2): "I never attended the workshop" (CE) (no. 3). "Not sure. Ms. Elaine joined late. She found some aspects difficult" (DT) (no. 5). "… From this term I did not go. I was waiting on a letter of release from the Department of Education. At the same time, the leaders of the programme did not instruct teachers from the classroom to attend the training sessions. Volunteers go instead" (DT) (no. 15).

It is important that all teachers and head teachers attend the training sessions. Back in the classrooms, the head teachers could offer guidance, support and encouragement to the teachers under their supervision. Since teachers and head teacher are an integral part of the school's life, it is important that they be involved in all processes of the programme from the outset. With respect to educational innovations in schools, Cummins (1996: 164) affirms that if the innovations are restricted to a single classroom and affect only the classroom teacher and a few others, the life of the school will remain largely unaffected. It is important that all teachers, including the administrative staff, "buy into" and take ownership of the innovation for it to become part of the school's mission, according to Cummins. However, a genuine involvement of the school staff will be more likely if all teachers

work in concert with one another, based on the conviction that the programme will make a positive impact on the life of the school.

6.5.10   The development of a conceptual framework

The themes inferred (from Subsections 6.5.1 to 6.5.9) are key ingredients for programme implementers of not only the *Quality Bilingual Education Programme for Wapichan Children* but also of mother tongue-based education programmes in linguistically and culturally diverse contexts, especially in Indigenous communities.

While all ingredients may not be applicable to all linguistically and culturally diverse contexts, most would fit in any Indigenous context. As stated by Lambert (2011: 2019), themes are the foundation for the Spider Web conceptual framework which is appropriate for Indigenous communities; hence, the themes are used to create a spider web conceptual framework (see Figure 34 below) that has been adopted in this study. As can be seen all themes are interconnected, converging at the centre or the heart of the web. This interconnectedness illustrates that all ingredients (themes), once activated, should progressively impact on the way a mother tongue-based bilingual education programme is implemented, thereby meeting the needs of the children, their parents and the community at large.
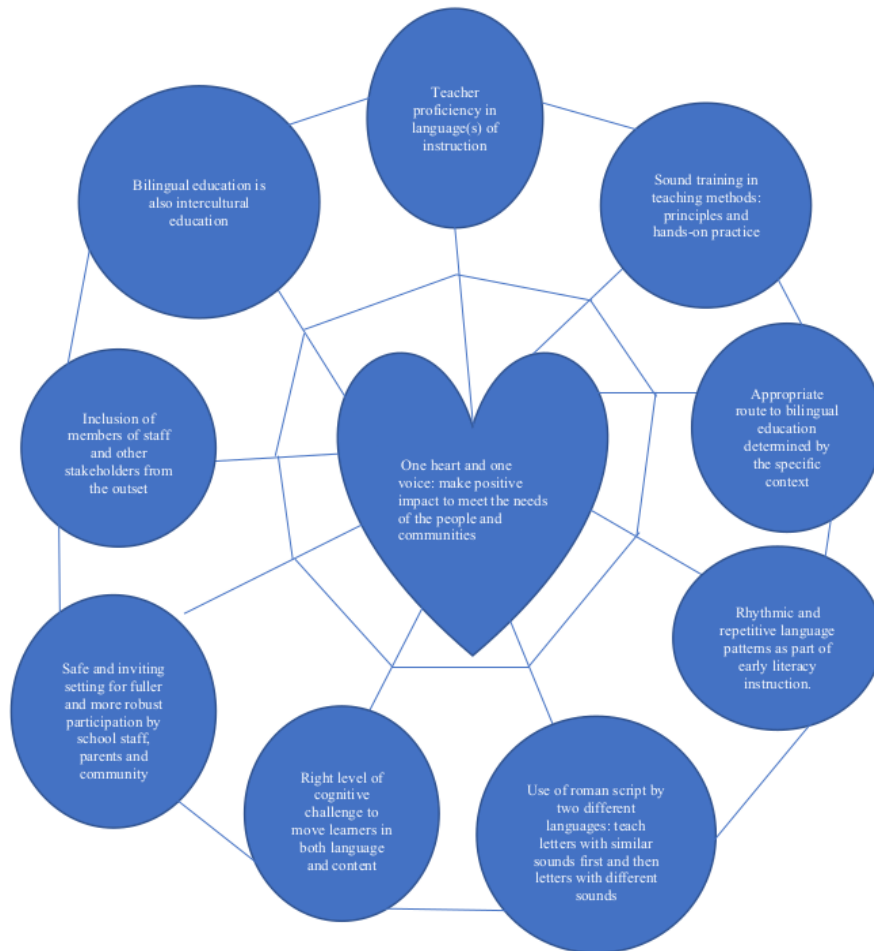
Figure 34. Spider web conceptual framework
(adapted from Lambert 2011: 220).

6.6   Summary and discussion: the main research question

Having presented the findings under the first two specific research questions (Sections 6.3 and 6.4) and inferred and discussed themes under the third specific research question (Section 6.5), I now return to address the main research question: "What are the practices in mother tongue-based schooling that promote children becoming biliterate, bilingual, intercultural, and academically oriented?"

The practices may be grouped under the following:

1.   Biliterate practices

The programme introduces the children to literacy skills in their first language. At the same time the programme also attempts to introduce the English language so that the children are not held back or left behind in a world in which they are going to have to complete with others in a national education system using the second language (from Subsection 5.3.1.1). A central component in the early stages of programme is therefore the concurrent use of both languages. Based on this together with the goals mentioned above, the programme seems to be in alignment with the "early-exit" transitional bilingual education programme, which is a weak form of bilingual education (Baker 2006: 216, from Subsection 4.5.1).

Clearly, this practice differs from the successful and strong forms of bilingual education termed the Maintenance/Heritage Language (Baker 2006: 216, from Subsection 4.5.1), also termed Developmental Maintenance (Benson 2004: 15, from Subsection 4.5.2) or the Mother Tongue-Based Multilingual Education programmes (Dekker and Dekker 2016: 1; Malone 2016: 1; Walter 2016: 1, from Subsection 4.6.1). The evaluation of the two-year pilot programme as indicated in the memorandum of understanding signed between the MoE and the QBEP will determine if the programme is extended into the primary school (from Subsection 5.3.1.5). If the programme is extended for another two years, it would resemble the "late-exit" transitional programme (Corson 1994: 5, from Section 4.4.2). Even if this is followed, it would still have the characteristics of a weak form of bilingual education (Baker 2006: 215, from Subsection 4.5.1). At this stage, it would seem that the developmental maintenance programme (Benson 2004: 15, from Subsection 4.5.2), which is a strong form of bilingual education (Baker 2006: 216, from 4.5.1), is not the focus in the memorandum of understanding.

The programme benefitted from the adoption of a Wapishana orthographic convention that was in use in the communities since the 1970s (see Subsection 3.3.1). The stories and instructions were in a writing system that was familiar and accepted throughout the communities. There was no need to develop a new writing system as there was already one that was followed. The adopted Wapishana orthographic convention is consistent with Young's (2005: 29) suggestion that a writing system be developed before the start of a mother tongue-based education programme.

The development of literature focused on the development of thirty short Wapishana stories and six short English stories for the big books. This development of stories fits into what Young (2005: 23) calls "Stage 1

literature for learning to read". The children's reaction to the Wapishana stories in particular is reflective of the point made by Wilson (2008: 32, from Subsection 4.7.1.2) that "when the listeners know where the storyteller is coming from… it makes the absorption of knowledge easier." Other visual materials in adequate supply were illustrations of plants and animals with bilingual labels as were charts of numerals and shapes. In effect, the use of the Wapishana orthographic convention contributed to development of stage 1 materials that are culturally appropriate (Young 2005: 53).

2. Bilingual practices

The programme seems to provide oral instructional time of approximately 50 per cent in Wapishana and the same in English as a lesson progresses. For most part of a lesson, code-switching from one language to another is done by most teachers. Teachers thus use both Wapishana and English for instructional purposes in close succession or simultaneously. This practice differs from what Baker (1995: 110, from Section 4.3) suggests: for learners in a language minority or linguistically diverse context, when sequential learning to read and write is adopted, it is important that the stronger language be used first. According to Baker, this will usually build on the child's stronger first language (minority) language competence, help the child's motivation, and develop more positive attitudes to literacy.

On collaboration, during a meeting with the resource team, the representatives of the MoE posed a couple of questions to the participants for further consideration and understanding. One of the questions concerns what would happen to an English-speaking child attending this special programme. For such a child in this situation, it would be regarded as an additive bilingual situation for the child (Baker 2006, from Subsection 4.2.1.1). In this situation, according to Baker, the child's first language (a majority language) is not replaced or under threat by the second (minority language); instead, the child is able to add a new language and culture without loss of the first language. Furthermore, based on research, such a child's English language competence together with their curriculum performance does not suffer or is not impaired (Baker 1995: 131 and Sallabank 2012: 114 from Section 4.2.1.1). Similarly, regarding the other question about the child who would have attended the pilot programme and then transferred to another school, what s/he has learnt would not have been in vain. According to Datta (2007: 21), "their experience in and understanding of the first language acts as a cognitive sponge to absorb and make sense of the second language." Therefore, while children in these situations would have to readjust to the new school contexts, school language should be an "additional tool" in that it should be added rather than replace the first language (ibid. 2007: 23). These answers based on research

could be shared with the teachers and stakeholders who may have similar cases of children in the programme. In this way, teachers and stakeholders can be better-equipped to address such questions or cases, should they arise.

3. Intercultural practices

The current practices are predominantly intracultural. This is understandable since at this stage children are expected to begin learning about their cultural knowledge and skills before learning about other cultures. One of the main strategies employed in the introduction of literacy activities is the use of the children's first language—Wapishana—and their cultural background. Specifically, stories from oral tradition were written in Wapishana. When these were presented in the big books, most children became animated in their responses as they related most of the stories to their experiences. The inclusion of the children's first language and cultural themes in the curriculum parallels one of the effective strategies of strong bilingual education programmes, namely, building on prior experiences of the learners (Kosonen et al. 2007: 54). Furthermore, the fact that the teachers spoke Wapishana and included aspects of Wapishana culture and skills in the timetable promoted the children's proficiency in their language and pride in their cultural heritage. All these activities clearly reflect what Nyakatawa and Siraj-Blatchford (1994: 114, from Section 1.3) see as using bilingual pupils' home language and cultural context as an essential initial strategy.

The big books were culturally relevant, but there were a few minor flaws. A few illustrations were unclear and some elements were not in proportion to others in some illustrations. There were also several big books in English reflecting the introduction of the affiliated culture. Before they were used in the classroom, most of the illustrations were coloured, using wax crayons.

Under "other activities" value was placed on Wapishana cultural knowledge and skills, augmented by the corner devoted to Wapishana artefacts and the traditional dress worn by the children. This seemed to have ignited motivation among parents to participate as resource personnel. In other activities associated with Wapishana cultural knowledge and skills, it was evident that children were responding well.

There was also a CD and player that played recorded Wapishana songs/nursery rhymes about the weather and numeral concepts learned.

4. Academically oriented practices

The language, math, and other activities presented by the teachers were considerably challenging. Some relevant strategies that teachers employed were asked probing questions about the stories which allowed children to

apply their understanding of the stories to their own experiences. Overall, the big book activities reflect the Balanced Methods, which incorporate the "reading" of whole texts and "reading" of words and parts of words, including some writing related to sound–letter correspondences (Kosonen et al. 2007: 55, from Subsection 4.7.1.4). One track of the balanced methods emphasizes meaning and communication of whole texts, while the other track emphasizes accuracy and correctness of words and parts of words (ibid. 2007: 55, from subsection 4.7.1.4).

Teachers provided lesson markers to give the children a sense of how the lesson was progressing. For maths and other activities, visual supports such as chart and real objects were used. For reinforcement of concepts, nursery songs/rhymes were used. All these strategies were largely in line with Cummins' suggestion (1996: 72, from Subsection 4.7.2) for the promotion of academic development for children from culturally diverse backgrounds: presenting input that is cognitively engaging with contextual supports.

Other strategies that were used by teachers included cooperative learning, thematic teaching and the language experience approach. Cooperative learning was evident in the small group work for language and maths activities. Working in small groups is reflective of cooperative learning, a strategy that promotes participation and academic growth in the classroom (Cummins 1996: 82, from Subsection 4.7.2.3.2). Indeed, children were meaningfully engaged in small groups, manipulating tactile objects such as seeds, beads, smooth stones, and shells. Such activities lead children to learn through discovery. In addition, the small group setting allows for the children's social interaction or rapport with peers and teachers. The rapport is characterized by children's greater interaction using their first language. This effect is extended to sharing what they have learned in school with their parents at home.

Thematic teaching was also evident as the teachers followed sub-topics in the Teachers Handbook. The language experience approach, which is an experience shared between the children and the teacher, was a feature in the programme. Two phases of the experience were covered: exploratory talk and reporting back. Children's questions and oral reporting on what they observed are consistent with what Datta (2007: 19) terms "exploratory talk" and "reporting back", the oral phases of the language experience approach. The reporting back, which builds on the exploratory talk, is an important skill in promoting academic language development, according to Datta. Engaging children in these two skills is consistent with the recommendation by the MoE that the teaching of the skills in this approach must be actively pursued (from Subsection 5.3.1.3).

These strategies are in sync with the most promising instructional practices that should be used for a successful bilingual programme. This is because such practices engage children in activities that are cognitively demanding and context-embedded, leading to their academic growth (Cummins 1996: 73, from Subsection 4.7.2.5.3). Another major reason why these strategies are effective is that they promote more active student participation (Bühmann and Trudell 2008: 25, from Subsection 4.7.2).

The instrument of the required Nursery Diagnostic Assessment for each child on their entry to school was previously written in English. The instrument was translated into Wapishana. Formative or continuous assessment was done in both Wapishana and English at the end of each sub-topic of a theme. In this way, the teachers determined if each child was achieving the literacy, numeracy, and other developmental standards or learning outcomes. Moreover, a record of this assessment for each child was kept in assessment booklets for literacy and numeracy. In each assessment booklet, there was an observational checklist that assessed the overall performance of each child on achievement of the learning standards or outcomes. At the end of each theme, a summative assessment was done either by individual children exhibiting a portfolio of work or a completed group project (e.g. a model of a house) to demonstrate that they have grasped the concept taught. All these types of assessment reflect what a successful programme evaluation should have, that is, providing information on each child's academic progress for the entire school year (Thomas 2005: 55, from Subsection 4.7).