

**Support for Mother Tongue Based, Multilingual Education
(MTB-MLE) for Schools in Rural and Remote Areas of Papua
(ACDP 023)**

FINAL REPORT

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Prepared by

PT. TRANS INTRA ASIA (TIA), INDONESIA

In association with

SIL INTERNATIONAL

**THE EDUCATION SECTOR ANALYTICAL AND CAPACITY
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The Government of Indonesia (represented by the Ministry of Education and Culture, the Ministry of Religious Affairs, and the Ministry of National Development Planning / *BAPPENAS*), the Government of Australia, through Australian Aid, the European Union (EU) and the Asian Development Bank (ADB) have established the Education Sector Analytical and Capacity Development Partnership (ACDP). ACDP is a facility to promote policy dialogue and facilitate institutional and organizational reform to underpin policy implementation and to help reduce disparities in education performance. The facility is an integral part of the Education Sector Support Program (ESSP). EU's support to the ESSP also includes a sector budget support along with a Minimum Service Standards capacity development program. Australia's support is through Australia's Education Partnership with Indonesia. This report has been prepared with grant support provided by Australian Aid and the EU through ACDP.

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I. Introduction

This final report tracks the activities outlined in the Inception Report and not in the original Terms of Reference (TOR). The reason for this is that the government altered course and made some decisions that affected the original (TOR) after the TOR was finalized, and this in turn affected the scope and sequence of the activities of this project. The changes necessitated by the government's decision are explained in the Inception Report, and the revised scope and sequence from the Inception Report will form the structure of this Final Report.

As clarified in the Proposal Submission Letter (Jan. 5, 2015), TIA and SIL foresaw this project as necessitating an extension from 11 to at least 18 months to coincide with the Indonesian school year. However, due to (a) the late finalization of the contractor for ACDP 023, and (b) having to work on a reduced time line because the Analytical and Capacity Development Partnership (ACDP) was unsure regarding their extension, the work in this project was given just 9 months to complete.

Given these two factors, the need for an extension is crucial if the following is to take place: a) the formations of the *Komite Sekolahs*, (b) the training of a Lani cadre of MTB-MLE teachers by the KPG and UNCEN faculty, (which can only be done when the government and its partners finish the complete curriculum) and (c) the ability to monitor and evaluate the MTB-MLE program in Lanny Jaya. The eventually second EGRA test meant to measure success will only come after kids have moved all the way through preschool to graduating from the second grade.. The anticipated date for the commencement of the program, according to the government's educational calendar, is July 2016.

All support activities not dependent on the completion of the curriculum associated with ACDP 023 have been completed as explained in this report.

II. Inception Survey

The importance of the Inception Survey cannot be underestimated. It provided pivotal data in the following three areas:

- a. Pretest data to provide a baseline for future evaluations.
- b. Data to ensure the area chosen for the MTB-MLE pilot intervention was appropriate given the parameters outlined in the ACDP 039 Study.
- c. Validated the driving motivations of the ACDP 023 research: that rural and remote schools in Papua are different than those near urban centers.
- d. That the existing method of education for rural and remote schools in Papua may need to be adjusted to meet national norms.

The survey measured language vitality, the condition of the schools, school management and set the stage for choosing the site where the MTB-MLE pilot project will be located. Finally, the compiled data will form the backbone for monitoring and measuring the efficacy of MTB-MLE in Papua. In the future, when the 2017-2018 PAUD students graduate from 2nd grade, they can be retested and the results compared with

the pretest students who were part of the cohort of 2015. As such it provides the baseline data from which the framework for MLE evaluation and monitoring can be constructed.

The team that trained government, university and teacher’s college personnel in survey techniques went to Wamena from May 19 – 23, 2015. The first two days were spent in training the trainees while the next three days were spent in the field. The final day was spent reviewing the data and debriefing the training to ensure the trainees will be able to collect similar data in the future when post MTB-MLE pilot project data will need to be collected.

A. The Sample

A sample of 184 students was randomly selected from children in grades 2 and 3 from 10 schools located in 10 villages in 5 sub-districts in Lanny District in central Papua. Tables 3 and 4 give more detail on the makeup of the baseline sample.

Sub-districts	Villages	Number in Sample
Dimba	Yugwa	10
Kuyawage	Kuyawage 1, Kuyawage 2	36
Makki	Kemiri	21
Poga	Gipura	34
Tiom	Bokon, Guninggame Longgalo, Name, Ninabua	83

Table 1. Sub-districts and villages included in the baseline study.

The sample was drawn from five separate sub-districts. In three out of five cases, only one village (and school) was selected from the respective sub-district. In the case of the Tiom sub-district (Kecamatan), five different villages (and schools) were included. The implication is that the Tiom sub-district is larger or more densely populated and is probably more like a town than a rural village.

Table 2 gives a detailed breakdown of the sample drawn from each school by grade and gender.

School	Village	Grade 2		Grade 3		Total
		Male	Female	Male	Female	
SD Buapaka	Longgalo	--	--	11	12	23
SD Inpres Gimbuk	Ninabua	6	2	2	7	17
SD Inpres Kondename	Name	8	2	3	5	18
SD Inpres Kuyawage 1	Kuyawage 1	4	4	8	0	16
SD Inpres Poga	Gipura	8	8	12	6	34
SD Inpres Tiom	Bokon	4	7	3	3	17
SD Negeri Kulugome	Yugwa	2	1	1	6	10
SD Negeri Kuyawage 2	Kuyawage 2	9	1	7	3	20
SD YPPGI Inpres	Gininggame	3	1	2	2	8
SD YPPGI Tobanapme	Kemiri	5	3	3	10	21
		49	29	52	54	184

Table 2. Makeup of the sample by school, village, grade, and gender.

There is something of a sampling anomaly in grade 2 with almost twice as many male students selected compared to girls. Whether this reflects the composition of the enrollment in these schools is not known at this time. The grade 3 sample does not reflect the same distortion by gender. In much of the analysis, no significant difference in performance was found by gender so this disparity is not taken to be a significant issue in terms of adequately representing school and grade level performance.

B. Sociolinguistic Survey

The decision to allocate the pilot project in Lanny Jaya assumed that students in more isolated regions are more likely to speak Lani. Lanny Jaya as a regency (Kabupaten) was chosen as the broad region from where, ultimately, the sample schools for the scheduled MTB-MLE pilot project were to be drawn. What is interesting is that even within Lanny Jaya, a kabupaten that is isolated by provincial standards (no direct roads to the provincial capital or the coast, few good roads leading in-and-out of the area and the fact that almost all non-agricultural goods need to be shipped by plane to either Wamena or Tiom to be accessible to the local population) a variation in language vitality was found. The areas more remote from the capital of the kabupaten (Tiom), proved to have a different degree of language vitality than those closer to Tiom.

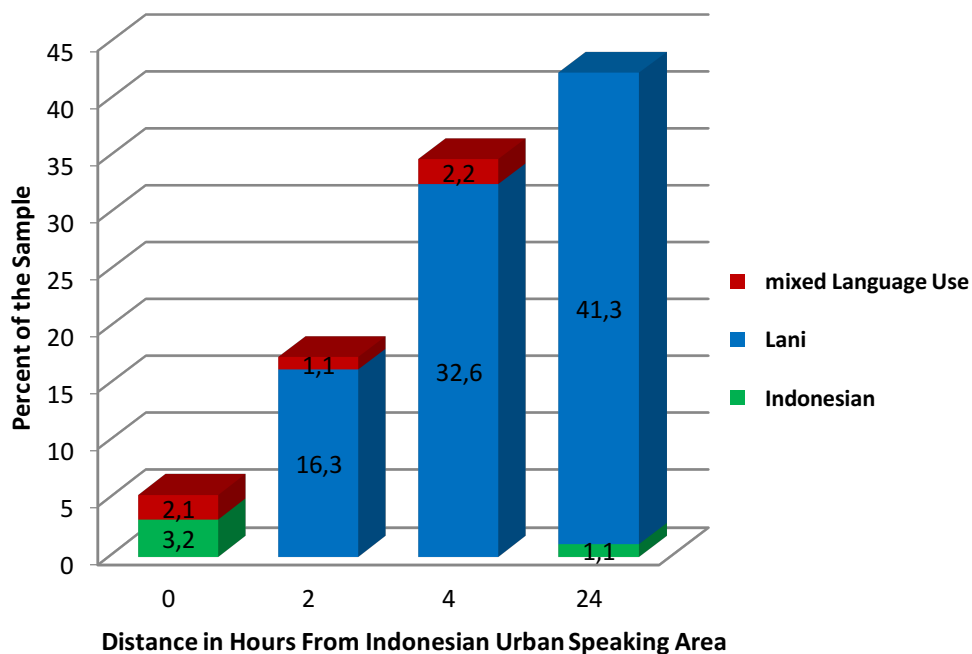


Figure 1: Language Use and Distance from Urban Center

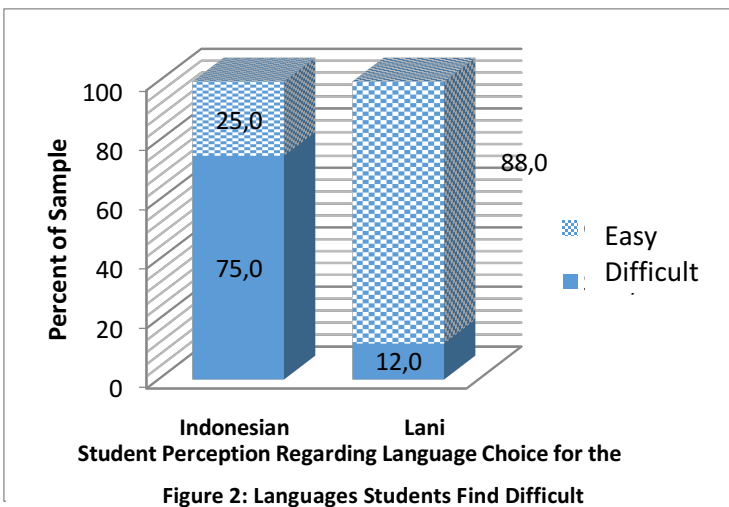
Figure 1, drives to the heart of our research: that rural and remote schools are different. As soon as one moves outside of the urban area of Tiom, only 1% of the population use Indonesian as their language of communication and 90% use Lani, with 3.3% mixing the two languages. This data strongly supports the use of the mother tongue especially if one's educational paradigm is meant to be "child-centered". The data above indicates that one of the primary differences between urban and rural children in Lanny Jaya is language use.

Chi-Square Tests			
	<u>Value</u>	<u>df</u>	<u>Asymp. Sig. (2-sided)</u>
<u>Pearson Chi-Square</u>	<u>55.962^a</u>	<u>6</u>	<u>.000</u>
<u>Likelihood Ratio</u>	<u>32.821</u>	<u>6</u>	<u>.000</u>
<u>N of Valid Cases</u>	<u>92</u>		

Table 3: Correlations between Remoteness and Use of the Mother Tongue

The assertion of a relationship between distance from an urban center and language use, is further proven above in Table 3. Table 3 indicates an extremely strong statistically significant correlation between distance from an urban center that uses Indonesian and the daily use of Lani. The further one moves away from an urban center, the greater the role Lani plays in the local life of children. If the Department of Education is committed to a child-centered curriculum for rural and remote areas, they need to confront the reality that there is significant language shift between rural and remote areas.

Ultimately, if one commits to a child-centered approach, one needs to know if language is truly a



significant variable in the self-perception of the students to understand things and perform well in school. This mandates that we examine which languages students perceive to be difficult and/or easy, which languages are used in school by the teachers, and if there is a significant statistical relationship between these variables.

If one looks at Figure 2, we can clearly see that 75% of grade 2 and 3 students in Lanny Jaya find Indonesian as a language for education difficult and 88% find Lani easy. The fact that more than 3 times as

many students find Lani easy as compared to Indonesian, leaves us with the probable hypothesis that possibly only a small fraction, possibly only 13%, are truly fluently bilingual.

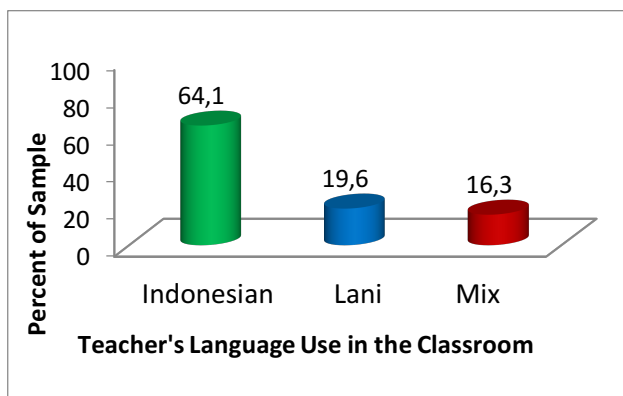


Figure 3: Language Use in the Classroom

If we examine in Figure 3 which language teachers tend to use as the choice of language for the classroom, a striking reversal of the above graph emerges. Almost 65% of teachers choose to use a language the students find difficult and only 20% use the language the students find easy. Again, more than three times as many teachers use a language the students find difficult, leaving us wondering about the child-centered philosophy of education that should be undergirding activities in the classroom.

If mother tongue based multilingual education programs are going to be encouraged, teachers need to

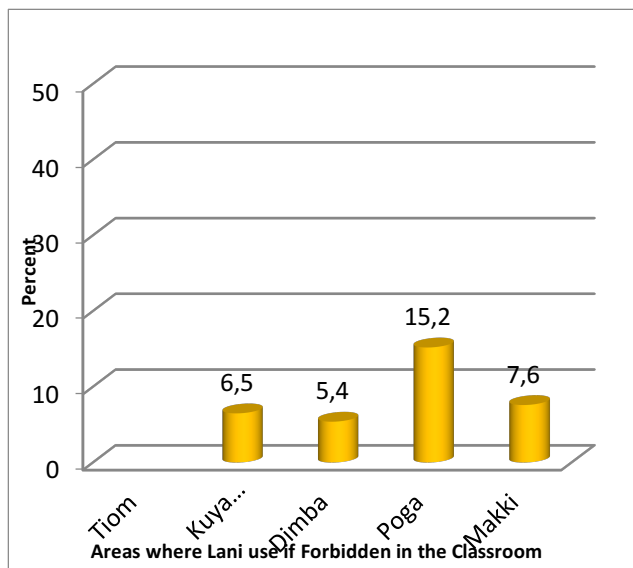


Figure 4: Children Forbidden from Using their Mother Tongue

be receptive to the idea. The sociolinguistic survey therefore asked two questions from the students in order to ascertain the openness to Lani use among the students by their teachers. The first question asked if they were forbidden to use Lani on school property and the other asked if they would be physically punished if they did not obey. Figure 4 indicates that on average 6.9% of the students are forbidden to use their local language on the school premises. When the researchers compared this data with the type of schools represented in the sample, it was found that boarding schools that employed non-Papuan teachers, like the one in Pogo, were much more likely to forbid their students from using the local language as compared to non-boarding schools that had predominantly Papuan teachers.

The second question on whether a physical beating could result from using one's local language on school property once again mirrored the relative differences in the school districts. As can be seen from Figure 5, Poga, the boarding school with non-Papuan teachers were much more likely to beat their students for using the local language than were students from the other schools. A test looking for statistical significance between the likelihood that dorming students with Non-Papuan teachers were more likely to be beaten for using their mother tongue found strong confirmation of such a relationship.

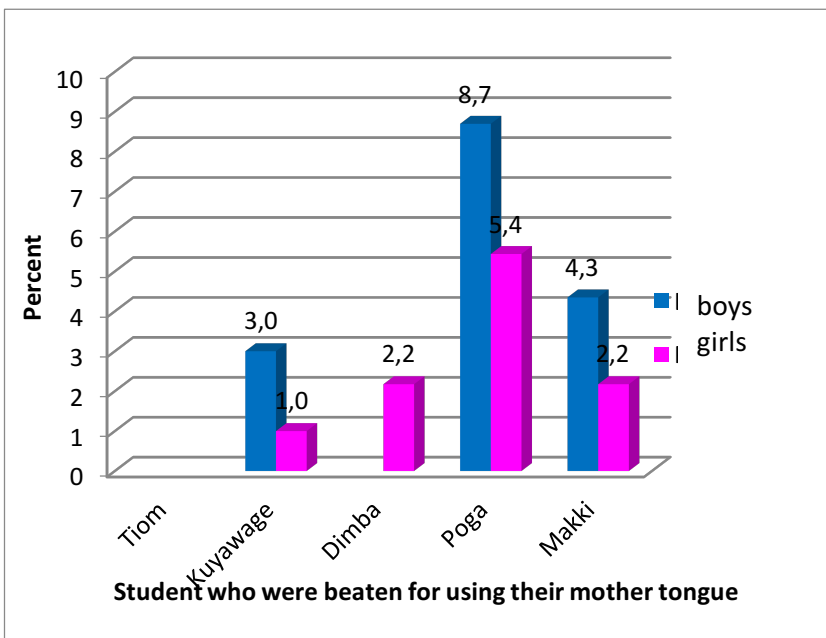


Figure 5: Percent of Children Beaten for Using Mother Tongue

This trend is disturbing since it mirrors the same type of activity that has taken place in developed nations who colonized the indigenous people within their territories. Whether one looks at Canada, Australia or the U.S., the level of child abuse in the dorming facilities was often significant. It remains to be seen whether this trend will repeat itself in Papua, but the first warning bells appear to be ringing in the data collected in this survey.

C. EGRA Survey

The EGRA survey was conducted simultaneously with the sociolinguistic survey and the full report can be seen in the *Framework for MTB-MLE Evaluation and Monitoring Report* but some of the salient points will be mentioned in this section. The instrument used to assess progress towards literacy was the Indonesian EGRA. This instrument—adjusted for local linguistic realities—has been widely used around the world in low income countries and therefore it has reasonably well-understood characteristics. The Indonesian EGRA was developed and implemented by RTI International under contract to USAID. The report of findings is dated 2014. Findings from this study provided a very helpful frame of reference for interpreting the results of the baseline survey done in Lanny District.

A novel feature of the Indonesian EGRA is the inclusion of a set of subtasks designed to assess basic proficiency in Bahasa Indonesia. The inclusion of this feature was highly relevant to the Indonesian context given the unusually high level of linguistic diversity found in this far-flung island nation. This component of the instrument proved invaluable in the analysis and interpretation of results in the district.

The Indonesian study included a set of five additional instruments referred to collectively as a Snapshot of School Management Effectiveness (SSME). One of the five focuses on a range of social, economic, linguistic, and educational characteristics of individual children rather than dealing with school management per se, but was nonetheless most useful to the analysis. The sample of students included in the baseline included 184 students from grades 2 and 3 in 10 different schools. The 10 schools are located in 5 different sub-districts (kecamatan) in Lanny Jaya..

D. Findings about progression towards literacy

The findings of the Indonesian national EGRA, completed in 2014, provided a very useful vantage point for evaluating the literacy-related assessments coming from the schools and students of Lanny District. This district is a part of the “MNP” sector of Indonesia (Maluku, Nusa Tenggara, Papua) which covers the eastern-most region of the country. In general the literacy assessments included in the Indonesian EGRA showed MNP (Eastern Indonesia) trailing the national norms by approximately 50 percent. The children in the Lanny Jaya baseline performed at a level roughly 50 percent below the rest of Eastern Indonesia. In short, the progress of these children towards full literacy in Indonesian is extremely limited. Despite the overall low levels of performance, the data do show consistent progress being made from one grade to another.

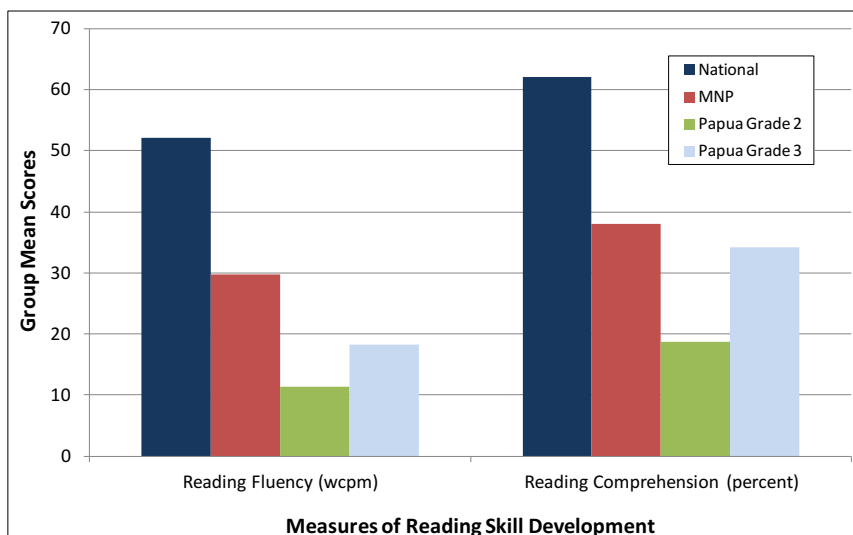


Figure 6: Comparative Measures of Reading Skill Development

Despite the overall low level of performance, the data contain a limited number of cases of children who are doing extremely well—up to or even above national norms. While it is tempting to ascribe this high level of performance to a high level of ability—which is very possible—it is also striking that such children also demonstrate a high level of proficiency in Indonesian. Could these two variables be closely related and a part of the reason why progress towards literacy is so

limited in general in the baseline region?

E. Findings about proficiency in Bahasa Indonesia

Proficiency in Bahasa Indonesia was measured by means of a listening comprehension task and three separate vocabulary assessments. Of these, performance on the listening comprehension task was the lowest being about 30 percent lower than the norm established in the National EGRA. Performance on the vocabulary tasks ranged from 10-15 percent below the national norms.

	N	Mean	SD	Q1	Median	Q3
Oral Vocabulary – parts of the body						
National	4,812	79.7				
Grade 2	78	65.1	27.6	37.5	62.5	87.5
Grade 3	106	71.1	20.4	62.5	75.0	87.5
Oral Vocabulary – classroom terminology						
National	4,812	97.6				
Grade 2	78	89.5	17.6	83.3	100.0	100.0
Grade 3	106	96.2	8.1	100.0	100.0	100.0
Oral Vocabulary – knowledge of prepositions in BI						
National	4,812	86.3				
Grade 2	78	70.1	30.3	50.0	83.3	100.0
Grade 3	106	76.9	22.5	66.7	83.3	100.0

Table 4: Assessment of oral vocabulary in Indonesian by grade

Given that Bahasa Indonesia is the language of literacy yet there is a much larger differential between the baseline performance and that of the national norm on this measure, we are left with some obvious questions to try to resolve. First, does/did the assessment of proficiency of Indonesian in the EGRA instrument adequately measure the level of proficiency needed to support basic education (and literacy)

in Indonesia? Second, could it be the case that in the schools of the baseline area, too much instructional time is being invested in developing proficiency in BI rather than in literacy? Third, are there fundamental cultural, geographic, economic or religious features of the baseline area which make literacy and education less desirable or more difficult among the local population? Fourth, is it possible that the entire educational delivery system in Papua is much more poorly resourced than in other areas so that results suffer accordingly? Fifth, does language of instruction really have that great of a negative impact on literacy development?

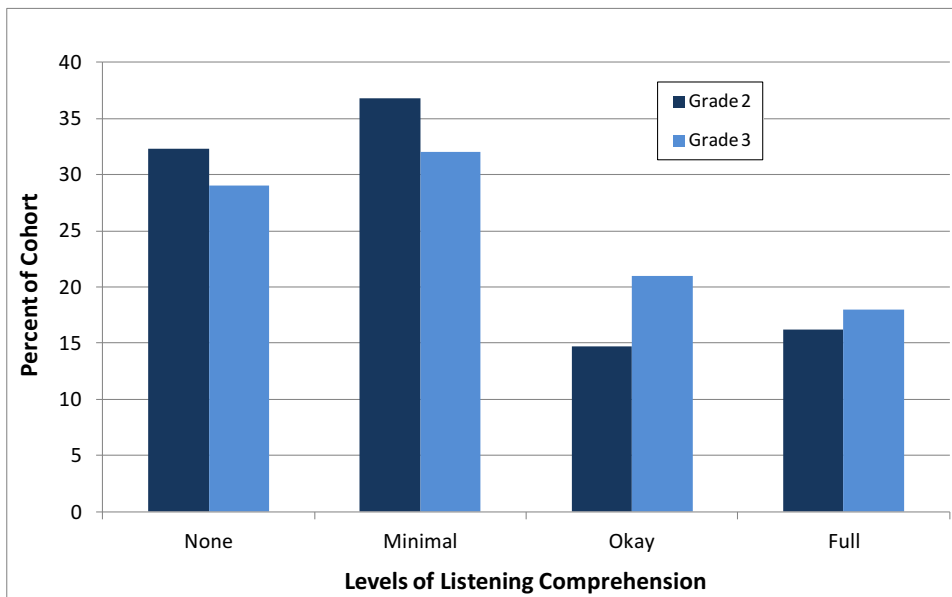


Figure 7: Levels of listening comprehension (BI) in the baseline sample by grade

Some of these questions are not answerable with the data gathered in the survey. Rather, one would have to gather different data from different sources and methods to find answers to those questions which seem to be more qualitative in nature.

F. Findings about the relationship between literacy and Bahasa Indonesia

The data from the survey show clearly a strong relationship between proficiency in Bahasa Indonesia and progress towards literacy. This is to be expected since Bahasa Indonesia is the language of instruction as well as the language of literacy. However, if mastery of this language by the child is significantly or seriously deficient, normal progress in moving towards proficiency in literacy is necessarily limited as well.

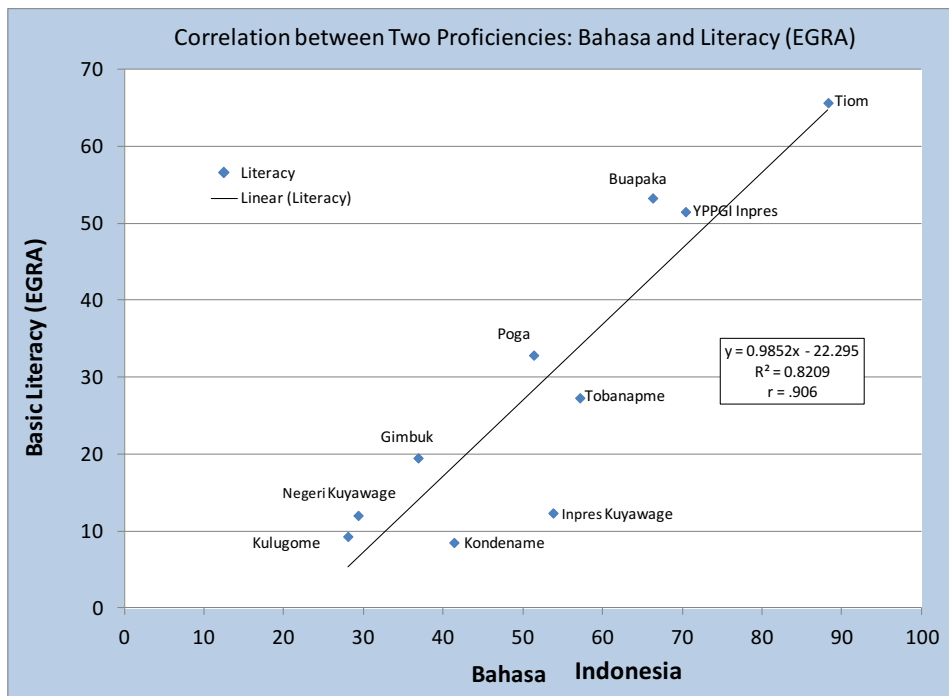


Figure 8: Relationship between Literacy and Indonesian Language Ability

The data suggest several tendencies with respect to the interplay between the two variables of literacy and proficiency in Bahasa Indonesia. First, there is some evidence that teachers in some of the schools may be putting more instructional time in teaching Bahasa Indonesia than in teaching literacy. While this is entirely understandable, the inevitable result is reduced progress in developing literacy.

Second, it is clear that there is huge variation among the schools in terms of achievement in either of these areas. Whether this is due to issues of accessibility, morale, teaching capacity, poor administration, educational support, or the distribution of knowledge of Bahasa in the local population, some sort of change or intervention is needed to raise the quality of very low performing schools.

Third, while there is a strong correlation at the school level between the two variables, and a moderate correlation between them at the individual level, it is also clear that the school one is a stronger predictor of achievement in literacy than is proficiency in Bahasa Indonesia. Possible reasons include major school-level problems in providing good instruction, lack of interest in or even resistance to learning to read in Bahasa (or even learning to read, period), or possibly high rates of absenteeism on the part of children or teachers.

G. Findings from the SSME Student Questionnaire

This questionnaire produced several findings of interest though no major surprises. These will be listed with only brief commentary. First, it is clear that Bahasa Indonesia is very much a secondary language in the baseline population and a weak one at that. Lani/Dani is the first language of almost all of the children so most are entering school with, at best, very rudimentary proficiency. If there is not much environmental support for Bahasa Indonesia (little or no media, few native speakers in the area, little

available literature, little or no institutional support outside of the school), depending on the schools to develop adequate proficiency in the language in support of literacy and subsequent education is going to have very limited success.

Second, it is clear that this area is very traditional in terms of standards of living and economic development. School-based education in this kind of a setting lacks the same level of urgency and importance seen in towns and cities where education is important to survival and job security.

Third, judging by the test data, the existing preschool system in the area provides very little preparation for literacy though it may provide some for Bahasa Indonesia.

Fourth, the impact of a number of variables seen to be salient in western contexts such as socioeconomic status, parental literacy, attendance at preschools, being read to at home, parental involvement in the child's schoolwork, etc. appear to be weak to very weak predictors of academic success in the schools of the baseline area. Household wealth is the strongest of the predictors though its influence seems to apply mostly to Bahasa Indonesia and not to literacy.

H. Findings from the other SSME Questionnaires

Several observations are noteworthy. First, only one of 14 teachers appeared to be a native speaker of Bahasa Indonesia. There is growing concern worldwide that dependence on second language speakers of the language of instruction significantly restricts the effectiveness of such teachers. This issue has yet to be well-researched but awareness of the problem is growing.

Second, absenteeism appears to be a significant issue. Interestingly, high rates of absenteeism (of students) in low quality schools does not seem to have as much negative impact as it does in higher performing schools. Still, if high rates of absenteeism are present among most or all students in a school or classroom rather than just a few, educational outcomes for the entire school or classroom are going to be reduced because of the absenteeism. If there are high rates of absenteeism or tardiness on the part of the teacher(s), the problem is compounded.

Third, it was noted that about half of the teachers are local and about half are from outside the area. This is almost always an issue (in a negative way) in traditional areas.

I. Conclusion

The data from the baseline make it very clear that achievement in the area is low. The rates of progress observed between grades 2 and 3 suggest that the rate of skill development in literacy will not reach national grade 2 norms until grade 4 or 5 (closer to 5 than 4). From an educational perspective, it is easy to conclude that present methods and strategies of educational delivery are not well matched to the cultural, linguistic, and maybe even geographic characteristics of the area. From a cultural or ethnographic perspective, interesting questions arise as to just how one should understand the interface between western-style education and traditional cultural communities.

The data also leads one to conclude that the Kuyawage valley may be the best place to initiate a pilot project in MTB-MLE. Its language use is very strong, it is isolated, it has two rural and isolated schools that are part of the Gerbang Mas program, the literacy rate is one of the lowest among all the samples, and the ability of the children to speak Indonesian ranks at near the bottom of all the samples.

III. Capacity Needs Analysis of KPGs, Government and UNCEN

If one refers back to the last progress report, one notices that most of the work for the capacity needs analysis related to the development of MTB-MLE in the province was completed by the end of September. The purpose of this analysis was to ensure key government players were well educated regarding the broad outlines of mother tongue based multilingual education before specific institutional changes were discussed as they related to MTB-MLE and their specific institutions.

In order to facilitate capacity development discussions that were rooted in an understanding of what was entailed in MTB-MLE among many educators who had erroneous ideas regarding MTB-MLE, all the key players were taken on an International Study Tour in April, with the hope that opinions expressed during the needs analysis of the Kolese Pendidikan Gurus (KPGs), the State University of Cenderawasih, and the Dept. of Education and Culture would reflect a more mature understanding of MTB-MLE. By taking some of these key players on the study tour at the inception of this project, we were able to use some of these officials as presenters in other key events as the project has evolved.

During the international study tour discussions were held regarding the capacity needs the participants felt needed to be addressed at their respective institutions (UNCEN, KPG, and Government). Several participants collaborated on position papers which they submitted to the government. A synopsis of the perceptions of study tour participants was circulated to all the institutions and each participant was encouraged to engage in further discussions with the primary stakeholders of their respective institutions before the ACDP 023 focus group discussions were scheduled.

State University of Cenderawasih:

It quickly became apparent in the focus group discussion that tensions between UNCEN and the KPGs (Teachers Colleges) had a long history. According to one of the participants who had been key in setting up the KPGs in the past, money sent from the KPGs had been diverted and the KPGs had received little or no benefit from the annual student fees they had been required to pay UNCEN. This historical tension had clouded the KPG-UNCEN relationship and the faculty with whom we interacted agreed that changes were needed.

The UNCEN faculty also agreed that the mission and vision of the KPGs was intended to be more focused on preparing rural and remote teachers as compared to the mission of UNCEN. Regarding MTB-MLE development at UNCEN, the members of the focus group emphasized the need to ensure the FKIP Dean be more actively involved (he had been invited but had a more pressing engagement). Also, since the UNCEN School of Education (FKIP) was undergoing structural changes, it was still unclear what the new mission and vision of UNCEN School of Education was meant to be and whether this would eventually include the preparation of MTB-MLE teachers for the island of Papua.

Several months after the initial discussions, and after some of the faculty participated in several of the capacity development workshops with the KPG participants, we once again broached the capacity needs of the KPGs and how the relationship between the KPGs and UNCEN could be revitalized.

After the training they received in Thailand, Ambon and through the workshops, the UNCEN faculty perceive themselves generally ready to create and develop MTB-MLE curriculum and teacher training programs. As indicated in the Thailand Study Tour report, UNCEN did indicate that as the MTB-MLE program goes forward UNCEN will need to take responsibility for:

- creating an MLE course for training primary school teachers (PGSD),
- creating an MLE course for training kindergarten teachers (PAUD)
- creating an MLE course for training language and humanity teachers (PBS FKIP)
- and creating an MLE course for the KPGs

They were challenged by the government to take up the Sentani language MTB-MLE program since UNCEN is located within the Sentani language traditional territory, making it easy to find native speakers with whom to work. The only concern UNCEN faculty offered was that because they are part of a large institution, that actual implementation will be very slow and that allocation of money towards MTB-MLE endeavors would be slow in coming.

KPG Nabire

Nabire faculty were positive in regards to MTB-MLE development at the teachers college but did not feel ready to develop MTB-MLE curriculum and preferred more training in this area. Specifically, since one of the faculty members had done extensive post graduate work in the Me/Ekari language, and since they had a sizable number of students from this language group, it was felt that perhaps this language should be prioritized in any local push in MTB-MLE.

Faculty indicated it may be necessary to inaugurate a different category of teacher: the “Pembantu Guru” or teacher’s assistant, specifically in areas where MTB-MLE is desperately needed. The *Pembantu Guru* would function as the MTB-MLE Bridge teacher and be directed by the regular teacher (one that may not speak the local language). *Pembantu Guru* training would be directed by the KPG and geared specifically towards MTB-MLE. Two specific courses were suggested: (a) one, 3 credit course in MTB-MLE and (b) one course in *Second Language Acquisition* meant for students entering areas where they did not speak the local language. The faculty also suggested they would like more financial resources to visit remote and rural schools to better monitor student practicums.

Several concerns came up regarding the KPGs relationship to UNCEN. Everyone felt that the quota system limiting the number of students the KPG could accept, and which had been imposed by UNCEN, was counterproductive to ensuring the success of their institution since UNCEN provided little or no assistance. When asked regarding their preferred future regarding structural relationships, the faculty either wanted a separate dean to sit on the UNCEN president’s cabinet of deans or to form an independent institution of higher education along with the other KPGs and credentialed to offer S1 degrees.

KPG Sorong:

The KPG in Sorong is in a serious operational crisis. Ever since the division of Papua into two provinces, Papua and Papua Barat, the KPG in Sorong was left in political and financial limbo. Their campus building program has stalled since the inauguration of the new province. Presently the campus is being overgrown by the jungle and the KPG is meeting in a private institution that generously opened its doors to the KPG students. Ideally, the campus will be finished and include a computer lab and library.

Like other KPGs, the accreditation of KPG Sorong is controlled by UNCEN in Papua, but the SMA (secondary school) finances are controlled at the Kabupaten in Papua Barat. As a result the institution has seen little if any faculty salaries transferred to their institution. Most of the KPG faculty teach for free, with the hope that this will be quickly resolved. In discussing their preferred future, faculty indicated it may be better to associate with UNIPA, their provincial state university and as an institution they would like to offer S1 degrees since at the present their students cannot find employment without them.

The faculty indicated the necessity of students knowing the languages in which they were teaching, and in preparation for MTB-MLE teacher preparation requested their staff be expanded to include a linguist and someone trained in MTB-MLE.

KPG Timika

In an ironic twist, KPG Timika felt there was no problem in the relationship with UNCEN because they largely ignored UNCEN. They considered UNCEN a weak partner in fighting for Papuan teacher issues, especially as UNCEN largely ignores factoring in the needs of rural and remote Papuan children in their teacher preparation. KPG Timika's own observations in the field have led them to believe that a S1 degree was not a guarantee of ensuring better teacher preparation for remote and rural communities.

The faculty at KPG Timika indicated that the "Kelas-kelas jauh UNCEN" (UNCEN extension classes) were not effective in Timika because of the lack of collaboration with KPG faculty on designing curriculum meant for rural and remote schools. The UNCEN extension classes tended to be too theoretical and revealed an unawareness of rural and remote schooling situations. They perceived they were just being asked to jump through accreditation hoops designed by UNCEN that did little in preparing their students prepare for actual field realities.

As an institution they felt they would like more support in nurturing doctorates amongst their faculty. They also saw a looming crises in regards to the government's mandate that all teachers have a S1 degree. They wondered where all the underqualified teachers would go, and what would happen to the schools that see an exodus of their undereducated teachers?

KPG Timika indicated that their local kabupaten government would only support students from the two large language groups in their area, which created difficulties in ensuring support for students from language groups in other kabupatens. While they had made efforts at ensuring other kabupatens supported their students who were being educated at the KPG, this proved to be a highly time-consuming task. In an ideal world, they would prefer that the central government would cover all the cost of all their students regardless of where they originated in the province.

One challenge KPG Timika faced was the necessity of upgrading the ability of the remote and rural student's reading, writing and mathematics abilities. Special remedial courses had been instituted to deal with the educational deficit that remote and rural school SMP graduates brought to the KPG.

When asked about the quota system articulated by UNCEN, the director said she largely ignored the quota of 80 students and accepted more, believing UNCEN received the student fees and were therefore obligated to service them.

Regarding structural changes needed to move the institution forward in their preferred future, the faculty agreed they would prefer the creation of an umbrella organization that would cover all the KPGs and allow the KPGs to offer their own degrees since they felt they never really received much assistance from UNCEN. At the present, their students had a rigorous internship, and ideally, they would prefer offering a S1 degree (in keeping with new government regulations) in which a rural and remote practicum would play a significant role. They also indicated a desire to expand their curricular offerings to include a MTB-MLE component, especially as it relates to the preparation of preschool and kindergarten teachers (PAUD program). The faculty also felt it was necessary to institute a reading and mathematics test for teachers in order to ensure teachers had the minimum service standards in the subjects they were required to teach.

In regards to monitoring their students in remote and rural schools, the faculty felt it would be better if the village level *Komite Sekolah* was separated from any influence of the school principal, since many of the problems related to teacher absenteeism centred on school principals exercising undue control over the financial and human resources allocated to the village. They were however concerned that the *Komite Sekolah* would demand money to sit on a more rigorous *Komite Sekolah*.

Like other KPGs, the faculty felt it was important to evaluate the students on-site, but because of a lack of money, there was no possibility for the faculty evaluators to go to the remote villages where the students were doing their practicums.

There was a strong negative reaction to the SM3T program that brought teachers from outside of Papua to teach in Papua. These teachers were often unable to communicate in the local language, had short contracts (after which they went back to their home provinces), were unaware of local cultural situations and tended to take jobs from Papuan KPG and FKIP graduates. It was felt that if local teachers were paid the equivalent of SM3T teachers, some of the teacher absenteeism problem could be solved.

In regards to perceptions of readiness regarding MTB-MLE curriculum development and teacher training, KPG Timika showed minimal active support for the concept. They only sent one person to Ambon for the domestic study tour and never participated in the Thailand Study Tour, or two of the workshops to which they were invited. This was perceived by the team as possibly indicating a lack of conviction regarding the efficacy of MTB-MLE for Papua. It was also believed that since they never personally interacted with the quality programs in Thailand that they may have harboured erroneous perceptions throughout the entire duration that was never truly rectified.

KPG Merauke

It was refreshing to discuss the role of teacher preparation for MTB-MLE with the faculty at KPG Merauke. The interaction with the staff indicated an awareness of the issues. The faculty had examined the language vitality maps and realized that many of their students no longer originated from areas that

were remote and rural. In response, faculty indicated there may be a necessity to ensure they did not lose their original mission and vision of preparing students for remote and rural schools. There was a call to contact some of the kabupatens with large remote and rural populations in order to ensure more students were attracted to their institution from these forgotten areas.

The faculty was very open to including courses in MTB-MLE, especially for those anticipating a career in rural and remote schools. Like KPG Nabire, the faculty wanted clarification on the status of “Guru Bantu” in the classroom if they adopted the Thai model of MTB-MLE where the primary classroom teachers may not speak the local language of the community but are assisted by *Guru Bantu* teachers in the actual teaching. They imagined the assistant teachers would need to have a D1 but clarification was needed on who would pay for their salary as a “guru bantu” once they graduated. In anticipating a greater role for MTB-MLE, the faculty wanted training to prepare “Master Trainers” in MTB-MLE.

Similar to other KPGs, Merauke also found they needed a special upgrading program to teach some of the students from isolated regions to have functional reading, writing and mathematics skills. They felt an upgraded computer lab, better dorming facilities and a better library would be beneficial for the entire educational program.

Structurally the faculty wanted more clarification on placement procedures for those who graduated from the KPG. The faculty also felt they were stuck in limbo since they were not recognized as university faculty by the national government and the director felt such recognition would be beneficial since it could engender greater faculty stability. As an institution they would also like to become an independent institution offering their own S1 degrees, but were very open to working under an umbrella organization of KPGs, distinct and separate from UNCEN, from whom they received little or no support.

After the final workshop one of their faculty embraced the challenge to develop curriculum for the Marind language in the area where the KPG is located. The fact that this faculty member had written a Marind-Indonesian dictionary and that he was from this language group left the ACDP 023 team feeling that application of the MTB-MLE design techniques was embraced by this KPG for this particular language. What appears to be needed is encouragement and follow-up by the government as he moves ahead with this project.

Conclusion on KPG Revitalization

The tentative conclusions of the focus group discussions have led the researchers to realize further discussion is needed with UNCEN and the government if full revitalization of the KPG is going to take place. The table below compiled the prioritized results of the structural changes requested by the KPGs.

Institution	Become an Independent Institution of higher education	Band together with the other KPGs and form one institution granting S1 degrees.	Ensure we have a separate dean representing the KPGs at UNCEN (no longer just a separate body under UNCEN’s Faculty of Education)
KPG Nabire	3 rd choice	2 nd choice	1 st choice
KPG Sorong	3 rd choice	2 nd choice	1 st choice
KPG Timika	2 nd choice	1 st choice	3 rd choice

KPG Merauke	1 st choice	2 nd choice	3 rd choice
Overall Rating	3rd choice	1st choice	2nd choice

Table 5: Structural Changes Requested by the KPGs

Given the above results, the researchers are leaning to suggesting ***the development of a new umbrella institution under which the four KPGs would function as one institution of higher education with four campuses free to offer fully accredited S1 degrees in elementary and PAUD/TK education.*** The board of this institution would be situated in the Papua Provincial Dept. of Education and Culture to ensure its mission and vision remains the preparation of rural and remote teachers for Papua. The aim of this new umbrella institution would satisfy the government and KPG desire to offer Bachelor degrees (which is presently a requirement for teachers) but also to give them greater flexibility to embrace their mandate of educating teachers for rural and remote communities without having their curricular needs controlled by UNCEN, whose vision is driven more by national curricular concerns.

Besides this important structural change, it is suggested that the following changes are implemented:

1. Development of MTB-MLE Master Trainers at each KPG.
2. Inclusion of at least one course in MTB-MLE in the curriculum with the possibility of a course in Second Language Acquisition.
3. The development of a 1 year *MTB-MLE Teacher Assistant Program (D1)* meant to prepare SMA graduates from rural and remote areas to function as bridge teachers in MTB-MLE programs (Bridging from Indonesian to the local language).
4. Expansion of the KPGs course offerings to include teacher preparation for preschool and kindergarten.
5. Clarifying the reporting and financial support mechanism needed to support KPG Sorong (campus and program ownership and responsibility).
6. Developing a mechanism for KPG faculty, who possess the necessary qualifications, to be recognized as faculty of higher education by the national government
7. Continue upgrading the credentials of KPG faculty.
8. Discard the SM3T program and ensure Papuan teachers receive the same kind of contracts enjoyed by SM3T personnel.
9. Allow each KPG to negotiate its own quota of student enrolment with the provincial government and without UNCEN interference.
10. Include a summative final exam for all potential teacher education graduates that will evaluate all basic skills needed (minimally to include reading, writing and mathematics skills)
11. Provide greater provincial financial support to:
 - a. Ensure faculty can travel to remote and rural schools to evaluate their student teachers.
 - b. Add upgrading classes for under-performing students from remote and rural schools.
 - c. Upgrade computer labs, libraries.

Papuan Ministry of Education and Culture

The Papuan Ministry of Education and Culture has been very supportive in engaging in all the dimensions that this project has taken. From the initial research in ACDP 039 to launching ACDP 023, the Provincial Ministry of Education and Culture has been a major driving force. The provincial government would like to move faster in MTB-MLE than their present capacity allows, and they would like to contract with outside NGO's to speed up the process for rural and remote languages. They have

good cooperation between the ACDP team and the leadership of this new department and the ACDP 023 team.

There is an objective reality among government leaders driving forward the MTB-MLE curriculum that nurturing a change in the sub-department responsible for curriculum development (from just buying and distributing the national curriculum to developing MTB-MLE curriculum) is a hurdle that will need outside help. As such, they have developed the understanding as to what is needed, what they need to manage, and what will need to be funded, but are relying on UNCEN, the KPGs and possibly outside NGO's to deliver the books and teacher guides necessary for each language. It remains to be seen whether this approach will be able to deliver the necessary educational product that underlies MTB-MLE for Papua.

Funding for MTB-MLE has been allocated within the provincial budget and several priority languages have been identified by the government for MTB-MLE programs. The responsibility for the development of each one of these languages has been delegated to all those who have been involved in all the facets of ACDP 023 and can be broken down as follows:

Language	Primary Responsibility	Geographic Location
Sentani	UNCEN	North Coast
Me/Ekari	KPG Nabire	Eastern Papua
Marind	KPG Merauke	South Coast
Lani/Dani	SIL	Central Highlands

Table 6: Government Priorities for MTB-MLE Language Development

The government has asked SIL to work together with the government as it slowly rolls out these programs over the next few years. SIL has not signed any MOUs in this regard, and will consult with the other parties before any decisions are made. Some of the other concerns raised by the Papuan Ministry of Education and Culture included the following:

1. MOU with SIL
2. MLE programme consultant
3. MLE sample materials
4. Funding for awareness raising
5. Field research/survey instrument, personnel and support
6. Funding for field research/survey personnel

Additional MLE programme support needs:

1. School committees will need to have a strategic role to strengthen parent-teacher relations
2. Grappling with the new concept of MLE in continuing discussions with NGOs active in Papua
3. Hold awareness raising/coordination meetings with key government agencies such as DPR, MRP, district (kabupaten) level officials and scholars
4. Create MLE monitoring committee at provincial and kabupaten level

Conclusion

The results of the study tours, workshops and training have left the stakeholders in the MTB-MLE initiative more empowered, but their perception of readiness to embrace the totality of the challenge is

not uniform across all stakeholders. It is therefore fortunate that the initial foray into MTB-MLE by ACDP 023 was meant to go slow and begin with a pilot project in one large language (Lani). If the other stakeholders are encouraged to integrate into the roll-out of the Lani MTB-MLE project so that all parties can “learn by doing” and thus fine tune their own approaches based on field realities.

The government has encouraged the development of a field school in MTB-MLE in the pilot project area and has invited all the KPGs and UNCEN, to become active participants as this project. Such an approach will hopefully not only contribute to their understanding of what it means to expand into other areas of MTB-MLE, but also contribute to the synergy needed amongst these institutions as they are structurally mandated to work together in the field of Papuan educational development.

IV. Draft Road Map for MTB-MLE

The survey and community interaction in the area where the MTB-MLE pilot project is to be initiated has indicated a strong desire on the part of the community for a trilingual educational paradigm. This means that while the initial draft for MTB-MLE road map has not changed since it was first proposed at the Inception Report, it may need to be adjusted among the different communities where an attempt is made to implement the curriculum. At the Inception Report the Secretary of the Prov. Ministry of Education and Culture, insisted on beginning the MTB-MLE program in preschool instead of first grade. This necessitated the change that resulted between the original TOR and the Inception Report since government policy now mandated we begin our curriculum development at the preschool level. The draft road map begins with the Mother Tongue in preschool and gradually transitions to the national language (Indonesian) as each grade builds on the next, with all but one class in Indonesian by third grade (below).

Language	Preschool	Kindergarten	Grade 1	Grade 2	Grade 3-6
Local Language	Oral mother tongue for introducing pre-reading, and pre-writing in the mother tongue	Oral and written mother tongue to introduce reading and writing in the mother tongue	Mother tongue (MT) for reading, writing, mathematics. Possibly adapt Buku Paket Kontekstual to Bahasa Lani.	Mother tongue for reading, writing, mathematics. One class that uses a <u>bilingual reader</u> to cover science and, social studies	All classes in Indonesian except for Muatan Lokal
Indonesian	Oral Indonesian for introducing pre-reading and pre-writing in Indonesian	Oral and written introduction to Indonesian to introduce reading and writing and numbers in Indonesian	Oral and written introduction to Indonesian as a second language (consider using revised Indonesian Buku Paket Kontekstual Papua)	Oral and written introduction to Indonesian. Use curriculum Buku Paket Kontekstual Papua; Bilingual Reader to cover other material	All subjects in Indonesian except for “Muatan Lokal”

English	none	none	none	none	Decision of Community
Language of Instruction	Mother Tongue	Mother Tongue	Mother Tongue	Mother Tongue and Indonesian	Indonesian

Table 7: Draft MTB-MLE Road Map

However, in Kuyawage, Lanny Jaya the location where the MTB-MLE project is to be implemented, the community was very insistent that the government include three languages laddered into the curriculum. They want to begin with Lani, add Indonesian and include English as children progress through their elementary to secondary school education. As far as ACDP 023 is concerned, the inclusion of English will necessitate a decision on the part of the Papuan Provincial Ministry of Education and Culture.

V. Study Tours

The primary purposes of the study tours was to jump-start the educational process among key stakeholders regarding what was included in a comprehensive MTB-MLE program and what was needed to be able to implement such a program. By exposing professors from UNCEN, the KPGs and the Ministry of Education and Culture to well developed and well-run programs in Thailand and Ambon, as well as exposing them to the international UNICEF conference on MTB-MLE, we were able to achieve this purpose.

Study Tour to Thailand

The participants for the International Study Tour included key officials from the Dept. of Education and Culture, the Teachers Colleges (KPGs), and the State University of Cenderawasih (UNCEN). They were given pre-reading material as well as homework assignments prior to the tour and the tour was tailored to their primary responsibilities. Those from the government and UNCEN interacted with key MTB-MLE experts at the UNESCO conference on MTB-MLE issues that specifically addressed MTB-MLE policy, budgeting, planning and evaluation. The educators from the KPGs interacted with educators from universities and NGO's involved in the training of teachers and the development of MTB-MLE programs. All participants personally interacted with teacher and parents whose children were involved in MTB-MLE programs.

Responses from all the participants was very positive towards the need to nurture MTB-MLE in Papua. Several policy shifts that participants suggested included the need to address minimum standard qualifications for MTB-MLE teachers. Their exposure to several ASEAN countries using local people with just a high school education as early grades MTB-MLE teachers or as "bridge" teachers (teachers who function as translators or implementers, and who work under a head teacher possessing higher academic credentials) made them realize the need for greater flexibility in MTB-MLE teacher credentialing.

Lessons Learned from the Thailand Study Tour

- A general sense that the problem lies with the implementation. They believe that they (and others in official positions) know the theory of MTB-MLE. However, they do not yet feel capable

of running an MTB-MLE project without further information, capacity development and consultant help (see below for further comments on capacity development);

- Lack of consensus over how much to depend on the government. Some had experience of government funding being suddenly cut in the middle of a project. This person mentioned that the rules for the government budget lists ('daftar anggaran') are very strict. This money may not, for instance, be used by foreigners;
- Consensus that there needs to be stronger and clearer governmental support. The group felt that they should put pressure on the provincial parliament (MRP) and have mother tongue education put into a 'Perdasi' (provincial area law). They felt that support from Jakarta was not necessary, as long as the Governor of Papua made a formal statement of agreement;
- That a strong MLE programme in Papua would have support from many sides – the central parliament (although see above – not totally necessary), UNCEN university, the provincial Department of Education and Culture, the local communities and others;
- They do not currently have enough information about the language situation in their areas (SIL staff directed them to read www.ethnologue.com), or the attitudes of local language speakers. They felt that a first step would be to do a survey to target areas;
- Lack of clarity about whether it is better to start a project at kindergarten level or primary school level; (this concern was laid to rest by the government's MTB-MLE policy decision to begin in preschool)
- That it would be best, going forward, for government personnel to continue to focus on policy making and professors on the technicalities of curriculum development and teacher training;
- It was agreed that everyone should go back to their respective institutions and talk to others about what they had learnt;
- The teachers' salaries should be paid via the head of district since he is a civil servant and has access to the towns;
- The head of culture should be enlisted to help enforce teacher attendance, and given an incentive to do so if necessary. In several areas, this has already been done. (N.B. It was also noted that the head of culture usually sits on the school committee anyway, and if he isn't on it in a particular village, he should be);
- Some teachers are Muslim, so the church would have no authority over them, but the head of culture holds considerable authority, even over newcomers to an area;
- Teachers who leave for the town must be fired;
- The 'satu atap' system, whereby there are only 3 grades in the villages - Grades 4-6 are in the small towns and children board – is a good one;
- It is doubtful whether moving from a 2-term system to a 4-term system with longer school days in order to give the teachers a break would work;
- In the past, there was a system whereby a package containing essential items ('kebutuhan pokok') for the teacher would be dropped at the village every 1-3 months. This was a good system;
- There is a communication problem – there needs to be more mobile phone and/or radio coverage in remote areas.

Study Tour to Ambon

In order to increase stakeholder capacity to implement mother tongue based multilingual education (MTB-MLE) programs, a field visit to a program which serves preschools in a neighboring province was conducted in Ambon, Maluku. The Sulinama Foundation, a local foundation, is in its sixth year of implementing a mother tongue based preschool program (PAUD-B2S) and continues teacher training and monitoring student and teacher achievement.

The main goal of this field visit was to learn from a local organization the practical aspects of implementing a mother tongue based program in Indonesia. Through presentations, preschool visits, discussions and reviewing research results, participants directly observed the benefit of mother tongue based education in the Indonesian context. Participants benefited additionally through networking with stakeholders in the neighboring province of Maluku.

The Sulinama Foundation's PAUD-B2S preschool program partners with 31 preschools on Ambon and other nearby islands. Sulinama provides Ambonese Malay mother tongue based curriculum and teaching materials for their partner schools as well as monthly teacher training, school monitoring, and parent support. A small honorarium is also provided to schools monthly to assist with school supplies, photocopies and teacher pay.

Over the course of two preschool visits and meetings with stakeholders and staff, participants were able to observe key components in the PAUD-B2S program that positively influence the success of this program. These components are the use of the mother tongue, strong developmentally appropriate curriculum, on-going teacher training, parent involvement, and frequent school monitoring by trained Sulinama staff. Additionally, the most successful preschools are staffed by teachers with high internal motivation to serve their community regardless of external incentive. It was clear for participants to see that for the PAUD-B2S program to be truly sustainable, greater government support is necessary.

Lessons Learned from the Ambon Study Tour

As the study tour debriefed during sessions following meetings and preschool visits, the following was noted by participants as being important to the development of mother tongue based multilingual education (MTB-MLE) in Papua.

- Government support is crucial for the success of a mother tongue based multilingual education program.
- Laws and regulations for an MTB-MLE program will increase sustainability.
- The PAUD-B2S program in Maluku cannot be sustainable if they have to continually find outside funding to support teachers.
- Papua does not have a difficulty with providing salaries for their kindergarten teachers, but compared with the teachers in Ambon, the Ambonese teachers serve their students with greater commitment and motivation even though their income is much less. Teaching with internal motivation to serve one's community is a key to success.

- Participants agreed that MTB-MLE in rural and remote areas is a good idea, and have begun the process for getting laws and regulations in place to support and fund MTB-MLE in preschool and primary school.
- The Papuan Ministry of Education and Culture has begun planning and conducting five Trainer of Trainers (TOT) workshops for an integrated program in five areas: Functional Literacy, Preschool Management, Preschool Tutor Internship, Parenting, and Mother Tongue Based Preschool Curriculum Development.
- It would be beneficial to work together with NGO partners such as Wahana Visi Indonesia (WVI), SIL, Sekolah Kampung (run by John Rahel), and others.
- Sekolah Kampung could be a good resource because it is a school based on the local culture, however it is only in the Sarmi Kabupaten. It hasn't spread across Papua yet.
- The "Bunda PAUD" (Early Childhood Education Mother – the wife of the kabupaten leader or governor) could be an advocate for MTB-MLE in Papua.
- It would be good if the preschool teachers' network (HIMPAUDNI) could function as a center for professional development and support for teachers. The HIMPAUDNI and kindergarten teacher's group (IGTK) in Ambon serve mainly as a place to discuss administrative issues, there is little opportunity for professional development or support.
- The Cultural Sector and the Education Sector of the Papuan Ministry of Education and Culture should work together so that this program strengthens the local language and culture.
- It would be good for Papuan teachers to participate in an internship in Ambon, like teachers from Lembaga Pemberdayaan Masyarakat Amungke Kamoro (LPMAM) in Timika, Papua have previously done. It would also be possible for the Sulinama Foundation staff to go to Papua to host an intensive teacher workshop with practice teaching.
- Training teachers is not just a one-time thing, but rather teachers need to be trained continually. Knowledge and support continue through workshops, practice teaching, learning-by-doing, routine meetings, evaluation and upgrading skills.
- Parents should be involved in observing preschools and attending trainings so that a strong educational foundation can continue at home.
- There is an agreement that MTB-MLE would be a good choice for Papua's rural and remote areas.

VI. Communication Strategy

One of the challenges in changing the Papuan educational paradigm from monolingual education to multilingual education has been communicating the research that has proven that rural and remote minority peoples greatly benefit from multilingual education; that this approach produces better results than the traditional monolingual approach. Erroneous views have persisted as the program has evolved since key stakeholders, once they understand and support the new paradigm, are often moved to new positions of leadership and replaced by people who have not taken the time to understand the background research undergirding MTB-MLE. This challenge remains.

In order to counter erroneous perceptions regarding MTB-MLE, and since the success of this project demands a multiplicity of stakeholders assent and support, a multipronged approach has been attempted.

Stakeholder	Approach	Rational for Approach
Sub district Level (Kecamatan Kuyawage)	Personal contact with local people; met with all the school teachers, community leaders and included them in the development of the curriculum material.	Since Kuyawage is the area where the proposed pilot project is to be developed, it was imperative they were included in the discussions. The Kuyawage Kecamatan is very isolated and so the only way to communicate is through immediate, personal contact.
District Level (Kabupaten)	<ul style="list-style-type: none"> • Personal contact was established at the inception of the project at the Kabupaten level of government • Study Tours • Workshops and Seminars • Personal Correspondence 	There is little if no internet access in the Kabupaten, and cell phone coverage is minimal and often only operative after 6 p.m. (when the generators go on). Because Kabupaten Lanny Jaya is considered one of the more isolated regions of Papua, and because most of the decisions are based on face-to-face encounters, a multiplicity of personal, face-to-face approaches was deemed most suitable.
Provincial Level	<ul style="list-style-type: none"> • Personal Contact • Press Conferences • Radio Interviews • Television Interviews • Newspaper coverage • Study Tours • Workshop and Seminars 	At the provincial level there are many more influences shaping educational policy, and public perceptions are less aligned with MTB-MLE because the use of the mother tongue has all but disappeared around the provincial capital of Jayapura. This has mandated engaging a broader segment of community in order to ensure the movement of MTB-MLE for rural and remote regions is not undermined by erroneous urban perceptions regarding the reality of rural and remote regions. As a result a greater number of media choices were engaged.
National Level	<ul style="list-style-type: none"> • Round Table Discussions • Press releases • Publications • Radio programs • Inclusion in workshops 	Ultimate curricular policy is formulated in Jakarta and the support of Indonesia's Ministry of Education and Culture in applying national educational indicators by using a multilingual approach was imperative if the program is going to integrate and receive support from the national government.

Table 8: Communication Strategy

Evaluation of the Communication Strategy

Evaluating one's communication strategy is difficult since it requires some pre-determined benchmarks. However, if one evaluates the support the project has received from the people in the sub-district (kacamatan) where the MTB-MLE project is to be implemented, the level of support is very good. Regular phone calls to the ACDP 023 Team leader by the government coordinator of the preschool

program requesting updates has indicated an excitement among the target preschools in the pilot project.

At the Kabupaten level, the support has been more difficult to gauge. Kabupaten level officials have been diligent in attending seminars and workshops, and the Secretary Daerah (#2 in the Kabupaten) has publicly voiced support for the program and promised to include it in his budget. Since the actual implementation is to commence in July of 2016, it remains to be seen whether this has all been rhetoric or an actual commitment to ensuring the MTB-MLE pilot project will be adequately supported.

The Provincial Ministry of Education and Culture has been very supportive of MTB-MLE. They have ensured their people have participated at all levels of the project. They inaugurated a sub-department of Letters, sent their people to Thailand and Ambon, and paid for others of their staff to join in some of these events as well. They have visited our workshops around the province, and articulated support at workshops, conferences and in the press.

Finally, since the ACDP Team spent very little time in Jakarta, the heavy lifting for nurturing support in the Ministry of Education and Culture in Jakarta was done by the ACDP Jakarta staff. They arranged for meetings between the Minister of Education and Culture and NGO's involved in MTB-MLE. They were effective in ensuring the press wrote accurate stories reflecting the nature of MTB-MLE, arranged for radio and television spots and held round table discussions within the Ministry of Education and Culture.

While undoubtedly perceptions have been changed regarding MTB-MLE at all levels of the political spectrum there remain some outstanding misperceptions regarding the MTB-MLE. At all levels the question of cost arises. It is presumed that MTB-MLE will be too cost prohibitive to ever implement on a large scale. Part of the misperception lies in the fact that government officials have not accurately tabulated the drain on their budgets that the present approach has had in graduating large numbers of rural and remote children who are illiterate. It would be effective if this kind of comparison was undertaken in order to provide evidence-based research addressing this question.

VII. Four Capacity Development Workshops

Kabupaten Level Workshops

The purpose of the four capacity development workshops was to expand the understanding among key MTB-MLE stakeholders in order to nurture their support for MTB-MLE programs at the Kabupaten level. Since the financial control of schooling in Indonesia is largely controlled at the Kabupaten/Regency level, three of these workshops targeting 17 kabupatens with large numbers of remote and rural populations were delivered. The three workshops brought together key officials from different government departments engaged in education (Head of the Dept. of Education and Culture, The Planning Bureau, Preschool Education and Elementary Education as well as people from the nearby teachers colleges or university) and attempted to create a sense of synergy between the kabupaten educational administrators and the institutions of higher education with whom they would naturally work to develop curriculum and train teachers.

The location of the workshops and invited regencies can be seen in the table below:

Workshop Location	Regency Invited	
Wamena	Tolikara	Yalimo
	Pegenungan Bintang	Yahukimo
	Lanny Jaya	Nduga
Nabire	Puncak Jaya	
	Paniai	Dogiai
	Deiyai	Intan Jaya
Jayapura	Nabire	
	Sarmi	Memberamo Raya
	Memberamo Tengah (Hulu)	Keerom
	Jayapura	

Table 9: Kabupaten P&K Leaders Workshop Locations

The workshop covered the following topics:

- ▶ Session I: Opening: Pak Loby, Secretary, Provincial Ministry of Education and Culture
- ▶ Session II: Language, language vitality, language mapping, MTB-MLE theory and how it relates to raising the quality of education
- ▶ Session III: MTB-MLE theory and practice; (includes testimony from study tour participants)
- ▶ Session IV: Lessons on Rural and Remote Education from around the world
- ▶ Session V: Working with data and planning: compiling data necessary for MTB-MLE decisions; how to prioritize languages for MTB-MLE etc.

One eye opening exercise for most of the government officials was an exercise guiding participants through a budgeting exercise on the cost of graduating children from elementary school who were still illiterate. Most participants had never looked at the wasted monies in their budgets by not ensuring basic mathematics and reading skills were achieved by graduating elementary school children.

Different levels of progress were made with different kabupatens depending on their existing priorities and plans. Four of the kabupatens, along with faculty from one of the local Teachers Colleges invited to the Nabire workshop decided to band together and develop the Me/Ekari language. This was a very significant breakthrough as their choice of language indicated a good understanding of the seminar material and their decision indicated an ability to analyze MTB-MLE data tables foundational for making strategic MTB-MLE programmatic decisions.

A **fourth capacity development workshop** in curriculum development was implemented from Oct. 19-24, 2015. Extensive work went into the preparation of this workshop, since it formed the backbone of future curriculum design in MTB-MLE. Attendees included members from the National Ministry of Education and Culture Curriculum Department, UNCEN, Prov. Ministry of Education and Culture, KPGs, as well as Lanny Jaya educational personnel. The workshop reviewed the national educational indicators and walked people through the components necessary to adapt and create books, teaching aids and teacher guides for minority languages in line with the national indicators. The workshop both

taught the concepts behind MTB-MLE curriculum while working towards developing MTB-MLE curriculum for rural and remote contexts. Some of the outputs include the following:

- ▶ Several children's books in Lani; teaching patterns; questioning techniques
- ▶ Papuan stories were adapted into Lani
- ▶ Teaching aids were developed (geoboards, patterning wheels, tangrams, lacing cards, shape matching cards, sticks with Velcro, puzzles made from sticks, painted sticks, shape matching sticks, bingo game, spanduk books)
- ▶ Understanding the role of Traditional songs, free play, listening stories, fine motor skills curriculum, Lani alphabet chart etc.
- ▶ First grade mathematics indicators and how one could adapt the first several weeks of curriculum
- ▶ First grade reading curriculum indicators and how one could adapt the first several weeks of curriculum.

One of the primary outcomes of the workshops was significant movement towards the expansion of MTB-MLE within the province. Four kabupatens have committed to place money in their budgets for the development of specific languages within their boundaries. UNCEN and the Teachers Colleges have committed to developing three languages in the geographical locations from where they draw their students and which overlaps with expertise within their faculty. It is these kind of collaborative commitments by local governments and institutions of higher education that nurture hope for mother tongue based multilingual education in Papua.

One of the weaknesses of the MTB-MLE curriculum development process was that the key people invited to participate were often exchanged by other people who, while perhaps interested in the subject, would not be expected to develop curriculum in the future. Another weakness was that the difficult task of working through the linguistic, orthographic and dialectical issues was difficult to cover since most people did not have the rudimentary linguistic knowledge to address these issues demanded

VII. Teacher Training

Preparation for teacher training has been ongoing. The *Guidelines MTB-MLE Development* is a handbook meant to be used by all those who will be involved in MTB-MLE development. The handbook will include information on curriculum development, training teachers, and developing graded readers and principles of bridging to Indonesian. The materials are envisioned to be used in ongoing teacher training.

During the *Curriculum Development and Teacher Training Workshop*, trainers of trainers (TOTs) were taught how to not only create MTB-MLE curriculum, but time was also set aside to practice using the materials produced in the workshop. The expectation is that all those from the Teacher Colleges and UNCEN that attended the workshop will use their training to further train teachers in MTB-MLE.

It is expected that Lani preschools teachers will be trained in May and June of 2016 by a group of UNCEN and KPG personnel. Due to the fact that insufficient time was scheduled in this project to complete an entire year of curriculum, the Lani teacher training will therefore need to take place just before implementation in July 2016 (new school year). This teacher training will be limited to the preschool curriculum since the government has directed the program to begin in preschool, with the understanding that one year of MTB-MLE programming will be added every year. Preparations for such teacher training have begun, with the development of the curriculum.

IX. Parental School Committee Development

Parental school committees have a long history in Indonesia, and the government has a law on the role and responsibilities for parental school committees (KEPUTUSAN MENTERI PENDIDIKAN NASIONAL NOMOR 044/U/2002 TENTANG DEWAN PENDIDIKAN DAN KOMITE SEKOLAH). The challenge for rural and remote parental school committees is that often the parents are functionally illiterate and thus have difficulty actualizing the roles they are expected to adopt because they cannot write or read reports. They also have no idea of the legal framework of the *Komite Sekolah* and what their rights and privileges are as a community. This information needs to be conveyed to the community if they are going to ensure the hopes and dreams they have for their children are to be actualized in their schools.

In reviewing existing research on community school development the ACDP 023 team contacted the researchers implementing a research project on community school development meant to reduce teacher absenteeism (TNP2K) in Papua. The innovative approach by the research team mirrored the approach used by educators in Thailand and after onsite visits to the experimental site, many of the ideas were incorporated by the ACDP 023 Team in how the education department and local communities can play a complementary role in nurturing community-owned schools (*sekolah Kampung*). The ACDP 023 Team wrote a small handbook (*Pedoman Pelaksanaan Diskusi Masyarakat untuk Membina Sekolah Kampung*) outlining a workshop with 6 sessions that guide the community in analyzing community resources, educational goals and priorities, how they might want to evaluate their community school, and finally, to the selection of the Community School Committee (if there is none). The purpose of the handbook was to provide a step-by-step discussion guide for community facilitators engaged in leading rural and remote communities to understand what it means to be a community based school and how the *Komite Sekolah* can work to facilitate this endeavor.

The community outcomes expected at the end of these community discussions as developed in the handbook include the following:

- People will have described their local context, hopes, dreams and resources as well as their challenges in literacy/education in their language communities
- Prepared an impact statement for their educational program
- Set concrete, attainable goals for their school, including what role their local language will play in supporting these goals
- Develop a series of monitoring tools to assist the community in evaluating the progress they are making as a school regarding their desired outcomes.
- Provide the necessary community discussion for electing an effective *Komite Sekolah*

The basic outline adopted by ACDP 023 follows 6 community impact sessions:

Session 1: Mapping Our Community and Exploring the Causes of Educational Shortcomings

Session 2: Mapping Our Future Community and Exploring the Needs to Attain this Future

Session 3: What does it mean to be a Community School?

Session 4: Defining our Short and Long Term Educational Goals

Session 5: Planning for Documentation and Evaluation

Session 6: Electing the *Komite Sekolah*

The methodology chosen to attain the above mentioned goals through the six community impact sessions is meant to be inclusive and participatory. By drawing maps, pictures, cause-and-affect diagrams, and ensure illiterate people can participate fully in the discussions an approach has been attempted to ensure the resulting outcomes are community driven. However, since the MOEC demands written reports regarding monitoring and evaluation protocols, the final choice of who will be chosen as the *Komite Sekolah* chairperson will necessitate an ability to read/write.

X. Curriculum Review

The curriculum review process has proved to be much more difficult than initially anticipated. The presupposition was that since the Bible had been translated into Lani, there would be a significant number of people to draw from in developing reading, writing and curricular material. This proved to be a wrong presupposition. While Lani pastors and parishioners may be able to read the Bible, very few, if any Lani speakers have been trained to write Lani, which has necessitated a large amount of extra work.

Some of the challenges in nurturing Lani writers and translators needed to develop Lani books and teaching guides included the following challenges:

1. Dialect: Lani has several dialects and the team was fortunate in choosing Kuyawage as the site for the MTB-MLE project because it is situated in the central Lani dialect used in the Bible, the standard requested by the people in the Kuyawage valley.
2. Confusion in vowel sounds: Lani has a 7 vowel system but since Indonesian is written with 5 vowels. After checking with linguists and field testing some writing samples, a five-vowel writing system was adopted.
3. Loan words: There are many concepts that needed to be included in the teachers guides meant to meet government outcomes, but many of the words in these government mandated outcomes or concepts are not in Lani (i.e. psycho-motor, squares, triangles, cognitive, sphere, circle etc.). The translation of these concepts were addressed on a one-by-one basis.
4. Target audience: The style of language needed to be adapted to the audience, and since the baseline survey indicated a very low literacy level, and since personal visits with teachers indicated some had trouble speaking fluent Indonesian, effort was taken to simplify much of the curriculum.

Curriculum Review Challenges

The curriculum development process began with a review of the national educational indicators and a review of Indonesian PAUD curriculum. The decision was made that the best PAUD curriculum was that

developed by Yayasan Sulinama in Ambon, but the cultural and linguistic features would need to be adapted to Lani. The best contextual Papuan early elementary school curriculum was *Buku Paket Kontekstual Papua* and the primary contextualization process would include adapting it to Lani.

The adaptation process included forming a team of Lani translators and illustrators and having them work with the curriculum design specialists. The review of the curriculum resulted in the following changes:

1. Changes from a 5 day to a 4 day curriculum since Lani preschools meet 4 days/week
2. Simplifying the curriculum from 3 age groups to two age groups due to less human resources being available in the classroom
3. Reworking some entire themes since the Maluku people are island people and the Lani's live in the highlands of Papua (the children have never seen boats, oceans, big waves, volcanoes etc.)
4. The stories were adapted to the culture
5. The illustrations were adapted to the culture
6. The stories were translated into Lani
7. Teaching aids were adapted to be less dependent on store bought items and driven more by what is available locally.

The process of forming a curriculum development team that needed to work through linguistic, artistic, curricular, educational and contextualization issues proved to be a big challenge and it should be noted that this took much more time than anticipated, especially with the change in direction by the government to prioritize preschool curriculum over elementary school curriculum.

The drafting of the initial curriculum was a fluid effort where all members of the team interacted in developing the books, teacher guides and learning aids. After the initial books were drafted, they were checked onsite with teachers and Lani leaders in the target area, who suggested many changes. Two of the linguists who initially put the Lani language into writing were consulted where necessary. After the final changes from the community were edited into the curriculum, colour was added to the pictures and prepared for printing.

XI. MTB-MLE Pilot Design and Support for Implementation

The MTB-MLE Pilot design was initially driven by the educational parameters given by the government: it had to be in Lanny Jaya, be part of the Gerbang Mas designated schools, have strong mother tongue language vitality, be supported by the local government and the concept of MTB-MLE had to be embraced by the local community.

Further discussions with the Provincial Department of Education, the State University of Cenderawasih and the Papuan Teacher Colleges led to the decision that future training of teachers in MTB-MLE and future research could benefit from a field site where students could do practicums and faculty could engage in research. This mandated that a location needed to be selected that would be large enough to accommodate students and researchers while still accommodating all the initial parameters set by the government.

Given the above parameters, the team began evaluating the factors discovered in the initial survey and another team went and visited all the potential sites where the Gerbang Mas Schools were situated. The community was engaged, teachers were interviewed, schools were observed in the different places and while several places in Lanny Jaya could have been chosen, the topography led us to choose the Kuyawage Valley. The reasons behind this choice included all the above educational, linguistic and training reasons, plus the fact that while it is a two day hike from the Lanny Jaya Regency capital, it is only an hour flight from Jayapura, the home of UNCEN, the Provincial Ministry of Education and since the valley has an airstrip, it is easily accessible for the other Teacher Colleges in the province. While a road is planned to connect this area to a broader road system, the fact that no cars can reach this destination will hopefully keep the research from being too affected by other easily accessible social influences. The Kuyawage Valley has 13 active preschools, 4 elementary schools, two Junior High Schools and one Secondary School. This will allow for long-term research tracking the students who engage in MTB-MLE as they move through the educational system in the valley. The kabupaten has indicated it may build another two schools in the valley, and these would then bring the sample to 6 elementary schools.

As the choice of the MTB-MLE site was chosen, further discussions ensued with the local people who desired a trilingual approach for their children (begin in Lani, add Indonesian and then English in Junior High or Secondary School).

In conjunction with the Provincial Ministry of Education, a four year plan has been developed to implement the MTB-MLE pilot project. Every year one more year of MTB-MLE schooling will be added to the curriculum and implemented in school, with the final goal being that MTB-MLE material will be used from Preschool-Grade 2.

The full implementation of the MTB-MLE pilot design will mandate significant amounts of work by the government and any partnering organizations. Schools need to be rehabilitated (roofs are falling down, pornography needs to be removed from the walls, desks need to be repaired), chronic teacher absenteeism will need to be addressed (95% teacher absenteeism), principals will need to be contacted and/or replaced (100% principal absenteeism was recorded when the Kuyawage Valley was surveyed the second time), and the allotted food supplies for preschools need to be delivered. At the time this report was written, a severe frost had killed all the crops (with the exception of the cabbages and peas), and children had difficulty walking to school if the walk was more than an hour due to lack of energy.

		Time Frame				
		Dec. 2015- July 2016	Aug. 2016- July 2017	Aug. 2017- July 2018	Aug. 2018 - July 2019	
		Preparation	PAUD/TK Launched	SD 1 Launched	SD 2 Launched	
Preparation	Baseline Data Collection					
PAUD/TK	Finish PAUD/TK Curriculum					
	Check Curriculum					
	Prepare Field Site					
	Count # of Active Teachers					
	Count # of Students					
	Order Sufficient Educational Supplies					
	Work with Communities to Create Komite Sekolah for PAUD					
	Teacher Training for PAUD/TK					
	Implementation of PAUD/TK program					
	Provide Monthly Training/Monitoring Introducing Each Theme					
	Writers Workshop and Language Committee Formation					
SD 1	Finish SD1 and SD 2 Curriculum					
	Check SD 1 and SD 2 Curriculum					
	Prepare Field Site					
	Rehab/Build SD Gerbang Mas Schools					
	Rehab desks					
	Repair Ceilings					
	Build and Stock Library					
	Order Books, supplies etc.					
	Count the # of SD students					
	Count the # of Active teachers					
	Work with Communities to Create Komite Sekolah for SD					
	Order Student supplies (textbooks, alat peraga)					
	Teacher Training for SD 1					
	Implementation of SD 1					
	Monthly follow up (same team as above)					
SD 2	Teacher Training SD 2					
	Implementation of SD 2					
	Monthly follow up					
	Collect comparative EGRA data from Grade 2 graduates					
	Write up final study.					
	Conference on MTB-MLE and Lessons learned					
	Primary Responsibility					
	ACDP/SIL/P&K					
	P&K/P&P Lanny Jaya/UNCEN/SIL/KPG/NGO					
	P&P Lanny Jaya; P&K Propinsi					

Table 10: Potential Timeline for Implementation:

Budget implications

The implementation of the MTB-MLE pilot project for the next three years will require a supporting budget. This 3 year budget can be broken down as follows:

Costs	Description	Value
Material Costs	Costs for curriculum development, printing of texts, teaching aids and workshops	1,259,045,000.00
Human Resource Costs	Monthly Monitoring and professional development for all teachers in the program for 36 months, 5 workshops	942,775,000
Training Resources	4 professionals for 3 years to assist in the development of this project	720,000,000
Total		2,921,820,000
Building/Renovating Schools	Many of the schools are in poor condition and the government has indicated it will build 2 Gerbang Mas schools,	Unknown

Table 11: Budget Implications

As the ACDP 023 consultant team has interacted with the Papuan Ministry of Education and Culture, there have been discussions that indicate the government may work contractually with an outside organization to provide some of the training resources needed to implement this program over the next three years. This suggestion originated from the key personnel who went on the Study Tour to Thailand and Ambon, and who were able to interact and observe the public/private partnership in MTB-MLE design and implementation in Thailand and Myanmar.

The *Sekretari Daerah* responsible for Lanny Jaya has been notified of the building and renovation challenges in Kuyawage and has agreed to undertake the necessary building program to meet the commitments of the *Gerbang Mas* program as well as bringing the existing schools up to minimum service standards. Since these costs are very dependent on existing contracts that the Lanny Jaya government may have with local contractors, they have not been factored into the budget above.

XII. Monitoring and Evaluation Framework

Baseline Framework

The baseline data collected during the survey will form the basis to measure any impact of MTB-MLE amongst the literacy skills of Lanny Jaya students. The baseline framework, along with all the baseline statistics has been written up in the *Framework for Monitoring and Evaluation*. This document is therefore key as the project unfolds and will play a key role from which comparative statistics will be generated in 4-5 years.

Structure for Regular Monitoring and Professional Development

In the interim the government needs to set up a monitoring and evaluation system in order to ensure the actual implementation of the MTB-MLE project and to ensure best practices are followed as it unfolds to verify any impact from MTB-MLE in the future. This actual onsite monitoring and evaluation system meant to ensure best practices are followed is alluded to in the section entitled *MTB-MLE Pilot Design*.

Within the MTB-MLE Pilot Design Framework a monthly training and monitoring time of approximately one week is scheduled. Based on interaction in the field, it appears the best use of this time will be as follows:

Day	Time	Activity
Friday (On Fridays there is no preschool or kindergarten)	16:00 – 20:00	16:00 p.m. Professional Development and Debriefing
Saturday	8:00 – 14:00	Introduce the next theme and lesson plans; practice teaching; review any new content
	15:00 – 20:00	Attendees return to their communities
Sunday	8:00 – 20:00	Time to join in worship or visit
Monday	8:00- 16:00	Onsite professional development and monitoring in schools
Tuesday	8:00- 16:00	Onsite professional development and monitoring in schools.
Wednesday		Trainers go home

Table 12: Schedule of Monitoring and Evaluation

Monitoring and Evaluating General School Performance

Since the purpose of this program is to be community based, it is anticipated that the evaluation framework, apart from measuring actual EGRA outcomes, will be developed during the discussions meant to flush out the community’s goals and hopes for their community school. It is expected that eventually, the monitoring will be taken over by the *Komite Sekolah*, and the actual instruments for future monitoring will be developed during the community school discussions. For a full description of what these community school discussion entail see the Handbook on Committee School Development. Since the community discussions are scheduled to take place during the month of July before school begins, it is premature to offer any concrete evaluation forms in this report.

Evaluation Framework within the MTB-MLE Curriculum

Different types of evaluation mechanisms are integrated into the MTB-MLE curriculum. For the Preschool-Kindergarten curriculum, a quarterly written evaluation is integrated that will measure progress in the following areas:

1. New Content
2. Emotional Development
3. Motor skills Development
4. Cognitive Development
5. Artistic Development

An evaluation mechanism is also integrated within the elementary school curriculum. At the end of every 10 lessons there is a quiz measuring the ability of students on the previous ten lessons. This structure is meant to repeat itself throughout the curriculum, to culminate every semester with a test meant to measure progress made during the semester. This final test is loosely structured after the EGRA test in order to allow outside evaluators a benchmark to measure progress while avoiding giving the EGRA test every semester and thereby reducing the reliability of the EGRA test as the basis of measurement after 4 – 5 years of MTB-MLE schooling.

XIII. Support for MTB-MLE Pilot

The ability to comment on support for the implementation of the MTB-MLE Pilot project presupposes two things:

- a. That a primary implementer has been identified. The presupposition is that this will be the government since they are the only educational provider in the Kuyawage Valley in Lani Jaya. However, the government has indicated it may find an educational NGO who has greater expertise in the area of MTB-MLE and work in partnership to implement the pilot project
- b. That there is a project implemented that needs support

Discussions with the government indicate that the commencement of the program will be in August of 2016. The government has indicated it may work with a local NGO (YABN) who has experience in MTB-MLE and other partners have also been suggested (UNICEF, WVI). While no MOU has been signed, the possibility that this Initial discussions with YABN may lead to a partnership with the government, UNICEF, and World Vision, all of whom are involved in increasing the capacity of education in this province among rural and remote peoples, is a distinct possibility.

At the present, ACDP 023 has put in place support systems, which include the training of teacher trainers, example curriculum, and evaluation mechanisms. Should an extension be granted that covers the period of the implementation (and beyond) of the MTB-MLE curriculum in the 13 PAUD schools in the Kuyawage sub-district, direct and ongoing support from ACDP 023 may commence. The government has given strong indications of the planned implementation, but due to the fact that this project has yet to be notified on whether it will be extended past December 2015 has made any concrete plans to support further implementation premature.

Mapping of Schools and Languages

Previous research by ACDP has indicated that for the government to move ahead with a MTB-MLE approach a series of maps needs to be constructed indicating the position of rural and remote schools and in which languages these rural and remote schools are located. Specifically, schools in certain selected rural Kabupatens were to be mapped in order to assist the government in calculating the distance between schools and the distance children had to travel to attend their local school. Besides training government and university employees in how to collect GPS coordinates for mapping exercises, progress regarding the school mapping component of the project can be seen in the table below:

Table 2: School Mapping Progress

Regency/Kabupaten Map	In Progress	Completed
Tolikara	X	
Yalimo		X
Lanny Jaya		X
Yahukimo		X
Nduga		X
Paniai		X
Deiyai		X
Sarmi	X	
Memberamo Tengah		X
Intan Jaya		X
Memberamo Raya	X	
Keerom	X	
Dogiai		X
Nabire		X
Puncak Jaya	X	
Puncak		X
Pegenungan Bintang		X

Table 13: Maps Completed

The making of the maps combined several sources of data: (a) standard topographical data from the ARGIS 10.1 software; (b) SIL language boundary data; (c) Papuan Bureau of Statistics data on kabupaten boundaries and rural and remote village locations and (c), school and village data from the Papuan MOEC. The mapping process began with the ARGIS software and then added all the SIL language data, (which included the GPS coordinates of many rural and remote communities). To this layer was added the data from the Bureau of Statistics that filled out the kabupaten and kecamatan boundaries as well as the village locations not supplied by SIL. Finally, the school locations were added.

Developing MTB-MLE Language Committees

Since most language communities do not have language committees, since the Pilot Project area also does not have any functioning Komite Sekolahs, the ACDP 023 team roled of function of the MTB-MLE Language Committee into the Komite Sekolah. It was felt that by introducing too many community groups in rural and remote schools at once, we would actually increase the ineffectiveness of the school system. Therefore, a specific person was suggested to be elected and sit on the Komite Sekolah, whose primary responsibility was to support and liaise with the community about MTB-MLE matters and to call the community together when there was a need to discuss issues related to language (who would

participate in a writers workshop, be editors, adapt future language material, discuss orthography issues etc.).

Should a separate committee be needed to facilitate further MTB-MLE development, it is anticipated that a sub-committee in the Komite Sekolah could be formed that would report back to the chairperson of the Komite Sekolah. If this proves unwieldy, a separate committee can be formed.

XIV. Guidelines for MTB-MLE Design and Methodology

A handbook entitled *Guidelines for Mother Tongue Based Multilingual Education* has been developed as a resource for others working in the field of MTB-MLE primarily Trainers of Trainers (TOT). The handbook covers material some of the following subjects:

- a. Questions meant to guide the planning of MTB-MLE curriculum and instructional materials
- b. Instructional and Reading Materials for MTB-MLE
- c. Creating Graded Reading Material in MTB-MLE
- d. Principles for Bridging to Indonesian
- e. Developing Mother Tongue Orthographies/Alphabet Development

It is also anticipated that the expansion of the program to other languages will necessitate the inclusion of local linguists to work through potential orthography issues that may arise. This can be achieved through the inclusion of UNCEN linguistic professors.

XV. Policy Brief on MTB-MLE

The 275 linguistic and cultural groups that dot this island are unique and different from the rest of Indonesia. The legal recognition of this fact is enshrined in the OTSUS laws of Indonesia and according to UU 21/2001, Papua is to ensure its languages are developed, preserved and used in the classroom where appropriate (UU 21/2001 Pasal 58). If Papua is going to maintain its unique cultural identity, the province needs to ensure the languages and cultures of this island don't disappear. If the cultures and languages of the Papuan peoples disappear, the only unique thing separating Papuans from the rest of Indonesia will be their curly hair. If that happens, the need for any legislation like OTSUS will no longer be necessary.

The founders of Indonesia recognized the necessity of approaching each cultural group as unique and this was enshrined in the national motto: *Unity in Diversity*. In Indonesia's Constitution, Chapter XIII, Paragraph 32 we read that Indonesia as a nation is committed to honoring and protecting its languages and cultures. In the laws relating to Otonomi Khusus Bagi Provinsi Papua (UU 21/2001) Papua has been granted policy control regarding curricular matters (Pasal 56) and have been granted the right and responsibility to engage in mother tongue based multilingual education in communities that may not speak much Indonesian.

Mother tongue based multilingual education fulfills the Papuan OTSUS laws that encourage the use of the mother tongue, Indonesian and English. Scientific research in mother tongue based multilingual education has proven that this approach nurtures more creative and critical thinking students who are less likely to drop out, repeat classes or degenerate into passive memorizers of facts they may not

understand. The pay-off comes in secondary school, where international studies have shown that a multilingual approach to education is more effective in nurturing skills in mathematics, chemistry, physics and biology as compared to students who began their education in a language different than the one they knew best as a child.

One of the drivers to mother tongue based multilingual education for isolated communities is cost. Recent research by UNICEF and SIL regarding the ability of Papuan elementary school student's ability to read, write and do simple mathematics has proven that Papua is investing a lot of money in education but obtaining very poor results. Papuan students' literacy scores are about 25% of the Indonesian national average. If we compare the costs of mother tongue based multilingual education to the existing costs of building schools, paying teachers and providing curriculum costs for rural and remote students who, after they graduate, are still functionally illiterate, Papua is wasting huge amounts of money. A change needs to be explored if the government wants to ensure taxpayer dollars are used wisely and that students who graduate from our elementary schools can fluently read, write and do basic mathematics. For this reason the government has requested the experiment in mother tongue based multilingual education to pay close attention to a cost/benefit analysis as compared to the existing approach.

The push to mother tongue based multilingual education is not meant to incorporate all the languages of Papua. Unfortunately many Papuan languages are dying and the children no longer speak the languages of their parents and grandparents. Their mother tongue is Indonesian. Schooling in these communities will be done in Indonesian, with the option of including a muatan local class meant to preserve the languages that originate in this province.

Other languages are small and we call on the many religious organizations involved in translating the Bible for these communities to work with the education department to ensure the peoples of our smaller language groups will not only have Bible in their own language, but will also be able to read the Bible in their own language. All these religious organizations came to this province to serve, and the service needed includes a commitment to create reading, writing and basic mathematics curriculum for Papuan peoples.

To implement the challenge of mother tongue based multilingual education for rural and remote peoples we need to work not only with our foreign religious personnel, but also with the linguists and educators in our institutions of higher education. We need the linguists to develop linguistically sound alphabets and grammatical grounded writing systems. We need bilingual dictionaries and anthropological descriptions of every peoples group in this province. Papuan schools of education need to develop educationally sound multilingual education curriculum, and our Kabupatens need to allocate money to ensure our children can enjoy an educational system that springs from the cultural soil of this province. That Papua's unique cultural and linguistic heritage will be preserved for decades to come.

This is not a task that will be done in a week, or a year or five years. This is a task that needs to continue for as long as Papuans identify themselves as Papuans.

XVII. Conclusion

The ACDP 023 Inception Report outcomes have all been met to the degree that the Indonesian school calendar would allow. As the government now moves towards implementing the Pilot MTB-MLE project

in Kuyawage, Lanny Jaya, it can draw on a cadre of trained trainers, equipped with example curriculum and a framework for monitoring and evaluation to help them ascertain the efficacy of MTB-MLE for rural and remote schools in Papua. This in turn will help them as they continue to formulate educational policy.

In order to ensure continued synergy is developed among UNCEN, the KPGs and the MOEC, a field site has been identified in which all these institutions can experiment and collaborate in both training and research. Finally, a series of handbooks have been created that can be used to train teachers and communities to launch new MTB-MLE projects or to expand existing ones. It is this experimentation that will give the government the needed data to continue to sharpen its approach in rural and remote schooling.

It is expected that this project will become a program supported by the government and that the newly developed sub-department of Letters within the Department of Culture will be the driving force for future development. It is also expected that the government will seek out other international organizations to work alongside this new endeavor as together they expand the existing educational paradigm to make it more friendly for rural and remote children.