

Action Research on Mother Tongue-Based Bilingual Education

Annex 1: Overall Research Design

I. Objectives and Principles

The overall aim of the Research is to develop an appropriate and sustainable policy for bilingual education, with practical guidelines for successful implementation based on the results of the action research, by the end of the Research cycle. The Research objectives are:

- To implement successfully a valid and feasible design of bilingual education in three ethnic minority languages and Vietnamese on a small scale, in selected pre-primary and primary schools;
- To incorporate action research into all levels of the Research;
- To contribute to the development of policies and practices (including legal frameworks) that will promote use and development of ethnic minority languages as a means for improving access, quality and equity of education and other social services.

This mother tongue-based bilingual education approach allows for pedagogically sound use of the appropriate ethnic minority language (the mother tongue, or L1, of the learners) and Vietnamese (the second language, or L2) for teaching and learning. As illustrated in Figure 1 below, both Vietnamese and the ethnic minority language are used in pre-primary for reading readiness and the content of the theme-based (integrated) ECE curriculum. The focus is on pre-reading in the mother tongue and developing oral competence in L2 Vietnamese. The skills and competencies developed in pre-primary prepare learners to enter the primary curriculum, which includes the teaching of both Vietnamese and the ethnic minority language as subjects from grades 1 through 5. Literacy skills are taught first in the L1 and are developed throughout primary schooling. Vietnamese continues to be taught as a second language during grades 1 and 2, when learners develop vocabulary and oral communication skills. Learners will be exposed to the Vietnamese alphabet and word labels around the classroom, and they will begin to transfer literacy skills acquired in the L1 to Vietnamese at grades 3 and 4. The reading and writing skills acquired in the L1 will transfer to an equivalent level in Vietnamese, meaning that they will move directly into age-appropriate literacy in Vietnamese.

The content areas of the primary curriculum are taught in the L1 during grades 1 and 2, when learners are still acquiring basic Vietnamese competence. Starting in grade 3, the use of side-by-side bilingual books (L1 on one side, Vietnamese on the other) will permit both languages to be used for instruction through appropriate bilingual methodologies. As learners develop L2 competence, teachers' use of Vietnamese for instruction will increase, both to prepare learners for further education and to develop their Vietnamese in academic domains. Meanwhile, the L1 will continue to be used for instruction, allowing for bi-directional transfer of linguistic and academic skills. Learners will be assessed through both languages, and are expected to meet the standards of the national curriculum by the end of grade 5, in addition to having well developed bilingualism and biliteracy.

**Figure 1: Mother tongue-based bilingual education:
The flexible bilingual approach**

Pre- primary	Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5
L1-EML /L2-Viet	L1-EML	L1-EML	L1-EML	L1-EML	L1-EML
	L1	L1	L1/L2	L1/L2	L1/L2
	L2-Viet	L2-Viet	L2-Viet	L2-Viet	L2-Viet

- Preschool builds oral L1 and L2 competence
- L1 is used for literacy and instruction in grades 1-2
- L2 is taught orally, then literacy transfers from L1
- Bilingual materials facilitate transfer in grades 3-5

The piloting of a theoretically sound approach to bilingual education is expected to result in improved access to and quality of formal schooling for the target populations, whose languages and cultures constitute resources in this approach. The expected educational outcomes of the Research are, among others, the following:

1. Lower student repetition, failure and dropout rates
2. Higher student achievement rates in both languages and all subjects
3. Higher rates of transition to secondary education for all students
4. Greater participation and transition rates of girls
5. Greater interaction between educators, parents and communities
6. Higher level of satisfaction with schooling on the part of students and their families
7. Development of human resources from within ethnic minority communities
8. Greater degree of bilingualism and biliteracy on the part of all participants

Baseline data have been collected from all three regions to provide a basis for evaluating these expected outcomes during and following the process of implementation.

II. Scope and Time Frame

The pilot will be initiated in 3 languages: J'rai, Khmer and Hmong. The pilot will use J'rai in 5 pre-primary and 6 primary schools in Gia Lai province, Hmong in 6 pre-primary and 6 primary schools in Tra Vinh province, and Khmer in 5 pre-primary and 6 primary schools in Lao Cai province. **Annex 2** provides a detailed description of the schools and the selection criteria that were applied.

Two full cohorts of students in each province (from pre-primary through primary grade 5) will complete the bilingual pilot program. The piloting of two cohorts allows the Research to learn from the first cohort cycle and to improve the methods and materials for the second. This also allows for the re-editing of materials, making them stronger and more sustainable, as well as for teachers to learn from their experiences and contribute to improving the innovation.

UNICEF and MOET have agreed to roll out classroom-based instruction at the beginning of school-year 2008-2009 with the first cohort in all three provinces. At the beginning of the school year 2009-2010, the second cohort will begin at pre-primary level in all three provinces. According to this schedule, the second cohort of students will complete grade 5 in May 2014.

Figure 2: Pilot Cohorts of Students

Period begins	Sept. 2008	Sept. 2009	Sept. 2010	Sept. 2011	Sept. 2012	Sept. 2013	Sept. 2014
Cohort 1	Pre-Primary	Gr 1	Gr 2	Gr 3	Gr 4	Gr 5	
Cohort 2		Pre-Primary	Gr 1	Gr 2	Gr 3	Gr 4	Gr 5

III. Pilot Curriculum and Teaching/Learning Materials

The bilingual curriculum framework will be based as much as possible on the existing national curriculum standards. There will be standards added and some changes made to the weekly timetable due to the addition of the mother tongue literacy component and the component of Vietnamese as a second language. Students in the bilingual program are expected to meet current national standards by the end of grade 5, along with achieving high standards for mother tongue language and literacy. The main adjustment will be for current standards of Vietnamese language to become the L1 standards, and for new standards to be developed for Vietnamese L2 that represent levels appropriate for second language learners.

Regarding the content areas like mathematics, even where there are changes in the language of teaching and learning, the standards are expected to remain the same. It is agreed that the bilingual curriculum framework will not have to go through the formal review and approval process normally required for newly developed curriculum, since it is for a pilot program; however, the *Curriculum Team* (see below) will ensure that national standards are adequately represented, and the appropriate departments of MOET (see responsibilities in the MOU) reserves the right to approve the curriculum before it is used to develop the bilingual materials to be piloted.

A *Curriculum Team* composed of key national technical experts and supervised by RCEME will work with a UNICEF-contracted international specialist to develop the bilingual curriculum framework based on the current national standards for pre-primary and primary education. Once MOET has approved the framework and supporting documents, a *Materials Team* composed of key national technical experts and supervised by RCEME will work with a UNICEF-contracted international specialist to plan the types of materials (such as readers, content textbooks, teachers' guides, story books, alphabet cards and reference materials) to be developed and schedule materials development activities over the course of the Research period. This team will coordinate and supervise the work of three groups of authors/resource people (one each for Hmong, J'rai and Khmer). The language-specific groups will accordingly develop original materials or adapt existing ones for pre-primary (age 5 level) and primary grade 1 for the roll-out of the first cohort at the beginning of school-year 2008-2009. Appropriate use will be made of the materials developed under the J'rai project, as well as the local experts involved in that project. Materials for grades 2 through 5 will be adapted gradually over the following years, as much as possible in advance of the teacher training workshops in which they will be introduced. The *Materials Team* will function throughout the Research period, making extensive use of key experts and local intellectuals as needed for each language and content area, and coordinating the work of the three language-specific groups to ensure that they learn from each other's experiences and remain consistent with the bilingual approach.

Regarding the materials to be developed or adapted, the following are basic (minimum) guidelines:

Pre-primary: One teachers' manual (in L1 or bilingual), pre-reading materials in the L1, and Big Books and story books in both languages, in addition to other recommended materials.

Grades 1 and 2: Teachers' manual (in L1 or bilingual), learners' books and workbooks in L1, Vietnamese L2 resources for oral language development, story books in both languages. Note that content area materials may not be translated word by word from the national materials because they should be made culturally appropriate, but they will correspond to the national standards for each grade level.

Grades 3 to 5: Teachers' manual (bilingual), learners' books and workbooks (bilingual except for L1 and L2 as subjects). Note that starting in grade 3 the content area materials (student books and workbooks and any supplementary texts or aids) will be developed bilingually, using a side-by-side design. The side with content in ethnic minority languages will not be an exact translation of the Vietnamese side, but both sides will correspond to the expected learning outcomes/standards of the curriculum, i.e. the actual explanations and wording of the texts are written separately so that the texts are authentic and culturally appropriate in each language. This design is expected to facilitate teacher and student understanding of pedagogical vocabulary and concepts in both languages, facilitate bilingual methodology, and enable flexibility in adapting teaching and learning activities to learner needs at any given time. Note that assessment of learning will also be bilingual, except for L1 and L2 as subjects, where each is assessed in the appropriate language.

IV. Teacher Training

Implementation of the mother tongue-based bilingual education program requires successful staff development in each region, including teachers, school directors and other education personnel. Teachers will need a command of oral and written mother tongue as well as oral and written Vietnamese, in addition to being knowledgeable of the cultures associated with both languages. They will need to understand the approach and be equipped to use language-specific and bilingual methodologies at the appropriate grade level. In some cases they may need to work with multigrade classes, particularly at the preschool and early primary levels.

Teachers will not follow their students through the school system but will remain at the grade level for which they have been trained; they will teach that grade level bilingually at least two times (see cohort discussion above). Teachers for the following year will be recruited and begin their orientation the year before so that they can learn from their colleagues who are already teaching bilingually. School directors and other staff will be included in bilingual trainings so that they can support implementation at their levels.

Based on the agreed teacher selection criteria, all or nearly all teachers will be mother tongue speakers of the ethnic minority language to be used (J'rai, Khmer, Hmong), but not all will have had the opportunity to acquire literacy in that language. Even those who are literate will need to work with local language professionals to ensure that they write consistently with agreed orthographic conventions. This means that L1 training will take two different forms: (1) providing initial literacy and writing practice in the mother tongue to novices and (2) refining the reading and writing competencies of L1 literates.

Based on the agreed teacher selection criteria, teachers should be competent speakers of Vietnamese. Because the majority will be second language speakers of Vietnamese, some may need Vietnamese language strengthening as well as L2 methodology training.

The components of the teacher training will minimally include:

- L1 language and literacy
- L2 language and literacy
- Principles and methodologies of L1 and L2 acquisition
- Bilingual teaching and learning methodologies for the content areas
- Use of the new materials at the appropriate grade level
- Use of action research on their practices

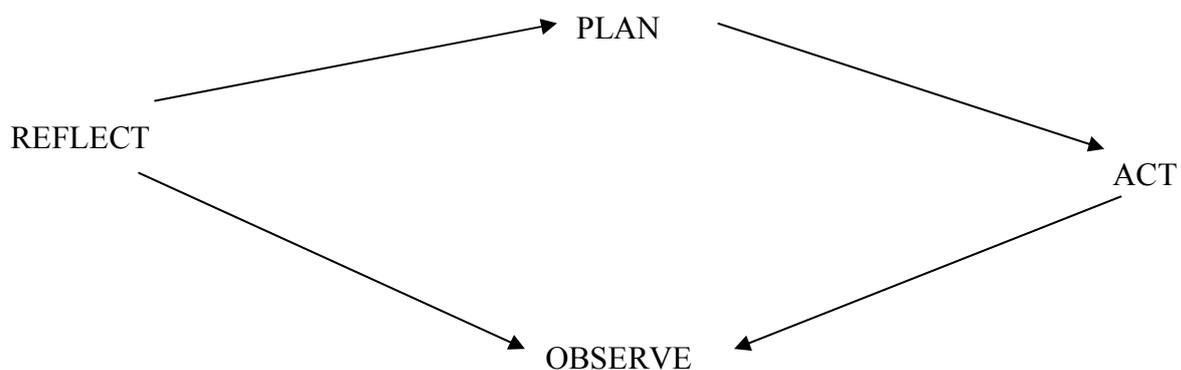
The **Teacher Training Committee** composed of key national technical experts and supervised by RCEME will work with a UNICEF-contracted international specialist to develop an overall training plan for the pilot program which includes types of training, content of training, designation of trainers, and when and where these trainings will take place. The **Committee** will also oversee the development and design of a Training of Trainers (ToT) program for the future training of bilingual teachers and managers in the pilot program.

A two-track approach will be used to support bilingual teacher development for the pilot program. The first track will consist of an accelerated training program designed to build capacity of teachers to successfully participate in the rolling-out of the first cohort at the beginning of school-year 2008-2009. Teachers from preschool and primary grade 1 teachers, as well as principals and education managers, will be provided training in the areas outlined above. Future grade 2 teachers will be included in some activities. The second track will involve longer-term measures to promote development of future bilingual teachers and managers. For both tracks, the **Committee** will work closely with teacher training colleges and university pedagogical departments which can support in-service and pre-service trainings as well as specific courses on targeted themes such as Vietnamese L2 teaching methods.

V. Monitoring and Evaluation Framework: Action Research

It is agreed that the Research will be implemented, monitored and evaluated according to an Action Research model. Action Research is a family of research methodologies which pursue both action outcomes (change) and research outcomes (understanding) at the same time.

Figure 3: Deakin model of action research
(Kemmis et al, Australia)



As shown in Figure 3, key stakeholders jointly develop a **plan** of critically informed action to improve what is already happening (what changes they want to introduce). They **act** to implement the plan, then **observe** the effects of the critically informed action in the context in which it occurs. Finally, they **reflect** on these effects as a basis for further planning, subsequent critically informed action and so on, through a succession of cycles. The alternation between action and reflection in a continuing cycle integrates theory and practice, action and understanding. Critical reflection consists of two parts:

- (i) Reflection on:
 - goals of the activity
 - data collected
 - interpretations of the data
 - the methodology and methods in use, and how well they are working
 - the people who are involved as participants or informants
- (ii) Planning for the next cycle

This will be a highly participatory process where stakeholders at all levels work collaboratively to plan, act, observe and reflect. Monitoring and evaluation is built into the design for implementation in an ongoing fashion.

It is agreed that this program will not involve use of a *control* group and an *experimental* group as in traditional positivistic research, because in practice it is impossible to control for all variables related to student, teacher, school and classroom characteristics, and community and management conditions. Use of Action Research allows for documentation of impact and effect without relying on a control group, because the methodology is designed to include the interplay of diverse variables through baseline data and description of the situation and interventions made at each stage.

RCEME has agreed to take overall responsibility for monitoring Research implementation regularly and overseeing the Action Research component. The Action Research cycle has an inbuilt monitoring and feedback mechanism where new plans for implementation are made based on critical observation and reflection, as described above. Each phase of each cycle contains an evaluative component which could be considered *formative* since it is ongoing and seeks to answer the question: *How can this program be improved?* *Summative* evaluation will be conducted periodically and seeks to answer the question: *How good is this program?*

In addition to ongoing monitoring and formative evaluation as part of the Action Research cycle, UNICEF will collaborate with MOET to conduct formal evaluations at the end of 2009 and then every two years until Research completion. Care will be taken by both parties to ensure that a variety of data is collected on a yearly basis, including e.g. bilingual test results – written and oral, student work samples, attendance records disaggregated by gender, observations of classroom teaching according to agreed observational tools, teacher journals, learner diaries, MOET field notes, student report cards, teacher interviews, student interviews, parent individual and focus group interviews, surveys, etc. These data will be triangulated and findings compared to baseline data, national educational data and relevant research literature.

VI. Key Next Steps

The detailed Action Plan from May-December 2007 will be used to guide activities during the next six months of the Research. A longer-term plan for the next five years, including key action points is attached in **Annex 5**. This outlines key action points by quarter, with responsibilities defined, and will serve as a monitoring and planning tool. It will also serve as a basis for detailed annual work plans, to be reviewed by the Advisory Group and approved by the Steering Committee.

ANNEX 2: LIST OF PILOT SCHOOLS AND SELECTION CRITERIA

Gia Lai province: 6 primary school and 5 kindergartens recommended

No.	District	Commune	School	%age EM children	Number teachers (recommended)
1	Chu Pah	Ia Ka	Ia Ka primary	90.4	17/33 (6 Jrai)
2			Ia Ka kindergarten	87	3/9 (3 Jrai)
3		Ia Phi	Ia Phi primary	99.5	12/31 (8 Jrai)
4			Ia Phi kindergarten	100	6/9 (6 Jrai)
5		Ia Mo Nong	Ia Mo Nong primary	93.8	4/22 (tbc)
6			Ia Mo Nong kindergarten	91	5/7 (5 Jrai)
7	Ia Grai	Ia Pech	Primary section, Nguyen Dinh Chieu secondary		
8			Kindergarten 26-3		
9		Ia Der	Ngo May primary	100	14/26 (10 Jrai)
10			Ly Tu Trong primary	94	14/28 (12 Jrai)
11	Kindergarten 30-4		89.4	13/13 (12 Jrai)	

Notes: Numbers in parentheses are teachers who are EM.

Tra Vinh province: 6 primary schools and 6 kindergartens recommended

No.	District	Commune	School	%age EM children	Number teachers (recommended)
1	Tra Cu	Don Xuan	Don Xuan C primary	95.2	14/18
2			Don Xuan kindergarten	88.7	4/13
3		Tap Son	Tap Son B primary	100	13/17
4			Tap Son kindergarten	44.3	3/9
5		Ham Giang	Ham Giang C primary	100	18/24 (16 Khmer)
6			Ham Giang kindergarten	89.7	10/12
7		Don Chau	Don Chau B primary	92.2	15/19
8			Don Chau kindergarten	55.1	4/6
9	Cau Ngang	Thanh Hoa Son	Thanh Hoa Son A primary	70.1	17/28
10			Thanh Hoa Son kindergarten	71.2	5/9 (3 Khmer)
11		Nhi Truong	Nhi Truong primary	84.5	14/26 (11 Khmer)
12			Nhi Truong kindergarten	71.7	14/16 (8 Khmer)

Notes: In some schools, though the percentage of Khmer students is low, some satellite classes have 100 Khmer students who are going to enroll in the pilot primary school

Lao Cai province: 6 primary schools and 5 kindergartens recommended

No.	District	Commune	School	%age EM children	Number teachers (recommended)
1	Bac Ha	Ban Pho	Ban Pho primary	100	2/28
			Ban Pho kindergarten	100	7/15 (3 H'Mong)
		Ta Van Chu	Ta Van Chu primary	100	6/22 (5 H'Mong)
			Ta Chu Van kindergarten	100	5/10 (3 H'Mong)
	Si Ma Cai	Sin Cheng	Sin Cheng I primary	100	7/22 (6 H'Mong)
			Sin Cheng II primary	99.5	5/12 (no H'Mong)
			Sin Cheng kindergarten	92.8	8/15 (6 H'Mong)
	Sa Pa	Sa Pa	Sa Pa primary	100	5/22 (1 H'Mong)
			Sa Pa II kindergarten	100	0/12
		Lao Chai	Lao Chai primary	100	10/28 (1 H'Mong)
			Lao Chai kindergarten	100	3/5

Selection criteria

We prefer to choose small schools (**including their branches**) with teachers and students competent in EM languages. The student population should be as linguistically homogeneous as possible, i.e. **100% of students should be speakers of the target EM language**. It may be that some pilot schools will have some non-bilingual classrooms due to lack of teachers competent in the EM language being piloted, or presence of some students who speak languages other than the one being piloted, or presence of some children/families who choose not to participate in the bilingual pilot. However, the whole school will be given bilingual materials and training where appropriate (especially action research and Vietnamese as L2, even for non-bilingual teachers), and later the communities and education managers may be able to find ways to support more bilingual teachers as the program rolls out.

Where possible, we should attempt to pilot the bilingual approach in **preschools that are included in primary schools**. Second choice is for preschools that are very close to primary schools and feed students directly into those nearby primary schools.

Regarding number and choice of teachers, wherever possible, we should use the teachers already in the schools or localities who are competent in the target EM language. We would prefer **not to move** teachers. Where DOET and POET managers have offered to move teachers, we need to secure their **guarantee** that teachers will be moved only if they volunteer to do so after receiving adequate information about the Research.

The main requirement is that pilot teachers **understand and speak the EM language very well**. We would prefer to work with teachers who are **literate in the L1**, but in some cases this may not be possible, so we can include this type of training in our preparations.

Pilot teachers should be **qualified** teachers, i.e. meet the standards for teaching at the preschool and primary levels. They do **not** necessarily have to have a certain number of years experience; in fact, it is sometimes easier to work with less experienced teachers when implementing an educational innovation that requires new ways of thinking about the curriculum. They will be trained intensively to use the flexible bilingual approach at their level of teaching (preschool or primary grade 1).

It would be useful for pilot teachers to speak Vietnamese competently; however, this is also something that can be provided through ongoing training. (We can consider various models of ongoing study while pilot teachers are teaching.)

ANNEX 3: MEMBERS OF THE STEERING COMMITTEE
(names to be confirmed)

#	Name	Position and institution
1	Mme. Dang Huynh Mai	Vice Minister, Ministry of Education and Training (MOET) (Co-Chair)
2	Dr. Trinh Quoc Thai	Director, Primary Education Dept. (PED), MOET
3	Dr. Le Minh Ha	Director, Early Childhood Education Dept. (ECE), MOET
4	Mong Ky Slay	Director, Ethnic Minority Education Dept. (EME), MOET
5	Dr. Bui Thi Ngoc Diep	Director, Research Center for Ethnic Minority Education (RCEME), MOET
6	Ms. Maniza Zaman- Cespedes	Deputy Representative, UNICEF Vietnam (Co-Chair)
7	Mr. Jonathan B. Miller	Chief, Education Section, UNICEF Vietnam

ANNEX 4: MEMBERS OF THE ADVISORY GROUP
(names to be confirmed)

#	Name	Position and institution
1	TBA	Ethnic Minority Education Dept. (EME), MOET
2		Representative of Primary Education Dept. (PED), MOET
3		Representative of Early Childhood Education Dept. (ECE), MOET
4		Representative of Research Center for Ethnic Minority Education (RCEME), MOET (Co-Chair)
5		Representative of National Institute for Educational Strategy and Curriculum Development (NIESAC), MOET
6		Representative of National Institute of Linguistics (NIL)
7		Representative of Ethnic Minority Policy Dept., Committee for Ethnic Minority Affairs (CEMA)
8		Representative of International Cooperation Dept., MOET
9	Mr. Jonathan B. Miller	Chief, Education Section, UNICEF Vietnam (Co-Chair)
10	Mr. Cliff Meyers	Regional Education Advisor, UNICEF EAPRO
11	Mr. Jeffrey Waite	Senior Education Specialist, World Bank
12	Mr. Eisuke Tajima	Education Program Specialist, UNESCO

ANNEX 5: ACTION RESEARCH IMPLEMENTATION FRAMEWORK

Activity	2007	2008	2009	2010	2011	2012	2013	2014
5.3. ToT for key trainers in themes indicated (see above). Include curriculum framework and materials drafted thus far for trainers to become familiar with approach and materials.								
5.4. Organize teacher training on the themes: Bilingual education, L1/EML-L2/Viet-bilingual methods, use of the bilingual materials, implementing action research in the								
5.5. Organize continuous training and/or follow-up training as needed by province for L1 literacy, L2 competence, and/or professional upgrading.								
5.6. Follow-up training of bilingual teachers.								
5.7. Organization of training for future pilot teachers (Grades 2-5); target teachers trained for EMLs as subjects Grades 3-5.								
5.8 Exchange visits within the province and to other provinces organised at least once a year to enable teachers to learn from one another								
6. Action research								
6.1. MOET/UNICEF establishes <i>Steering Committee</i>								
6.2. UNICEF/MOET hire international and national consultants (action research trainers or resource people), including 3 teams at provincial/district level.								
6.3. Consultants conduct ToT for action research trainers/resource people on conducting and supervising action research and developing structures for support and reporting of action research by bilingual pilot implementers.								
6.4. Action research trainers/resource people train bilingual teachers/principals and local education managers to promote action research as part of pilot implementation.								
6.5. Bilingual teachers will report weekly to each other and to principals, monthly to a monitoring officer at DOET, and submit formal brief progress report to the central project steering committee on monthly basis.								
6.6. Action research implemented at local, DOET and POET levels.								
6.7. Local, provincial and national meetings to evaluate progress, including early results of action research projects e.g. monthly meetings at district/provincial levels.								
7. Community advocacy/public relations								
7.1. Orientation workshops on action research organised for community leaders and parents in each selected commune								
7.2. Development and distribution of media announcements in appropriate languages regarding the pilot and roll-out.								
7.3. Development and distribution of a bilingual user-friendly (picture-based) brochure in each language for communities and parents.								

ANNEX 5: ACTION RESEARCH IMPLEMENTATION FRAMEWORK

Activity	2007	2008	2009	2010	2011	2012	2013	2014
7.4. Development and distribution of reference materials in each language – adaptation of parental education materials, including abridged version of Facts for Life booklet								
8. Policy development/capacity building								
8.1. Carry out a study of past/current EM education policies, including the recruitment, training and deployment of EM teachers, in the target provinces and								
8.2. Education managers at district and provincial levels determine supportive policies for bilingual teachers needed for the pilot action research and beyond.								
8.3. Establish bilingual education resource libraries with key readings in Vietnamese and the three target languages.								
8.4. Make teacher training colleges and universities aware of opportunities for field research on the bilingual pilot (orientation workshops, field visits to project sites).								
8.5. Regular field visits by UNICEF and key MOET partners to discuss and make recommendations on adjustments if needed.								
9. Bilingual pilot program management								
9.1. MOET/UNICEF Memorandum of Understanding and five year plan discussed and signed including roles and responsibilities clearly defined for each MOET related department and research institution								
9.2. MOET/UNICEF Action Researc Steering Committee signs formal agreements/memoranda of understanding with NIL, CEMA and others with descriptions of their contributions to the bilingual pilot.								
9.3 On-going technical support by UNICEF including RO assistance as needed								
9.4 Consultancies by national and international specialists as needed for each theme including bilingual education, use of bilingual materials, action research implementation and monitoring, etc.								
9.5 Monthly review meetings of the Action Research Management Board								
9.6 Mid year and annual review meetings organised in each provinces (in late June and December every year)								