

An Evaluation of  
SigAm Bilingual Education Project  
for Deaf Children in China  
2004-2009

July 2009

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## CHAPTER 1: INTRODUCTION

### 1.1. Background

There are more than 1.8 million deaf and hard-of-hearing children under the age of 14 in China. Most schools for the deaf continue to use the three-modal monolingual approach (spoken, written and signed Chinese) and most hearing and speech rehabilitation centres with students aged 3-6 maintain an aural-oral approach. Internationally, there is an increasing recognition that sign language is a language in its own right, and if children are exposed to such a language at an early age they can learn sign language as their first language in the same way as their hearing peers learn the spoken language and reach the same cognitive, social psychological development.

The bilingual approach has over the last twenty years become the official policy in deaf education in the US, Canada, Denmark, Sweden and Norway. The legal introduction of sign language in Norway took place in the 1990's. At the same time, policies of emphasising inclusion as an overall value for compulsory education were implemented with active support from non-governmental organisation and academic research.

Establishing a bilingual experimental class by the Amity Foundation in Nanjing in 1996 marked the emergence of a bilingual-bicultural period in China. Within the same programme, two more classes were established in 1997 and 2000. The SigAm Bilingual Deaf Education Project started in 2004, as a cooperative project between the Amity and Signo Foundations and Jiangsu Provincial Special Education Professional Committee (JPSEPC). The aim was to introduce concepts and approaches in bilingual education to China by teaching deaf children Chinese Sign Language (CSL) as their first language, Chinese as a second language, and other subjects and knowledge in CSL in selected schools in Jiangsu Province in China. Later new project schools were established in Sichuan and Guizhou Provinces.

### 1.2. Purpose of the Evaluation

This is an end of project evaluation covering the schools in Jiangsu Province. According to Terms of Reference<sup>1</sup>, the purpose is twofold: Findings and recommendations will be used by schools and participating provincial authorities to improve and further develop approaches and methods in bilingual education. The evaluation will also be used by Signo and Amity to discuss the need for follow up and preparation of a new programme proposal.

The specific objectives for the evaluation are to assess results and achievements, analyse relevance of objectives and interventions and future sustainability. The evaluation should in particular assess to what extent:

- (a) Hearing impaired children in pre- and primary schools have access to bilingual education:
  - A syllabus for deaf education and materials is developed.
  - Deaf teachers are engaged by the education department.
  - Teachers and principals have competence in teaching according to the bi-bi concept.
  - Parents of deaf children are receiving sign language courses.
- (b) Universities in China and Norway are cooperating in the field of deaf educational science and linguistics:

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<sup>1</sup> See Annex 1.

- Professionals from universities of China follow the project closely by assessment, guidance and lectures.
- Professionals from universities of Norway make an annual observation and lectures at seminars.

(c) The evaluation should also pay attention to the following areas:

- Status of CSL in schools and the political focus on CSL in general in China.
- Sustainability of the project when it comes to organisational, administrative, technical and financial aspects.
- To what extent the SigAm project has contributed to the development of bilingualism in China.

### **1.3. Methods**

The evaluation has used three methods for collecting data and information – document review, interviews and observations. The work started with reviewing all relevant background documents (agreements, project plans, reports, newsletters, information brochures, etc.<sup>2</sup>) Then the two consultants visited Jiangsu Province for ten days in May 2009 and interviewed representatives from all the project schools except one, including principals, teachers, children and parents. The team also interviewed government officers in charge of special education, members of the JPSEPC, AMITY staff and Norwegian experts<sup>3</sup>. The team attended the three days final conference in Suzhou together with 180 other participants for summing up and sharing experiences from the project. Finally, we were able to observe performance of teachers and involvement of children in several project classes.

### **1.4. Limitations**

There are several threats to the reliability and validity of findings in such an evaluation. The findings and conclusions should be treated with caution as:

- The evaluation was completed in a short period of time.
- The Norwegian evaluator did neither understand nor use any Chinese or sign language and was dependent on interpretation – sometimes from sign language to Chinese and then from Chinese to English.
- Observations from selected school visits may not be representative and possible to generalize more broadly.
- There is limited systematic time series data and information collected and available in project schools on outcomes and other variables. Most of the information about results are based on perceptions and limited empirical studies.
- A relatively short report is not able to do justice to the broad range of reports and the rich and complex five years of experience.

In other words, we will not be able to present a complete picture of SigAm, but hopefully an important part.

### **1.5. Guide to the Reader**

Chapter 2 provides an overview of the project and explains the context for deaf education and situation for deaf children at national and provincial level. Chapter 3 consists of most of the assessment and analysis on questions from Terms of Reference. Chapter 4 presents main conclusions and recommendations.

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<sup>2</sup> See Annex 2: References

<sup>3</sup> See Annex 3: People met

The two authors are responsible for the overall report, but Jun Hui Yang took special responsibility for preparing the chapters on deaf education in China and results at school level, while Stein-Erik Kruse prepared the remaining chapters. .

## CHAPTER 2: THE SIGAM PROJECT

### 2.1. An Overview<sup>4</sup>

The SigAm Bilingual Deaf Education Project is a cooperative project between Amity Foundation in China, Signo Foundation from Norway and the Jiangsu Provincial Special Education Professional Committee (JPSEPC). The Amity Foundation is a non-governmental organisation initiated by the Chinese Christians in 1985. It aims in facilitating the open-door policy and providing services in the development of education, medical and health, social welfare and rural economy of the Chinese society.

The project was implemented by a Coordinating Committee (CC) headed by JPSEPC and consisting of representatives from Amity, the local deaf community and project schools. The CC meets quarterly, the Annual Meeting, required the presence of the Signo Foundation.

The project period has lasted for five years (2004-2009). Five schools from Jiangsu province attended from the beginning.<sup>5</sup> In 2006, the project expanded to four schools in the western provinces of China by invitation of the provincial education authorities of Sichuan and Guizhou. Two schools from each of the provinces were included in the project. By 2008, eight schools were part of SigAm. In each of the project schools, two classes were participating, making a total of 16 project classes.

The project has been motivated by the general rights of deaf population to education and to linguistic and cultural development on their own terms. The two overall goals have been:

- Hearing impaired children in pre and primary schools have access to bilingual education.
- Professors at universities in China and Norway are cooperating in the field of deaf educational science and linguistics.

Although the bilingual and bicultural concepts are universally used and recognised within deaf education, they need an interpretation in regard to the Chinese educational context. In a pamphlet presented by Amity Foundation the concepts are defined: "The term bilingual and bicultural refers to the presence of two languages (Chinese Sign Language and Chinese language) and the adherent culture of deaf and hearing people". In addition bilingual education is elaborated as follows:

- The recognition of Chinese Sign Language as a language in linguistic terms and sign languages as the natural language of deaf people.
- Advocating sign language as the first language of deaf people, and the written form of the spoken language of their country (Mandarin Chinese in the case of Chinese students) as their second language.
- Taking a positive attitude towards deaf people.
- Supporting equal participation of deaf people in the field of deaf education.
- Recognising multiple languages and multiple cultures in a society.

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<sup>4</sup> The chapter has benefited from Ohna (2009).

<sup>5</sup> Initially there were five schools in Jiangsu province; the deaf school in Nanjing left the project in 2007.

The first visit from Signo to China took place in 2001. After a few years of preparations, the SigAm project started in May 2004. Two activities were of particular value in the initial phase; a seminar in Nanjing where Chinese deaf education were presented for the Norwegian expert group and the opening seminar in Suzhou, where Norwegian sign bilingual education were presented for the Chinese project participants.

The Nanjing seminar represented the first encounter with Chinese deaf education for the Norwegian group. At the seminar, the Chinese project partners presented the five project schools, the Chinese deaf education, Chinese sign language research and experiences from the bilingual preschool classes in Nanjing. In addition, some of the ideas behind the new forthcoming national curricula for deaf education were presented.

At the Suzhou seminar for Chinese Principals of Deaf Schools, the Norwegian experts gave lectures on core principles and theories about development of deaf education and sign bilingual education focusing on three topics:

- The history and the development of deaf education in Norway, its past, present and future.
- Bilingual and Bi-culture in deaf education, its concepts and why is it important in education of deaf children.
- Classroom teaching methods in bi-bi approach.

### Student beneficiaries

According to the final report, a total number of 99 deaf children have attended bilingual classes in the four project schools from six months to five years. There have been substantial changes in the student population during the five year period. Students have left the classes and others have joined during the project period. Less than one third (30 students) have been in the bilingual classes for all the five years and a total of 54 students for four years or more.

*Table 1: Number of students attending project classes and their time of enrolment*

Schools	No. of students	Time of enrolment (year)					
		5	4	3	2	1	0.5
Suzhou	29	11	4	5	5	4	-
Changzhou	21	6	5	-	4	6	-
Zhenjiang	18	6	3	2	4	1	2
Yangzhou	31	6	13	0	8	1	3
Total	99	29	25	7	21	12	5

*Source: Cheng Yiji et. al., Final Report, 2009*

### Project activities

During the five year implementation the project has supported a number of activities. The most important are:

#### (a) Support to project schools

The second largest project component (in financial terms) has been direct support to the project schools in the form of salaries for deaf teachers, class and parents activities, training of parents and equipping each school with books and multi-media teaching facilities, as well as professional teaching books. The project also compiled signed language text books and produced sign language DVDs and established sign language labs.

**(b) Summer seminars**

Five summer seminars have been organised each for 2-5 days, and all of the teachers (deaf and hearing) and principals at the project schools participated. The purpose of the *summer seminars* was to create an arena for teachers learning of bilingual education and exchange of experiences between the schools.

The seminars have concentrated on three topics: (a) issues related to sign language (research, teaching and evaluation of sign language), (b) cooperation between deaf and hearing teachers, and (c) teaching and learning within classroom processes.

**(c) Educational and information materials**

AMITY has produced a large number of publications as part of the project. All are listed in Annex 4.

**(d) Observations in project classes**

Visits to the four project schools with class observations were part of the cooperation between Chinese and Norwegian experts. The first observation was carried out in June 2005 at the end of the first project year. The school observation was organised as a two day visit to each of the five project schools. At the end of the two days, the schools arranged a workshop where the observers presented initial results and discussed issues and challenges related to the teaching with the teachers. In April 2007, a new observation was carried out in the same five project schools. The final observation took place in May 2009.

**(e) Visits to Norway**

During the five year project, three Chinese delegations visited Norway - 2005, 2007 and 2008. The visits were organised by Signo and the purpose was to study educational and social welfare institutions working with deaf and deaf-blind education and deaf people in general. The participants were mainly from the project schools (principals and teachers), but also from the Government including the National Director for Special Education in China and Provincial authorities.

**(e) Publications**

The project involved Chinese and Norwegian academics mainly to provide a sound theoretical foundation for the work including lecturing at the summer seminars and taking part in school observations. The project was not able to provide funding for research and writing of scientific articles, but some publications have been produced.<sup>6</sup>

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<sup>6</sup> See Annex 4: Project Publications



## Funding and expenditure

Norad has provided funding to Signo and the project through the Atlas Alliance. The overall annual contributions and break down of expenditures have been as follows for all the provinces and not only Jiangsu Province.

Table 2: Sources of Income 2005 - 2009

Source of income	2005	2006	2007	2008	2009	Total	%
Norad	1.587	1.545	1.698	1.476	1.597	7.903	90
Atlas	0.226	0.220	0.189	0.128	0.138	0.901	10
Total	1.813	1.765	1.887	1.604	1.735	8.804	100

The project has been funded by Norad (90%) and Atlas Alliance (10%). Signo Foundation has contributed with staff time. Total funding has been approx. 9 Mill NOK over five years or in other words 1.76 Mill NOK per year.

Table 3: Expenditure 2005-2009

Expenditure	2005	2006	2007	2008	2009	Total	%
Seminars and training materials	662	617	487	453	291	2.510	32
Support to schools	82	309	719	384	280	1.774	22
Information materials		77	101	71	45	294	4
School observation (Chinese part.)		246	171	282		699	9
Technical assistance from Signo	213	217	184	126		740	10
Local personnel	322				17	339	4
External professional fees	236	18				254	3
Children activities				70		70	1
Amity administrative expenses	108	100	84	102	82	476	6
Admin. cost Signo	180	176	140	119		615	8
Total	1.813	1.760	1.886	1.607	715	7.771	

Most of the funds have been spent on seminars and training materials while the direct support to schools is the second largest budget item. The school observations by the combined Norwegian/Chinese team have also absorbed a considerable part of the budget (19%) and total administrative costs have been 14%.

## 2.2. National and Provincial Context

China hosted the Olympic Games and Paralympics in 2008. The government and the people of China made good use of this great opportunity to promote Disability/ Deaf awareness, increase accessibility and encouraged the public in learning Chinese Sign Language (CSL). Many deaf schools received attention from the media (e.g., some deaf students and teachers were invited to perform in a dance recital combined with signing entitled "Hello! Stars" for the Paralympics Opening Ceremony. Several teachers of the deaf served as signing interpreters on television during the games. The SigAm project schools have offered weekly sign language classes for parents and grandparents of deaf children and occasional classes for public service staff and university students who want to learn CSL. Bilingual signs requesting, "Please use sign language" are displayed through the campuses. There are nine Television News columns including sign language interpreting in Jiangsu Province in 2008.

China has experienced rapid economic growth and has shown a strong desire for international collaboration in education in recent decades. Jiangsu is one of three richest and most modern provinces in China. This province has sent many special education school leaders to visit Europe and North America, hired foreign lecturers to teach English in public schools,

provided students with 9—15 years tuition-waivers (e.g., Suzhou City Government now provides a 15 year tuition-waiver from kindergarten through high school) and financial assistance for low income families. The Jiangsu Disabled Persons Foundation<sup>7</sup> reported in 2008 that 7452 deaf students were studying in deaf schools and 3179 students with hearing loss attending mainstreamed schools, and 5,000 deaf children between 6-14 years of age in Jiangsu province. About 368 deaf children of school age never attend school because of lack of access.

The chair's report<sup>8</sup> on the Seventh Congress of Community Party of Chinese states: the CPC and government will stress the importance of preschool education and will provide for special education needs. Pre-schools are expensive for many parents, and rehabilitation centres for children with disabilities are more expensive than regular kindergartens. A group of parents in Yangzhou said that the local rehabilitation centre often favours children with good residual hearing and speech ability, while ignoring profoundly deaf children who do not respond well in speech, resulting in their transfer to a bilingual education program. They have thrived in these programs and have learned a great deal through sign language instruction and generally enjoy their preschool activities. The SigAm project schools provides a bilingual education model and deaf-hearing team teaching demonstration to other schools for the deaf who want to establish or promote their preschool education section. There are presently 68 schools for the deaf and 109 special education schools in Jiangsu as of 2008. Most schools for the deaf in larger and mid size cities offer a 9-year compulsory education and follow up with three years of vocational and secondary school sections. They rarely offer 1-3 years of preschool classes. Lacking an appropriate early education, many deaf children lag behind their hearing peers.

The Regulation of Special Schools<sup>9</sup> (issued by the Ministry of Education on 2nd December 1998) demands that a school principal have the authority and responsibility for school decision-making. Principals in the four project schools have played a crucial role in the 5-year project and have made a great commitment themselves to adopt the bilingual education philosophy. As stated on Article Nine, individual schools are responsible for making their own examinations and adopting various approaches to assess students' academic achievement (Chinese and Mathematics) and record students' progress. The four project schools have adopted the same curriculum and teaching materials used by regular school students in Jiangsu province. They have not made a test for the four schools nor do they assess all project students with standardized examinations designed for regular school students. Article Six states that Chinese language shall be the main language of instruction, and encourages the use of sign language and braille.

The coordinating committee of the SigAm project explained the four criterion of selecting and inviting 4 or 5 city schools (in Nanjing, Yangzhou, Zhenjiang, Changzhou and Suzhou) to participate: (1) the principal agrees to, accepts and supports the bilingual deaf education philosophy and is willing to persuade and obtain support from the local education administration, teachers and parents of deaf children, (2) there are at least five deaf teachers and deaf staff in place already, (3) participation in the project gets approved by the local education Bureau and is supported by a local educational research institution, (4) school sizes

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<sup>7</sup> Annual analytic report on the statistics of people with disabilities and service in Jiangsu Province in 2008. Access on 6 June, 2009 at [http://www.cdpc.org.cn/sytj/content/2009-05/05/content\\_30243650.htm](http://www.cdpc.org.cn/sytj/content/2009-05/05/content_30243650.htm)

<sup>8</sup> Hu, Jintao. 2007. Report on the Seventeenth Congress of Community Party of China. 24 Oct. 2007. Access on 6 June, 2009 at <http://news.sina.com.cn/c/2007-10-24/205814157282.shtml>

<sup>9</sup> Regulations of Special Education Schools. 1998. Access on 6 June, 2009 at [http://www.cdpc.org.cn/zcfg/content/2001-11/06/content\\_50533.htm](http://www.cdpc.org.cn/zcfg/content/2001-11/06/content_50533.htm)

and socio-economic situations of the students are suitable, and (5) school locations are convenient for transportation along the Su-Ning express way. The role of principal is by far the most important factor to committing to this project. The principal of the Nanjing School for the Deaf lost interest and confidence in the bilingual education of deaf students, left the project and pulled out the deaf teacher representative from the coordinating committee in 2006. No one from the school attended the SigAm conference in May, 2009. The other four school principals maintained their commitment and are working together toward the objectives of the program. The Suzhou school acts as a team leader, with the other three schools learning from Suzhou's example to hire more deaf teachers, improve the bilingual learning environment. Fieldtrips, provide extra pedagogy and research training for all staff in the schools (e.g., inviting local educational researchers and experts from the Chinese expert team to give lectures based on the school's request), and develop syllabus, lesson plans and teaching materials together.

## CHAPTER 3: FINDINGS AND OBSERVATIONS

### 3.1. Objectives

What are the objectives for the project? What did it set out to achieve from the beginning? Were the objectives and strategies clearly articulated and understood? Have they changed over time? Have they been contested and are there any long-term post-project plans?

A first challenge when reviewing background materials was to identify a programme or project document presenting the overall purpose and operational objectives. An agreement was signed between the three partners in 2004 and a brief (2 pages) project description attached. There are also annual project plans and one 2007-2009 multi-year plan submitted to the Atlas Alliance as a basis for funding from Norad. However, there is no comprehensive programme or project document or any long-term strategy.

The lack of such plans seems not to have had any major negative impact on the quality of implementation. A majority of partners interviewed had a sufficiently clear understanding of their roles, what they were supposed to do and what they had achieved. The problems were at a different level – in a weak shared and clear vision about the overall purpose and direction – whether this was a time limited project with funding from Norway for a group of children, parents, teachers and schools or part of a broader reform agenda. Experimental projects benefit from a flexible planning approach since rigid blueprints may inhibit innovation. On the other hand, too much flexibility becomes problematic when a project is coming to an end and is to be evaluated. Criteria of success are not clear and vary between partners and perceptions about future direction are blurred.

In the original Agreement, the overall goal for the project is “motivated by the general rights of the deaf population to education and to linguistic and cultural development on their own terms”. In other words, the project is guided by an overall rights based approach in line with international goals for basic education for all children – including deaf children.

The project objective is “to establish a bilingual and bicultural programme of education in/tuition of, sign-language in selected public schools for the deaf in the Province of Jiangsu. The programme is going to follow at least one group of pupils from start to completion within the compulsory school system”.

The primary beneficiaries are in one document “deaf children in the Province, their immediate families and relatives. Subsequently, educational personnel and authorities with responsibilities for the education of the deaf, and deaf and hearing teachers and assistants involved in schools for the deaf”. In another plan (2007-2009), “the immediate target group is teachers in deaf schools, including hearing and deaf teachers”.

Eight areas of results were identified:

- Education of deaf pupils in Chinese sign language.
- Tuition in bilingual educational methods of deaf and hearing teachers, school leaders, educational authorities, etc.
- Tuition of deaf teachers.
- Course in comprehension of sign language.
- Seminars for exchange of bilingual educational methods and linguistics.
- Developing educational materials in Chinese sign language.

- Collection and publishing of the history and culture of deaf people in China.
- Exchange programme for teachers and academics in bilingual education.

In the programme description for 2007 – 2009, there are two – not only one objective:

- (a) Establish bilingual education for hearing impaired children in pre- and primary schools.
- (b) Strengthen the cooperation between Universities of China and Norway in the field of deaf educational science and linguistics.

The first objective is explained as “build a set of experience patterns for practice in bilingual education for the deaf by introducing advanced foreign bilingual deaf education theory to China and to develop a syllabus for deaf”. The other objective will focus on research “on pupils’ skills and development in Mathematics and Chinese as well as in the Mid Term Evaluation”.

University cooperation was briefly mentioned as an activity in the original project description, but was later introduced as an objective in its own right. The reasons for including research and university scholars are sound. However, it can be questioned if university collaboration should be an overall objective for the SigAm project. It seems more appropriate to call it a strategy or component rather than a separate objective.

In the Annual Plan for 2009 the two objectives are formulated as:

- (a) Hearing impaired children in pre- and primary schools have access to bilingual education:
  - Development of a syllabus.
  - Sharing of teacher experience between schools.
  - Engagement of deaf teacher assistants.
  - Training of teachers and principals in the bi-bi concept.
  - Training of parents.
  - Continuous assessment and guidance.
  - Awareness raising through news letters, etc.
  
- (b) Some Universities in China and Norway are cooperating in the field of educational science and linguistics:
  - Professionals involved in assessment, guidance and lecture
  - Annual observations and participation in conferences

In the Final Report on the “SigAm Bilingual Deaf Education Experimental Project” to the Conference in Suzhou May 2009, a team of the most significant Chinese partners presents the project as “experimental research on deaf education in four schools”. Experimental research has usually a relative precise meaning in scientific literature (research designs used for controlled testing of causal processes through systematic collection of data from project and non-project classes). SigAm has been a school development project for deaf children and can hardly be categorised as an experimental research project.

Amity has in its brochure a straightforward presentation:

- Setting up experimental classes on a bilingual approach.
- Training deaf and hearing teachers.
- Developing teaching materials.
- Training parents of deaf children.

- Training school leaders and officials.
- Conducting seminars on bilingual education for experience sharing and academic research.
- Advocating the concept of bilingual approach in deaf education.

The reason for this lengthy discussion is to identify alternative interpretations of the project. It can be understood in at least four different ways:

- (a) *A school development project* with the aim to introduce and establish bilingual education for deaf children in a selected number of schools in order to replicate such an approach in other schools. This is to large extent the understanding reflected in the original project description.
- (b) *An experimental research and development project* in order to test alternative educational models and measure systematically their efficiency and effectiveness. This understanding was presented in the Suzhou conference.
- (c) *A capacity building project* focusing on preparing a new curriculum, introducing new teaching methods and teaching materials and training of teachers, parents, principals, school leaders, etc. This is a shared understanding of the project.
- (d) *An educational reform programme* involving advocacy for the rights of deaf children to education in general and bilingual education in particular, demonstrating the effectiveness of bilingual education and working towards reforms in teacher education, building supportive policies for bilingual education and preparing the ground for scaling up access to bilingual education all over China.

All the four interpretations are possible and to a large extent complementary. However, the SigAm project was primarily conceived and perceived as a school development project. Most attention has also focused at the school level. The summer seminars and training of school leaders/managers, visits to Norway and exposure to Norwegian experience, preparation of teaching materials have reached beyond the schools, but most of the human and financial resources were invested in all the project schools.

There are many arguments for starting a reform from below – from the demonstration of success in a small number of schools. The SigAm project has also been able to establish the bilingual concept and practice in four schools. As will be discussed later, there is also evidence that the experience have been replicated in other schools, that the policy and practice from provincial authorities have changed in favour of bilingual education and that seminars, research and information sharing have contributed to broader changes.

On the other hand, the bottom up approach may have been stretched too far and further replication and scale up will have to address also systemic constraints. More of the same – is not sufficient and a viable strategy. It would neither be the role of a Norwegian NGO to provide funds for implementing school projects in Jiangsu Province. The challenge is to redirect resources and attention, focus more on soft technical support including use of Norwegian academic expertise in policy and curriculum reform, teacher training, etc.

### 3.2. University Collaboration and Technical Support

It is commendable that Signo and Amity have contracted Norwegian and Chinese scholars to help build a sound theoretical basis for bilingual education and provide guidance and support to schools, give lectures to participants at the summer seminars and contribute with research and scientific articles.

As already mentioned, it is difficult to understand university collaboration as an objective in its own right in this project. What has evolved can better be described as technical support and guidance provided by a group of individual Chinese and Norwegian scholars. They have institutional links, but have taken part as individuals and not through or on behalf of their universities. In the Norwegian context, North-South university collaboration has also other objectives and sources of funding. On the other hand, if the involvement of university professors in a project like SigAm could develop into institutional collaboration, nothing would be better and should be seen as a positive spin off. The Norwegian scholars have applied for funding of research proposals and for establishing a Norwegian – Chinese research network based on the SigAm project, but so far without success.

#### Norwegian Academic Contributions

What are the Norwegian academic contributions? There are of three kinds: (a) lectures and discussions at the summer seminars, (b) observations and feedback to local schools, and (c) facilitating Chinese delegations visits to Norwegian institutions concerning deaf people and deaf education.

The purpose of the *summer seminars* has been to create an arena for teachers learning of bilingual education and exchange of experiences between the schools. The seminars were organised as a course for 3-5 days, and all of the teachers (deaf and hearing) and principals at the project schools participated. When the program at the first seminar was dominated by lectures by Chinese and Norwegian experts the following seminars gave more space for presentations by the project teachers and for group discussions. Over the years, the seminars have concentrated on issues related to sign language, cooperation between deaf and hearing teachers, and teaching and learning within classroom processes.

We attended the final conference May 2009. As much as 180 teachers, principals, government representatives, academics, guests from other countries came. Even more impressive was the level of participation from other provinces in China either from schools for the deaf or government departments for special education – indicative of how well known the SigAm project is in China and the growing interest for bilingual education. All the project schools had prepared a summary of their experience and a final report was presented.

*Observations in the project classes* were also part of the cooperation between Chinese and Norwegian experts. The first observation was carried out in June 2005 at the end of the first project year. The team used observation tools developed in a Norwegian evaluation study based on structural interval observation, field notes and video-recordings of classroom activities and interviews with teachers, principals and parents.

In April 2007, a new observation was carried out in the same five project schools. The observers used the same tools. Yet another observation was carried out in March and April 2008. This time the four project schools in Sichuan and Guizhou provinces were observed. The final observation in the Jiangsu project schools was carried out in May 2009.

Among the Chinese and Norwegian experts, there was a division of labour. While the Norwegian experts concentrated on issues regarding introduction of concepts related to bilingual education, sign language, cooperation between deaf and hearing teacher and the interaction in the classroom; the Chinese experts should concentrated on educational outcomes in terms of content-, linguistic- and cognitive development.

We are not in a position to assess the relevance and importance of the observations in any detail and have only some comments. It seems that the original idea was to use the observations to collect data and information regularly and systematically from project classes in order to assess progress and results over time in areas of class room interaction and student outcomes. We were told that a rich material is available and can be used by researchers to study changing interaction patterns and student outcomes. So far this has not happened. The observations have mainly served a formative purpose – providing feedback to teachers and schools in order to inform and support improvements. There have been some efforts by the Chinese experts to evaluate student outcomes (in pre school classes), but this is overall an unrealised intention. As such the observations have only partly achieved the objectives.

We can see the usefulness of involving scholars in direct school observations in order to provide them with a real life context and background for making more relevant contributions in summer seminars and other training, and also to build capacity in the schools for systematic evaluation of bilingual education. However, providing feedback on teaching methods and classroom interactions, do not represent an optimal use of university professors – in particular not Norwegians with marginal understanding of Chinese. Class room observations have also been a major part of their work. The final chapter recommends a stronger involvement in areas like teacher training and educational reform – in which institutional cooperation could be revitalised as a concept. Finally, we question the value of using so much of total project resources on class room observations. What is observed in brief visits may also not represent real school experience, but well prepared performance from a group teachers and students.

During the five year project, three *Chinese delegations have visited Norway* in 2005, 2007 and 2008. The visits were organised by Signo and the purpose was to study educational and social welfare institutions working with deaf and deaf-blind education and deaf people in general. We have not been able to do any assessment of the relevance and importance of such visits. However, the feedback from principals and teachers were extremely positive. The visits were well prepared and involving government representatives in charge of special education were of strategic importance for the project. Interest and support for bilingual education was created in schools and in government departments. All government officers interviewed were highly supportive of bilingual education partly due to the studies in and visits to Norway.



### 3.3. Management Structure and Partners

SigAm is as mentioned a cooperative project between the Amity Foundation in China, the Signo Foundation from Norway and the Jiangsu Provincial Special Education Professional Committee. Signo Foundation is a non-governmental and non-profit organisation in Norway working on a professional basis with deaf-blind and deaf people with disabilities. The Amity Foundation is a non-governmental organisation initiated by the Chinese Christians in 1985.

The Jiangsu Provincial Special Education Professional Committee is not an organisation, but a public/private committee initiated and supported financially by the Government, but managed independently. Membership is voluntary and its mandate is to promote research in the area of special education and provide guidance to the Government and special education stakeholders.

The SigAm project is implemented under a Coordinating Committee (CC) headed by JPSEPC with representatives from Amity, the local deaf community and SigAm Project Schools. The CC meets quarterly, and one of the meetings, the Annual Meeting, requires the presence of Signo Foundation.

The project was originally conceived by Amity and its implementation was made possible with funding from Signo – two church based NGOs with a concern for the deaf and with professional interests and commitment to promote and introduce bilingual education in China, but with no formal links to the Government. When the project started in 2004, they were in need of a third partner in order to introduce the project in public schools and build broader legitimacy and credibility. It was agreed that Amity should handle project management and funding while the Professional Committee should provide the technical support and open doors to the Provincial Government.

Overall – the management arrangement has worked – despite its unclear roles and responsibilities. The project has been implemented as planned in all project schools except one – to a large extent due to the active coordination from Amity – reflecting personal commitment, interest and professionalism. Such flexible and effective implementation would most likely not have been possible with a government partner.

However, this is a structure for a time limited project and was neither meant as a long term solution according to Amity and Signo. However, this is not explained in any documents available to the evaluation team. Some Principals and Government representatives complained that the division of responsibilities had been unclear with Amity being too involved in professional matters. In the plan for 2007-2009, it is stated that “Amity will lead the project through and Executive Committee and will be in professional contact with the authorities and international organisations” while the role of Jiangsu Provincial Special Education Committee is not explained.

The more important discussion is what structure should be prepared for a possible continuation of SigAm? It is difficult to see that the Professional Committee can play any role in management and implementation since it does not have any capacity for implementation. Amity declares that the long-term aim for them is integration of the project and bilingual education in government structures, but is less certain about when and how.

Norad encourages collaboration between like-minded organisations in civil society, but its guidelines do not rule out a direct collaboration between Signo and a teacher training college

or a provincial government. On the other hand, if future support will be in the form of training, providing technical support, preparing educational materials – a national NGO in China could still be a convenient partner for Signo.

There is no evidence of collaboration between Signo and other Norwegian NGOs working in China. At one point, Signo tried to establish a more structured cooperation with UNICEF, but it was driven primarily from the Norwegian side and never materialised.

### **3.4. Systems and Procedures**

Systems and procedures for planning, reporting, monitoring and evaluation, financial management and control are important, but not key issues in this evaluation. The following are selected observations and findings:

#### **Financial management**

Annual audits have been performed and no irregularities are reported. The systems for financial management and control in Amity have worked well including supervision and follow up of schools. No evidence of financial mismanagement has been reported.

#### **Planning**

The systems and procedures for project planning have been weak. There is a report from a needs assessment in 2001, which is more a short travel report than a basis for preparing a five year project. The assessment was also carried out in 2001 while the project plan was finalised first in 2004.

It is not clear what planning tools were used and more importantly what constitutes the project plan or programme document. The brief description attached to the Agreement from 2004 does not meet the standards of a plan. The annual plans submitted to the Atlas Alliance are brief, vary in form and substance and do not explain changes in objectives and priorities.

It seems that preparing formal plans have not been so important for the project owners. The project has been guided by a set of unwritten assumptions – making a formal plan less important. As mentioned, a flexible approach is often necessary for successful innovation. However, the project would have benefitted from a more comprehensive programme or project document and a short and sharp long-term strategy. When such documents are missing, problems and misunderstandings easily arise. The criticism of the management structure and role of AMITY is an example of such misunderstanding.

#### **Monitoring and evaluation**

The classroom observations served as the key formative evaluation tool. However, no regular monitoring system was established for the project – systematically collecting, collating and analysing data from all the projects schools of basic facts and figures to progress and achievements at individual, class room and school levels. There is data and information available, but it has not been systematised and used.

The Final Report presented to the Conference in Suzhou is interesting and capture well stakeholder perceptions about project performance and achievements, but is mostly based on subjective perceptions by staff and schools, more than empirically based data and information. A combination of qualitative and quantitative data would have strengthened the report, but minimal quantitative data are available, as for instance number of deaf teachers in the schools before and at the end of project and their status of employment, number of

teachers and parents being trained, changes in the school environment and class room interactions, disaggregated data on gender/socio-economic status, staff-, parents- and student satisfaction based on survey feedback, etc.<sup>10</sup> It should have been possible to establish such monitoring systems at the beginning of the project with relevant indicators and tools, but the professional partners failed to do so.

The planned mid-term review was not carried out and replaced with classroom observations – a too narrow evaluation tool partly because of its predominant formative purpose and not including issues and questions normally included in mid term reviews, like assessment of systems and tools for planning and monitoring, management and organisation, relevance of objectives and strategies, etc.

### **Reporting**

Amity has been required to submit quarterly reports to Signo covering financial expenditure and programmatic progress. Progress is mostly reported in tabular form. No annual reports have been prepared by Amity. It is difficult to understand the need and usefulness of so frequent detailed reporting. Signo prepares only one annual report to the Atlas Alliance. It could have added more value and been more useful if Amity had submitted one comprehensive annual report covering financial expenditure, description of completed activities and delivery of outputs and not least an analysis of progress and achievements – what went well, what the problems were, how they were resolved, etc.

### **3.5. Relevance**

The question of relevance has several dimensions – to what extent the SigAm project is in line with principles of Norwegian development cooperation in general and the Government's China strategy in particular. Further, whether the project supports Chinese policies and priorities and not least the need of the target group – deaf children. It could also have been discussed whether Norwegian support like SIGNO and the ATLAS should prioritise and provide financial support at all to a country like China but such discussion is beyond the scope of this report.

The project is clearly based on a rights approach to education for deaf children. The objectives of introducing bilingual and bicultural approach to the deaf are based on international conventions. Education is also related to democratisation and human rights perspectives. The UN Millennium Development Goals, regarding Universal Primary education, Goal 2, target 1: "Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling" provide a basis and rationale for bilingual education.

The approaches of SigAm are anchored in objectives and values that are supposed to characterise Norwegian cooperation, namely human rights, education for children, partnerships, participation and equity. The work is also in line with the document "Three billion reasons: Norway's development strategy for children and young people in the south". The score is lower on poverty orientation. Jiangsu Province is one of the better off provinces in China. However, this is partly compensated by adding project schools in more remote and poorer provinces in the west.

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<sup>10</sup> In the CC meeting July 2008, the CC chairman called for "the great need to organise some experts to evaluate the teaching results of the bi bi classes in Jiangsu Province. So far all the positive aspects are felt.... But we need statistics to prove to others that the bi bi teaching is an effective way in deaf education".

The Norwegian Government's China strategy is broad and does not mention education in particular, but emphasises the need for close collaboration between China and Norway at all levels, utilising Norwegian expertise from research and education and experience with social welfare systems. The university and research collaboration and the Norwegian experience with bilingual education reflected in the SigAm project all support the China strategy.

Consistency with and relevance to national plans and priorities are more complex questions. SigAm is about reform – with a deliberate aim to change current policies and practices and not in line with mainstream approaches to education for the deaf in China. The “Oral Approach Only” has dominated pre-school deaf education in China and still represents the Chinese language dominant and total communication mode of teaching in a large majority of schools for the deaf. However, there are changes underway. A main step towards understanding the needs of deaf children at the national level started in the development of a new curriculum. The option of using bilingual education was first approved for pilot schools in Jiangsu Province. In February 2007, the Ministry of Education issued “Experimental Plan of New Curriculum in the Compulsory Education Period for Deaf Schools” and promoted the “deaf-children oriented educational” concept as well as advocated for innovation and diversity in teaching approaches and methods.

The chairman of the SigAm project was responsible for preparing this plan. The Department of Basic and Special Education in the Ministry of Education is not yet ready to express a preference for sign languages and recognise Chinese Sign Language as an independent language, but supports a “dynamic” approach including use of flexible methods depending on the needs of the child. The SigAm project is in line with and supports such ongoing reform efforts in China.

One of the original project schools (School for the Deaf in Nanjing) decided to leave the project after two years for three reasons:

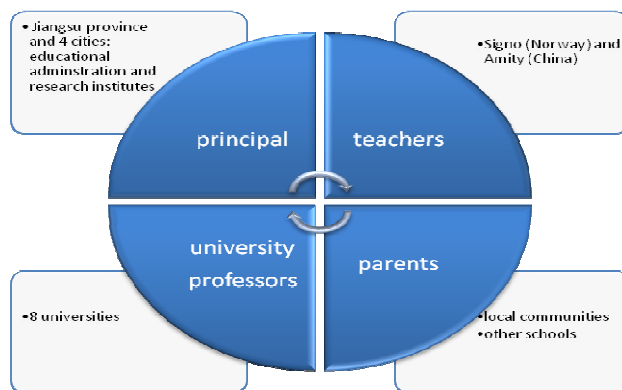
- The project emphasised Chinese sign language too much – in contrast and opposition to signed Chinese.
- Bilingual approach was reduced to and perceived as sign language approach only
- underestimating the value of the oral approach and the need for mainstreaming of deaf children.

In all the other schools and also among government representatives from the special education departments, the bilingual approach is perceived to enrich and complement existing services for deaf children. It is acknowledged that completely deaf children will benefit more from using sign language than from the traditional oral approach. The government has also shown considerable flexibility making it possible for schools to hire deaf teachers and for deaf to go through the teacher examination and obtain a teacher certificate (by exemptions from the oral test in Mandarin).

Finally, the project focuses on young profoundly deaf children's needs in communication, language and learning development, and provides children with deaf role models and improves their teachers and parents communication skills in CSL. The children are able to access communication and social activities in school and at home and feel happy and confident. With a solid foundation of the first language CSL, the children are able to access Chinese literacy and the national curriculum in regular schools, reducing the risk of lagging behind in academic achievement and competition in future job markets.

### 3.6. Results and Achievements

The SigAm bilingual deaf education project in Jiangsu Province has more than 400 people involved. They are working together toward the same goal, learning from each other, and are making unique contributions in the development of bilingual deaf education in China. There are more than 100 profoundly deaf students who have attended the project classes from one to five years, they form the centre of this project. The school principals, teachers and parents have attended many training sessions in sign linguistics, second language teaching methods, pedagogical knowledge and techniques of raising deaf children bilingually from university professors in China and Norway, and have received regular Chinese Sign Language lessons from deaf teachers. It should also be mentioned that representatives from Signo and schools for the deaf in Norway have been involved in training – but also serving as role models. Directors from the Amity foundation and the Signo foundation, educational administrators and observers at the national, provincial and local levels, researchers, graduate students, representatives from the deaf community, and university professors have observed the bilingual teaching demonstrations and have given critical feedback and support to teachers and principals during site visits. The figure below illustrates the project structure and interaction (the centre of circle represents deaf students in the SigAm project).



*Fig. 1 the SigAm children-centre project structure*

The CSL/Chinese bilingual education in schools is structured to allow students to acquire CSL as a first language and Chinese as the second, and use the two languages to communicate effectively and learn every day. They use their natural language CSL to express their thoughts and feelings and watch signed lectures and participate in signed discussion or written communication in classroom. Their teachers understand what students sign in CSL and give appropriate, timely responses. They also provide instruction in the two languages to facilitate students' learning and development.

By the end of the SigAm 5 years project in Jiangsu, the 10 pilot bilingual classes with deaf teachers involved range from pre-school classes to primary school and provide full access to bilingual education. Four classes have lasted five years, three classes three years, and other classes provide 1-2 years full access to bilingual education with the deaf teachers who taught them or worked with them in pre-school and Grade One. Several other non-experimental classes in project schools also have some access to bilingual education provided by deaf teachers or hearing teachers who are fluent CSL users. Table 4 shows the number of deaf students directly benefiting from the project and teams taught by deaf and hearing teachers during 5 years.

Table 4: Number of students attending project classes in 2009

Schools	No. of present bilingual experimental classes	No. of students in present bilingual experimental classes	Grade	Grade	Grade	Grade	Preschool classes
			4	3	2	1	
Suzhou	3	29	9	(4)	10	10	-
Changzhou	2	19	10	(5)	(4)	(6)	9
Zhenjiang	2	18	9	(3)	9	-	-
Yangzhou	3	30	9	(13)	9	(8)	12
Total		96	37		28	10	21

Note: Numbers in brackets indicate 43 students in non-project classes were previously educated in the bilingual pre-school class for one year only.

Source: Interview with school principals and teachers in May 2009.

Students in the SigAm project have obtained immense benefits from this innovative approach which provide them full access to CSL and deaf teachers as their language teachers and bilingual and bicultural role models at an early age, and a good command of CSL used to communicate with their parents who have learned CSL in the school as well. About 30 parents (and grandparents) when interviewed confirmed that the bilingual education is suitable for their children. Their children had not learned well in or enjoyed the oral-only methods used in the hearing rehabilitation centres (at pre-school level) and ordinary schools (usually without any supportive assistance). They and ten other parents on the written feedback and open letters stated that since their children began attending the bilingual classes, and the schools started offering sign language classes to parents and explained how to better raise their deaf children, they and their children are capable of understand each other and communicate well using CSL and sometimes written notes.

After learning CSL, parents can understand what their children want and are thinking, communicate with them well in various situations, and feel more relaxed interacting with them. They can now discuss many topics with their children at home and feel closer to them. Signing communication makes it easy for parents and teachers to teach deaf children lip-reading and in speaking some basic words and short sentences and has improved their children's behaviours. The parents witnessed that their children become happier and more expressive and show more respect for their parents. Many of the children now enjoy attending school and have age appropriate social skills. Other evidence of progress is found in the written work (letters and journals) from the students in their schools' final reports.

About fifty teachers reported during interviews and written documents regarding the students' learning abilities: (1) the students learn quickly and think more widely through CSL instruction supplemented by written texts; (2) after 1 year of bilingual preschool classes, most children at age 6 or above are ready for the national standard curriculum in Chinese and Mathematics, something that did not regularly happen in the past; (3) this is the first time that the four project schools have offered deaf students the national standard curriculum from Grade One, and teachers have evaluated and confirmed that the students can learn the same curriculum as the hearing students with bilingual teaching approaches, and learn far more from this curriculum than from the traditional deaf school curriculum.

Chinese Sign language is the primary language used in the four project schools. The schools display a sign stating “CSL/Chinese Bilingual School” at the main gate and treat CSL and Chinese as two equally important languages in deaf students’ lives. There are many strategies used to implement a bilingual learning environment on campus: (1) all teachers are required to use sign language while communicating with other in the classroom and outside of class, (2) each teacher a turn gives a signed lecture under the national flag to all school staff and students on Monday morning, (3) each school has a sign language resource room and multi-media equipment, (4) CSL salon led by a deaf teacher on duty at lunch time for students and teachers, (5) teachers produce and show signed videos, (6) bilingual labels on many objects are displayed throughout the campus, (7) schools organised many story-telling competitions for students, parents and teachers, and the project provide awards for the winners, (8) mixed age students have lunch table talks in small groups, (9) there are many one-on-one book sharing activities with older students assigned by teachers, (10) schools offer regular sign language classes and tutoring for parents. Several hearing teachers during interviews indicated that they worked for more than three years, but were not able to understand deaf teachers’ signing (without voice) at the beginning of the project; by the end of the project, they were more confident with their sign communication and understand what deaf children and adults were signing.

All teachers and principals in the SigAm project have written reflections on bilingual deaf education theories. Many answered that they have adopted bilingual education philosophy and have incorporated it in their syllabus and lesson plans, and have provided about 30 demonstrations in classroom teaching at each project school in the five year period. The principals and teachers who visited Norway have shown a better understanding of bilingual-bicultural issues in deaf education than those who did not visit, and they have also made great progress on their own performance and leadership skills, and have made positive contributions to improve their schools and the deaf community.

There are four models might be used to summarise the contributions of four project schools in developing bilingual deaf education in China:

**(a) The Suzhou model of bilingual education for deaf students**

The school is localised in a traditional Southern Chinese garden courtyard. Principal Gu Ruihua explained the guiding of the Suzhou Deaf school as “wenhua yuren, fuwu shehui”, adopting socio-cultural pedagogy to educate students, offering service to the society. This was transformed during the SigAm project from the deficit and rehabilitation perspectives on deafness to the socio-cultural perspective showing students a positive and healthy image of deaf people, accepting CSL as a natural language and a primary language of instruction, and creating a true bilingual and bicultural learning environment on campus. This school has a long history of use sign language and hiring deaf teachers. An outstanding Deaf teacher, Mr. Tan Jingsheng, 59, has been in a leadership position there for over 25 years. His exceptional signing skills have impacted on many hearing and deaf teachers and inspired them to become better signers. His leadership, lecture skills and rapport with students are key elements to the SigAm projects success, as two members of the coordinating committee pointed out. Five other deaf teachers are well trained and assigned to teach academic subjects independently such as mathematics (Grade 2, 3 and 7), Chinese (Grade One), Politics and Law (high school), and art. Teachers have adopted the regular school curriculum and created new teaching materials for deaf students. They make extensive use of multi-media techniques in classroom. A deaf teacher, Ms. Ding Xun, created a poster by labelling and drawing during lecture. After lecturing, the poster is displayed as lecture notes on the wall for students to read and review.

If this material was written on a conventional blackboard, the notes would eventually be removed when the class is over. This is one of many techniques used to reinforce knowledge retention by the students. The school is open to the public and visitors from other schools and organisations. The visitors can observe classroom teaching demonstrations and are encouraged to interact with the teachers and students. There is a website and an online forum to inform students and parents of school events and advocate for bilingual deaf education and the deaf community.

#### **(b) Changzhou model of team teaching**

There are two excellent deaf teaching assistants in the Changzhou school for the deaf. Mr. Zhang Xudong has been working with the first bilingual pilot class for 5 years. He has visited Norway in 2003 and brought new ideas and boundless energy back to the school. He often helps hearing teachers prepare lessons and teaching materials, translates complex Chinese sentences into CSL for students, teaches some parts of the lessons, organises learning activities, and types lecture notes on laptop with a real-time display during the class. He frequently provides feedback to hearing teachers about students learning processes and the use of CSL and signed Chinese, gives individual instructions to students in class and out. Hearing teacher's report that they are appreciated working with a deaf teaching assistant, as a result, their signing receptive and production skills have improved. Mr. Zhang and Principal Wu have created and taught a school based course on Deaf Culture for all students including the school history and the stories of successful deaf people.

Another deaf teaching assistant, Ms. Liu Hui, has been working with a hearing teacher, Ms. Yang, in preschool for 5 years with four groups of deaf children learning CSL, storytelling, basic Chinese and other subjects for 1 year as they get ready for primary school. Ms. Yang stated that Ms. Liu works very hard at a very low temporary wage. They are an extremely productive team and co-teach effectively in preschool. The hearing teachers state that they cannot be without a deaf teaching assistant who can provide full communication access and an excellent language model for young deaf children, and manage the classroom effectively. During interviews, parents said both deaf and hearing teachers are important for their children's learning and development. The parents who have learned CSL often chat with deaf staff in CSL and use mobile phones to send texts and exchange information with them.

#### **(c) The Zhengjiang model of team teaching**

At the Zhengjiang special education school, there is other model of team teaching in which deaf teachers are teaching mathematics, and a hearing teacher serves as an assistant for some students who need to listen a voice-over, provides individual instructions on speech and written exercises, and looks after one or two deaf students with an additional disability. Deaf students are from diverse backgrounds and their individual educational needs are carefully considered. The two deaf teachers are certified in teaching art or computer science before establishing the first SigAm project class. The project gave them a new stage to exhibit their talents in teaching CSL, storytelling, and mathematics and working with young deaf children.

#### **(d) The Yangzhou model of CSL teaching**

In Yangzhou, there is a traditional CSL variant with a natural, visual and fluent style. Many local signs and visualised sign words remain and are passed down to the next generation. Deaf teachers who graduated from the Yangzhou Deaf School and hearing teachers who have deaf parents often sign with a high level of visual motivation. The CSL storytelling and dialogs performed by the deaf teachers and students in DVDs are excellent and display natural signing. Many parents of the preschool and the Grade Two students in Yangzhou use



natural sign language more fluently and have better receptive and productive skills in CSL than other schools which tend to teach hearing parents sign vocabulary and signed Chinese. The Yangzhou School project team created a textbook of natural conversation in CSL for teachers and parents including cultural notes and sign linguistic knowledge.

In addition, the SigAm model of capability building for bilingual teacher professional development is innovative and useful. This model has strong leadership support at the provincial and city levels, interactive networks between schools, guiding principles (e.g., requiring the use of two languages, assigning deaf and hearing teacher teams, writing assigned documents, teaching demonstrations and producing learning materials), various activities and support resources. Professors at universities in China and Norway have given teachers theoretical support on seminar lectures and publishing research papers together. They have observed teaching performance and teacher-student interaction in all the pilot classrooms once or twice each year, provided critical feedback and stimulated teachers' thoughts on linguistics, literacy development of deaf students, interaction between students and teachers, the use of two languages, and visual learning approaches. The teachers are appropriate and satisfied with the professors' feedback and critiques. All project teachers have written many reflective essays and research papers each semester.

The SigAm coordinating committee analysed the strengths and weakness of the project on the final report, and the evaluation team agrees with them. There are some areas to be improved: hiring more qualified deaf teachers (at least each class should have a deaf teacher), promote experienced deaf teachers to leadership positions, and provide regular sign language and translation seminars for all teachers.

### **Policy level**

There are good reasons and support to conclude that the SigAm project has contributed to introduce and establish the concept and practice of bilingual education for the deaf – not only in a few project schools in Jiangsu Province, but in China. Project partners have been involved in national policy processes, key government representatives in special education at provincial and national level are aware of and several been involved in SigAm summer seminars, visits to Norway etc. Last, but not least – the SigAm project is known among people working in special education for the deaf all over China and the broad representation in the final conference May 2009 is a proof of its widespread reputation.

### **3.7. Sustainability**

The most pertinent questions are to what extent the benefits can be sustained beyond the project period. Do the schools have the technical and financial resources to sustain the bilingual approach when the external support now has come to an end? Will the cooperation between Chinese and Norwegian scholars continue involving research and teaching supporting bilingual education in China? There are also more fundamental questions related to the sustainability of the long term reform agenda.

All the project schools were aware that SigAm would stop and had also taken concrete measures for maintaining the bilingual approach. The level of awareness and preparedness varied between the schools, but in two of the schools all the deaf teachers had been permanently employed and obtained teacher certificates. The next table provides an overview of the situation for deaf teacher before and after the project. The principals and hearing teachers were also supportive of continuing and expanding bilingual education. Continued in-

service training, guidance and support to teachers would still be required, but a basic knowledge of bilingual concepts and practice had been established.

*Table 5: Situation for deaf teachers before and at end of project*

Schools	No. of Deaf Employees in 2003/2004		No. of Deaf Employees in 2009		No. of Deaf Teachers employed permanently	No. of Deaf Teachers with Teaching Certificate
	Teacher	Others	Teacher	Others		
Suzhou	2	0	5	0	5	5
Changzhou	1	1	2	1	2	0
Yangzhou	0	1	7	0	5	5
Zhenjiang	2	1	2	1	3	2

*Source: Interviews of Principals*

In other words, there are no indications that the project schools will not offer bilingual education next year and in the years to come – even if we are not able to assess at what level. As such, the SigAm project has been a success. It has been able to introduce and establish and sustain bilingual education in all the project schools. In addition, there is also evidence that other schools have adopted the same approach, hired deaf teachers and started bilingual classes.

The overall positive conclusion could be explained as an “experimental” effect – meaning that project schools have received more attention and support and subsequently more likely to be positive than other “normal” schools. Even if there is an element of such an effect, it does not explain the level of interest and adoption by other schools.

Sustainability of the research component and university cooperation is bleaker. Both Chinese and Norwegian scholars depend on external funding and such funding has not been secured neither in Norway nor in China, so the academic support to project schools and for training (e.g. summer seminars) will come to an end.

The bilingual education will continue in a small number of project schools and a few others. However, there are 1650 schools for the deaf in China. The future challenges in terms of reaching further out and scaling up are systemic. The policy and approach to bilingual education have been more “dynamic” and liberal, but the battle is not over and the systemic barriers and constraints need to be identified and understood. The lack of trained deaf teachers and opportunities for teacher training for deaf students are among such constraints that need to be resolved if quality bilingual education is to be scaled up.

## CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

### 4.1. Conclusions

1. Overall, the SigAm project has successfully introduced and established bilingual education in four schools in Jiangsu Province. This means that the schools have:
  - Recognised Chinese Sign Language as a language to be used in all project classes.
  - Hired deaf teachers to work in team with hearing teachers.
  - Offered deaf teachers permanent employment and helped them to obtain teacher certificates.
  - Trained teachers and parents in Chinese Sign Language.
  - Offered bilingual education to approx. 100 pre- and primary school children.
2. There is also evidence that:
  - Bilingual teaching is used in non-project classes.
  - Other schools in Jiangsu Province have adopted bilingual teaching.
  - The project is well known among teachers and principals in deaf schools in most other provinces in China, some have visited the schools and introduced bilingual education.
4. The Provincial Government has provided active support to the project schools:
  - Recognised the need for and usefulness of bilingual teaching in particular for children with no or minimal hearing capability.
  - Used flexible exemptions rules helping deaf teachers to obtain certificates and become permanently employed.
  - Provided moral and financial support to the introduction of bilingual education.
5. The SigAm project played an important catalytic role together with other similar initiatives preparing the ground for and contributing to the gradual shift from an oral only to bilingual education for children in China. Such a conclusion cannot be proved and there is no direct causal relationship change, but there are indications that the project has had a national impact. It came also at the right time and has been able to make a difference.

The highest ranking officer within Special Education in China is well aware of the SigAm project and participated in a study tour to Norway. He attended also the final workshop in Suzhou in May 2009. The CC chairman was responsible for preparing the new curriculum for deaf education in China promoting a dynamic and more flexible teaching approach – including use of sign language. 180 participants from all over China and international visitors attended the Suzhou conference.

6. The project has been well implemented according to plan. The major deviation happened when the Nanjing School for the Deaf decided to leave the project.
7. The project has involved Norwegian and Chinese scholars. The two Norwegian Professors have helped to establish a theoretical foundation for bilingual education based on international knowledge and expertise, lectured for principals and teachers in the annual summer seminars and designed an evaluation system which was used in several class observations together with Chinese experts.

8. A project objective was to promote institutional collaboration between universities in China and Norway and research of direct relevance to project schools, but also for deaf education in general. In practice, this has been more an example of selected scholars providing technical support and guidance rather than collaboration between universities. The research ambition has to a large extent remained unrealised, even if some scientific articles have been produced and published. Annex 4 provides an overview of all the educational materials and publications produced as a result of the project.
9. The project is based on an understanding of all children's equal rights to education, and is as such in line with principles for Norwegian development cooperation - even if the score on poverty orientation is low – with Jiangsu as a relatively better off Province.

The project is also an example in which a Norwegian NGO is utilising its special experience, expertise and network in Norway for a partnership project with China. The human rights perspective, the involvement of Norwegian scholars and the visitation programme make it also relevant to the Government's China strategy.

10. The activities linked to the first objective – establishing a bilingual education programme in four schools will be sustained when the project now has come to an end. The Provincial Government has recruited the deaf teachers on permanent contracts. There are no indications that the bilingual education classes will disappear with the current demand from parents and active support from teachers, principals and government.

The second objective on research and university collaboration will not be sustained – unless other sources of funding are found.

11. The overall positive conclusion means that an important first step is taken towards introducing bilingual education in China, but the battle is not yet won. There are several unresolved issues and barriers:
  - Chinese Sign Language is not recognised as a language in linguistic sense.
  - A majority of the schools for the deaf are still practising oral only approaches – meaning that the large majority of deaf children are excluded from the right to education using sign language.
  - The new curriculum is a move in the right direction, but does not mean that the policy has shifted to bilingual education.
12. There are also several systemic constraints that need to be addressed before bilingual education can be brought to scale in a majority of the provinces in China:
  - There are few trained deaf teachers.
  - Lack of teacher training opportunities for deaf students.
  - A mandatory oral test in Mandarin is required to obtain teacher certificate.
  - Lack of sign language training opportunities.
  - Prevailing conservative attitudes and traditions in the majority of schools for the deaf - perceiving CSL as an option reducing the opportunity for mainstreaming of deaf children.
13. There are weaknesses in the project design. The project emerged as an example of reform from below – building a model for bilingual education in a small number of schools. There is evidence that the model has been recognised and been a catalyst for broader changes beyond the project schools. There are several reasons why such a low key,

bottom up approach has been effective. It has demonstrated in a practical way to parents, teachers and authorities the benefits of bilingual education.

On the other hand, it can be questioned whether the wider effects were planned and intended from the beginning. It has been shown that the broader reform agenda was not part of the original project plan. Some project components like the summer seminars, visits to Norway including government representatives, involvement of researchers and academics, etc. had a potential for more long-term and broader changes, while others (e.g. recruitment of deaf teachers, exemptions, replication in other schools) more have happened by default than by design.

14. The project was poorly prepared and planned. There is no project or programme document only a brief project outline. The formulation of objectives has changed several times – also the primary/secondary target groups. The project was originally planned for five project schools in order to benefit children and their parents and not seen as part of a broader reform agenda. There are rudimentary elements of such ambitions in some documents – presenting the project as a stepping stone to something more, but such a view is weakly anchored and reflected in any of the planning documents.

But if the project has been successful also in promoting wider reform, what is the problem? A clearer strategy may have helped to address the underlying systemic constraints at an earlier stage. More resources could have been redirected to such work earlier. Since the bilingual concept and teaching practices were established, Norwegian and Chinese scholars have not been optimally used. A clearer strategy would have helped to see the project as part of a larger picture, encouraged the involvement of more partners and prepared the ground for the post-project period. At the moment partners have vague and partly conflicting notions of the future and no shared vision for what the next steps would be.

15. A major weakness is the lack of systematic collection and analysis of data and information on results and achievements in project classes including comparative studies with non-project classes. Most of the findings and conclusions are from internal assessments and based on unsystematic subjective perceptions. Such assessments are necessary and conclusions may be correct, but not sufficient to prove to the public that bilingual education is effective and more effective than the alternatives. The findings and analysis are not sufficiently based in empirical data. A better balance between qualitative and quantitative data would have strengthened the promotion of the project.

The project has been presented as an experimental research project. It has not been an example of experimental research, but more an experiment in a broader and looser sense of the term. It was a missed opportunity when the researchers did not to design a monitoring system with indicators for student, teacher and class room processes and outcomes – a tool for measuring change over time and between project- and non-project classes.

16. Class room observations had mainly a formative purpose – offering feedback and advice to teachers and schools, and have so far not generated any data and research for monitoring and analysing change, but the material is said to have the potential for such use.

17. The tripartite agreement between Signo, Amity and the Provincial Professional Committee has worked – despite the lack of clear definition and understanding of roles and responsibilities. The Provincial Committee became an important entry point for the project into Government systems, but less useful for providing technical support – due to its weak operational capacity. Some criticism was expressed of the unclear and too dominant role of Amity on technical issues. However, the project would not have been the same success without Amity's active support and the personal commitment from staff.
18. Reporting systems and procedures are cumbersome and reports inadequate. The quarterly financial and narrative reporting from Amity has involved considerable work for Amity, but added marginal value. It would have been better, if an annual report had been prepared combining description of factual progress and more in depth analysis of performance – successes and failures.

## 4.2. Recommendations

We suggest that Signo should:

1. Prepare a brief and strategic paper describing alternative options for a second phase of the project based on this evaluation and previous discussions. The options should reflect various level of involvement:
  - (a) Minimum – a short and targeted completion phase for schools in the two western provinces and possibly an annual seminar in Jiangsu Province for sharing of experiences, training and consolidation in the four project schools.
  - (b) Medium - the same as (a) plus targeted follow up of the university and research collaboration exploring needs and opportunities.
  - (c) Maximum – preparing a new multi-component programme including advocacy and promotion of policy reform, developing and supporting teacher education for deaf students, supporting courses in Chinese Sign Language, etc. in addition to (a) and (b).
2. A new programme should include activities in which Signo has expertise, experience and network and where international cooperation can add value for Chinese partners. Direct financial support to schools (teacher salaries, equipment, etc.) should not be included – except temporarily for the remaining project schools, but phased out as soon as possible.
3. Future support should seek to address prevailing constraints in systems and include interventions like for instance:
  - technical assistance to policy reform,
  - curriculum development,
  - teacher training and other types of capacity building,
  - specialised training courses.
4. Future options should be discussed with a broad range of stakeholders in China including CC members, relevant universities and colleges, Norwegian Embassy, as well as Norad/MFA in Norway. Other sources of funding should also be explored.
5. The organisational structure for SigAm should be reviewed and revised according to the profile and substance of the new proposal. If institutional reform and teacher training become important areas, relevant institutions will have to be directly involved. It could be convenient to maintain Amity as a partner for channelling financial resources,

management support for training, organising technical assistance, etc. However, a new project organisation will have to be developed with clear roles and responsibilities.

6. If Signo pursues the most comprehensive option, a proper programme document should be prepared based on a consultative process and professional planning support.
7. The possibilities for future university cooperation should be explored based on independent links between Chinese and Norwegian Universities with its own funding.
8. Norwegian scholars should be involved, but focusing on higher level issues, like policy reform, teacher training, capacity building etc. Local teachers should be trained for class room observations and providing support to parents, teachers and principals.
9. Further more specific recommendation on what should be done in remaining project schools are hiring more qualified deaf teachers (at least each class should have a deaf teacher), promote experienced deaf teachers to leadership positions, and provide regular sign language and translation seminars for all teachers.

## *Annex 1: Terms of Reference*

### **Terms of Reference for final evaluation of the SigAm bilingual education for deaf children in China 2004 – 2009.**

SigAm is an abbreviation for the two foundations involved: Signo in Norway and Amity in China. The evaluation will be conducted for The Norwegian Agency for Development Cooperation, NORAD, which is a directorate under the Norwegian Ministry of Foreign Affairs. The purpose of the evaluation is to document the results and collate the experience gained in order to learn.

#### **Background for the project**

##### Presentation of the foundations involved

The Signo Foundation is a nonprofit private organization working on a professional basis with deaf blind and deaf people with disabilities. This foundation is the owner of nine institutions and nonprofit companies in Norway.

The Signo Foundation has an agreement with The Atlas-Alliance, Norway, which finance and channel funding for International Cooperation. The agreement of this project is part of The Atlas Alliance / Signo Foundation portfolio and has been managed by The Signo Foundation. The Amity Foundation is a non-governmental organization initiated by the Chinese Christians in 1985. It aims in facilitating the open-door policy and providing services in the development of education, medical and health, social welfare and rural economy of the Chinese society.

##### Project context and rationale

According to the China Disabled People's Federation there are 1.8 million deaf and hard-of-hearing under the age of 14. In 1987 The Amity Foundation started its 1<sup>st</sup> oral approach rehabilitation project for the hearing impaired children in Nanjing, China. Based on their own experience and information from other countries, Amity changed their pedagogical approach. As a consequence of this the first experimental bilingual–bicultural project for the deaf children in China was initiated in 1996. This happened in Nanjing school for the Deaf in Jiangsu province.

For promoting the bi-bi concept and sharing the experience gained in Nanjing, Amity and Signo sought support and cooperation with the Jiangsu Provincial Special Education Professional Committee, JPSEPC. The formal involvement of provincial authorities in the project was regarded as important in order to legitimise the use of sign language. At this time it was not legitimate to use sign language in compulsory education. A tripartite agreement between JPSEPC, Amity and Signo was signed.

Political signals from Central Ministry of Education early 2004 indicated a change in the educational methods from orally based monolingual to bilingual tuition, with sign language as the main language. This was seen as a genuine opportunity to provide the means for a policy and for educational methods according to the UN's Millennium Aim of basic education for all children.

Within this project the participants have a common understanding of bilingual education for deaf children. We accept Chinese Sign Language, CSL, as natural language. This involves:



- CSL is the language used in the teaching in schools.
- Deaf are involved in teaching of deaf children.
- CSL training of teachers, parents and relatives.

### **Project description**

The project will in this part be described through main elements of the goal hierarchy:

#### Mandate and objectives of the SigAm Project:

The SigAm Project will be implemented under a Coordinating Committee (CC). This Committee will be headed by JPSEPC and seated by representatives of Amity, of the local deaf community and the SigAm Project Schools. The CC should meet quarterly and one of the meetings will be called Annual Meeting and requires the presence of the Signo Foundation.

- JPSEPC will gain experience through participation in the Pilot SigAm Project and give the experiences to the development of deaf education and the reform of teaching methods in deaf schools in China by using the CSL.
- The Amity Foundation will be in charge of the administrative and logistic implementation, in addition to sharing its knowledge and experience in bi-bi approach they have experienced in the past.
- The Signo Foundation will support the SigAm Project financially and technically. Experts in the field of bilingual education for deaf students will be involved.

The project's beneficiaries are deaf children in the province of Jiangsu, their immediate families and acquaintances. Subsequently, the target group includes educational personnel and authorities with responsibilities for the education of the deaf, as well as deaf and hearing teachers and assistants involved with the special education in the schools for the deaf.

#### Overall Goals

The project is motivated by the general rights of the deaf population to education and to linguistic and cultural development on their own terms.

The overall goals are described as:

- Hearing impaired children in pre and primary schools have access to bilingual education.
- Professors at universities in China and Norway are cooperating in the field of deaf educational science and linguistics. The universities involved are Nanjing Normal University, Zhongzhou University and Fudan University in China and the universities in Oslo and Stavanger in Norway.

#### Project Objective

Establish a bilingual and bicultural program for education in Sign Language in five selected public schools for the deaf in Jiangsu Province. From 2006 the project expanded to two schools in the Sichuan province and to two schools in the Guizhou province.

The program is going to follow the students involved in the project from the time when they start in pre-school to completion within the compulsory school system.

### **Purpose of the evaluation**

#### Reasons related to formal decisions

The original project plan counted with a mid-term participatory evaluation. Considering both technical and economic reasons the Coordinating Committee decided to turn the general mid-

term evaluation into a pedagogical classroom observation program of the nine pilot schools. The classroom observations have been carried out over the last three years and have covered all schools and are fully documented. The observation reports are meant to be included or referred to and commented upon in the general evaluation. Additionally a Master Degree thesis was presented by three students at BI, Norwegian School of Management, in 2006/07. Their review was found valuable regarding steering methods and leadership in the project.

#### Intended use of results

The results and recommendations given in the Final Evaluation Report will be distributed to and hopefully used by the schools involved, the participating provincial authorities and implementing institutions as a corrective to the further development of methods and organization of bilingual education.

The results will of course also be used in a possible planning of and applying for a new program by Amity and Signo.

#### Scope and issues to be covered

To assess results related to project goals primarily on basis of development efficiency.

The goals are defined and described as:

- (c) Hearing impaired children in pre and primary schools have access to bilingual education
  - a. A syllabus for deaf education and materials adapted to this are developed.
  - b. Deaf assistant teachers in the project classes are engaged by the education department.
  - c. Teachers and principals have competence in teaching according to the bi-bi concept.
  - d. Parents of deaf children are receiving sign language courses.

It will be of interest to ask the students themselves, teachers, parents and the employees at the provincial education authorities of their perception of the development of the bi-bi teaching over years and of their thinking of new areas to be focused.

- (d) Some universities in China and Norway are cooperating in the field of deaf educational science and linguistics
  - a. Professionals from universities of China follow the project closely by assessment, guidance and lectures.
  - b. Professionals from universities of Norway make an annual observation and give lectures at seminars.
- (e) In addition to look at the goals mentioned, the evaluation should pay attention to the following areas:
  - a. The status of CSL in the schools and the political focus on CSL in general in China. Attitudes towards the bilingual concept and the use of CSL amongst school management, provincial and central authorities have to be assessed.
  - b. The sustainability of the project when it comes to organisational, administrative, technical and financial aspects.
  - c. In what degree has the SigAm project contributed to the development of bilingualism in China?
  - d. In what degree is the SigAm project a successful development assistance project?

## **The Report**

The evaluation is meant to summarise previous observation reports, giving focus on project progress according to annual plans (efficiency and results) and shall also maintain the sustainability of the efforts concerning effectiveness of organizational and administrative coordination.

The final report shall include an executive summary, not exceeding 2 pages. The total report should not exceed 30 pages excluding annexes.

The language used in the cooperation between the project members is English. The evaluation report should be written in English. To make the report available also for all involved in the project in China, we will translate the summary into Chinese.

The evaluating team will also be responsible for summarising findings and recommendations in a set format for NORAD's database on evaluations.

## **Methods**

The evaluation will consist of field consultations and a desk review of relevant documents, papers, newsletters and information brochures. The evaluation shall be participative in its approach. Interviews one on one or in groups would be preferred.

Authorities, institutions and groups to be consulted during the field visit are:

- A selection of project schools, principals, teachers, children and parents. In particular the group of children and their parents that has been followed over several years.
- Representatives for the Deaf Community.
- Representatives for the Educational Authorities
- Representatives for JPSEPC
- The Chairman of the CC and Technical Advisor
- The Amity Director of Social Welfare Department and the Project Coordinator (former and actual)
- The Norwegian project coordinator (former and actual) and expert group

## **The evaluation team**

The team shall consist of two or three people with knowledge and experience of special education and linguistics. The head and the majority of the team members shall be Chinese. One of the team members can be Norwegian. The team shall be experienced in participative methods for one on one interviews or group interviews.

Regarding language skills it is a benefit to master the languages used in the project, but it is not a must. Interpreters can be used.

The team has to sign a binding contract with Signo which will include details on financial aspects and procedures in case of disagreements or complaints.

## **Timeframe**

The Evaluation shall be carried out during May 2009 coinciding with the International seminar in Suzhou where many informants will be available for interview.

A draft of the Evaluation Report shall be ready by the 1<sup>st</sup> of July 2009. The draft will be commented upon and input given by persons involved in Amity, Signo and the JPSEPC for editing before 15<sup>th</sup> of August. The final Evaluation Report shall be ready for printing and distribution by the very latest 1<sup>st</sup> of September

## *Annex 2: References*

- Jun Hui Yang, Sign Education and oral/written language in deaf education in China, University of Central Lancashire, 2008
- Stein Erik Ohna, Communication and Participation in Chinese Deaf Schools: Experiences from a China-Norway Collaboration on Sign Bilingual Education, Chinese Journal of Special Education. 2009.
- Gong Ounhu, A Linguistic Discussion on Issues of Chinese Sign Language and Chinese in Deaf Education, Department of Chinese, Fudan University, 2009.
- Ingrid Delhi, The SIGAM bilingual education for deaf children in China from 2004 to 2009, Signo Foundation, 2009.
- Bilingual Practice and Experience in Chai Garden, Suzhou School for the Deaf and Blind, May 2009.
- Elizabeth S. Parks, Deaf Teachers in China Seek Larger Role in deaf Education, Gallaudet University, 2006.
- Richard R. Lytle et.al. , Deaf Education in China: History, Current Issues and Emerging Deaf Voices, Gallaudet University, 2006.
- Utenriksdepartementet, regjeringens Kina-strategi, 2007
- Prosjektoppgave BI, SigAm fra prosjekt til program? BI Handelshøyskolen, Oslo, 2007.
- Stein Erik Ohna, Rapport til Signo, 2009

### *Various project documents:*

- Rapport fra forundersøkelsen i Kina 2001.
- Agreement between the Signo Foundation and Amity Foundation and the Jiangzu Provincial Special Education and Research Commission, 2004.
- SIGAM Plan 2007-2009
- Plan for 2008
- Års- og landrapport 2005
- Annual Country Report 2007
- Annual Plan 2009
- Audit reports
- Minutes of the SigAm Joint CC meeting, 2008.

## Annex 3: People Met

Place	Time	Interviewee	Position
Nanjing	May 11	Shen Yulin	Chief editor of Modern Special Education Journal
		Cheng Yiji	Director of Jiangsu Special Education Committee
		Xu Tailai	Director of Jiangsu Provincial Education Department, in charge of primary education and special education
		Ouyang Xinmei (Ms.)	Teacher of Nanjing Special Education Technical College
		Chen Jinyou	Principal of Nanjing Deaf School
	May 12	Wu Anan (Ms.)	Director of Social Welfare Division, Amity Foundation
Changzhou	May 12	Wu Juanfeng (Ms.)	Principal of Yangzhou Deaf School
		Class observation	Fourth Grade: Chinese, Math, Deaf Culture
		Yang Hua (Ms.) Zhang Xudong 3 parents Wu Qinfang (Ms.)	Pre-school teacher Deaf teachers Grade 4 and preschool class Director of Changzhou City Education Bureau, in charge of primary education and special education
		Class observation	Pre-school, Chinese Characters, Story-telling, PE,
	May 13	Teachers	Feedback to teachers in the project team
		Students	Interactive talks
Yangzhou	May 12	Shao Baoxing	Principal of Yangzhou Deaf School
	May 13	Chen Yueming	Director of Yangzhou City Education Bureau, in charge of primary education and special education
		Parents meeting	Second Grade and Pre-school class
		Meeting with Stein-Eric Ohna and Yang Junhui	About previous school observations.
Zhenjiang	May 14	Gong Qing (Ms.)	Director of Zhenjiang City Education Bureau, in charge of primary education and special education
		Ren Jianmei (Ms.)	Principal of Zhenjiang Deaf School
		Yao Chunxia	Hearing teacher of Zhenjiang Deaf School
		Ding Fengnan	Deaf teacher of Zhenjiang Deaf School
Suzhou	May 15	Class observation	Two classes, Mathematics and Sign Language Story
		Qin Ningren	Director of Suzhou City Education Bureau, in charge of primary education and special education
		Gu Ruihua	Principal of Suzhou Deaf School

	May 16	Stein Erik Ohna and Arnfinn Muruvik Vonen	Dinner meeting
	May 17	Zhang Ningsheng	Prof. of Zhong Zhou University, Dept of Special Education
		Qiu Zhonghui	General Secretary of Amity Foundation
	May 18	Ding Yong	Principal of Nanjing Special Education Technical College
		Zheng Li	Prof. of Nanjing Normal University, Dept of Education
		Yang Xiaohua	retired deaf teacher in Nanjing, involved in the bilingual pilot project.
		Teachers	Tianjin School for the Deaf, Bilingual programs

### Annex 4: Major Publications Project (2004-2009)

Author /Editor	Year	Books and Video Products	Publisher
Shen Yulin, Wu Anan & Chu Chaoyu (Ed.)	2005	Bilingual Deaf Education: Theories and Practices	Huaxia Publishing House
Wendy Lewis et al. (Wu Anan trans.)	2005	Bilingual Deaf Education in Denmark	Huaxia Publishing House
Wu Anan (Ed.)	2007	CSL Signs and Chinese Characters Picture Book (with VCD)	Children and Youth Publishing House
Niemann, et. Al (Wu Anan trans.)	2009	Guide to Early Education for Deaf Children	Jiangsu Education Publishing House
Shen Yulin & Shao Baoxing	2009	Practical Conversations in Chinese Sign Language	Zhengzhou University Press
Yangzhou Special Education School	2009	Sign Language Vocabulary on Mathematics for Primary Education (with VCD)	Amity
Nanjing School for the Deaf	2006	Sign Language and Chinese Characters DVD	Amity
Deaf teachers	2004	Sign Language Story VCD 1-2	Amity
Deaf teachers	2005	Sign Language Story VCD 1-5	Amity
Children in the project	2008	Sign Language Story Telling by Deaf Children VCD	Amity
SigAm Project Team in Suzhou Deaf School	2009	Bilingual Deaf Education Practices in Chai Yuan Garden	Gu Wu Xuan Publishing House
Ren Jianmei (Ed.)	2009	Let deaf children grow up in happiness: SigAm project outcome report	Zhenjiang Special Education Center
Zhang Ningsheng (Ed.)	2009	Introduction to Sign Language Interpretation	Zhengzhou University Press
Changzhou School for the Deaf	2009	SigAm Bilingual Deaf Education in Changzhou School for the Deaf, experimental reports	Changzhou School for the Deaf
Yangzhou Special Education School	2009	Yangzhou Special Education, SigAm Bilingual Education Experiment Issues, vol. 1	Yangzhou Special Education Research Committee
Suzhou, Yangzhou, Changzhou and Zhenjiang project schools	2008	Guidelines in teaching preschool program, Chinese, Math, CSL and training manual for parents in CSL	Amity
Yangzhou Special School and SigAm Project team	2009	Chinese Sign Language Conversations (textbook with DVD)	Zhengzhou University Press

<b>Author</b>	<b>Year</b>	<b>Articles</b>	<b>Journal/ Magazine</b>
Zheng Li, Shen Yulin, & Wu Anan	2004	“Bilingual Preschool Class Teaching Evaluation Report”	China Special Education
Zheng Li, Stein-Eric Ohna & Ingrid Dehli	2008	“Evaluation of Bilingual Preschool Class Teaching”	China Special Education
Zheng Li	2009	“What has bilingual deaf education brought to the deaf children?—A review of bilingual deaf education experiment in China”	China Special Education
He Xiaoxing & Zhang Yuan	2008	“A sociological thinking towards deaf education reform: The ‘Bilingual and Bi-cultural’ effort from NGO”	Education Journal
He Xiaoxing	2008	“‘Deaf Culture Declaration’ in Japan: The power politics, social inequality and cultural reproduction”	Education Review of Peking University
He Xiaoxing	2009	“The crime and education of deaf people in China: A reflective study”	China Study
Zhang Ningsheng	2007	“Let deaf teachers participate in Special Education School”	China Disabled
Zhang Ningsheng	2004	“The evolution of communication method for the hearing impaired”	Chinese Hearing Language Rehabilitation Sciences
Zhang Ningsheng & Xu Lili	2006	“Eliminate barriers and create harmony: Discussion on the communication between the deaf and the hearing”	Zhongzhou University Journal
Zhang Ningsheng & Yuan Yin	2006	“Chinese reading assisted strategy for the hearing-impaired students”	China Special Education
Zhang Ningsheng & Yu Songmei	2004	“Linguistic research on Deaf people’s sign language”	China Special Education
Zhang Ningsheng & Guohua	2007	“The profession and history of American sign language interpretation”	Zhongzhou University Journal
Zhang Ningsheng & Guohua	2008	“Review on William Stoke sign language and the origin of language signs theory”	Modern Special Education
Su Ping	2008	“Interest, the key to active learning for the deaf children”	Changzhou Teacher’s Education
Gu Ruihua	2008	“Maximize the success of every disabled child”	Suzhou Education
Gu Ruihua	2008	“The ‘harmonious of people’ strategy in management”	Education Research



Gu Ruihua	2008	“Education and research, making me painful and happy”	Modern Special Education
Gu Ruihua & You Wenying	2004	“To raise the ‘sun with the missing angle’ by love”	Suzhou Moral Education Research
Fang Hong	2004	“Why is it difficult for the deaf to be teachers”	China Disabled
Fang Hong	2005	“The role of deaf teachers and training issues”	Nanjing Special Education Technical College Journal
Fang Hong	2005	“Desire”	Modern Special Education
Fang Hong	2005	“It is my responsibility to help the deaf people”	Suzhou People's Congress
Fang Hong	2005	“The conversion from sign language and written Chinese”	Modern Special Education
Fang Hong	2006	“The sign language competition for the parents in Suzhou Deaf School”	Modern Special Education
Fang Hong	2006	“Changes in the three perspectives for the management in Special Education School”	Modern Special Education
Fang Hong	2008	“What are some of the necessary preparations for sign language interpretation?”	Modern Special Education
Fang Hong	2009	“What are some important issues for sign language interpretation?”	Modern Special Education
Jin Xiaolei	2004	“The network application in Chinese teaching at Deaf School”	Modern Special Education
Jin Xiaolei	2005	“Journal practice: enhance writing ability”	Modern Special Education
Fang Hong	2005	“Language Learning of Deaf People: Deaf teachers view on how to learn language”	in “Modern Education Series”, China Drama Publishing House
Tan Jingsheng (Deaf)	2006	“My Language Acquisition”	in “Modern Education Series”, China Drama Publishing House
Yang Jie (Deaf)	2006	“Persistence”	in “Modern Education Series”, China Drama Publishing House
Hua Chun (Deaf)	2006	“Taste of learning language”	in “Modern Education Series”, China Drama Publishing House
Hua Chun (Deaf)	2005	“Writing is liking drinking coffee, a bit bitter”	Modern Special Education
Ding Fengnan (Deaf)	2006	“Pursuit”	in “Modern Education Series”, China Drama Publishing House

Li Ying (Deaf)	2006	“I finally learned to speak”	in “Modern Education Series”, China Drama Publishing House
Zhao Qing	2005	“Constructive course strategy: Some reflections on the bilingual deaf preschool class in our school”	Nanjing Special Education Technical College Journal
Zhao Qing	2007	“On the reading ability of deaf students”	Zhenjiang Education
Bao Kui	2005	“The choice of hearing teachers”	Special Education
Wang Fang	2009	“On the language development of deaf students”	Yangzhou Special Education
Li Ling	2006	“How to conduct social activities”	Yangzhou Special Education
Wang Qi	2009	“On the self identity of deaf people”	Special Education
Wang Qi	2008	“Practice and understanding of bilingual deaf education”	Yangzhou Special Education
<b>Author /Editor</b>	<b>Year</b>	<b>Project Material</b>	
Amity Foundation	2005 to 2009	SigAm Bilingual Deaf Education Project Newsletter	
Amity Foundation	2005	SigAm Project Brochure	
Amity Foundation	2005 to 2009	SigAm Project Calendar	
Amity Foundation	2009	SigAm Conference’s Material Book	
<b>Author</b>	<b>Year</b>	<b>Other Articles During Various Essay Competition and Conferences, including “Modern Special Education Essay Competition”, “The Third National Special Education Essay Competition”, “Jiangsu ‘ShiTao’Cup Education Research Article Competition”, “Jiangsu Hearing and Language Rehabilitation Academic Conference”, “Zhenjiang Education and Research Article Competition”and “International Sign Language and Communication Academic Conference (held by Taiwan Normal Univeristy)”.</b>	
Zhao Qing	2008	“On the strategy of second language learning in Chinese learning for the deaf students”	
Zhao Qing	2007	“In search of individualized teaching model for deaf preschool class ”	
Zhao Qing	2007	“My opinion on the language rehabilitation for deaf students”	
Zhao Qing	2005	“Some important issues about the bilingual deaf education experiment”	
Zhao Qing	2005	“whole language education and bilingual preschool deaf education”	
Zhao Qing	2005	“The language of deaf students and research of language in deaf school”	

Chen Hui	2007	“On the early training of reading abilities for deaf children”
Chen Hui	2006	“On the teaching of sign language nursery rhymes in bilingual deaf education”
Ding Fengnan	2005	“Research and practice of sign language course in deaf schools”
Ding Fengnan	2007	“On the language education for older deaf students in preschool class”
Li Yiying & Deng Sharong	2006	“The role of deaf teachers in bilingual deaf education”
Ma Changjian	2005	“Establish sign language laboratory, improve sign language”
Sun Ningfeng & Qi Shanyu	2008	“The situation, reasons and measurements for the communication in Chinese course in deaf schools”
Tang Qin	2008	“Teaching strategies for better language development for the deaf”