

Adjustments and Transitions

After Shifting to Using Chinese as the Medium of Instruction (Draft)

Research Findings by the Support Centre for Teachers Using Chinese as the Medium of Instruction, Department of Curriculum Studies, The University of Hong Kong

(Date of Study: 11 September-15 November, 1999)

I. Background and Purpose of Study

In 1997, the Hong Kong government promulgated a "firm guidance to use Chinese as the medium of instruction," emphasising the advantages of mother-tongue education. By September 1998, the number of secondary schools using Chinese as the medium of instruction increased from 70 to over 300.

In December 1998, the Support Centre for Teachers Using Chinese as the Medium of Instruction (CMI Centre) at the University of Hong Kong carried out a survey, to study the problems encountered and support needed by teachers in schools which were at the initial stages of shifting to mother-tongue education.

September 1999 was the first anniversary of implementing the "firm guidance to use Chinese as the medium of instruction (hereafter MOI)." We felt that it was an appropriate time to carry out another survey. This study took place during September and October this year. Its purpose was to understand the experiences of teachers who had shifted to mother-tongue instruction, study the changes in their needs, and adjust the directions of our Centre's services. This paper will briefly report on the results of this survey, and compare them with the results of the previous study.

II. Method of Study

We interviewed 12 secondary schools; the interviewees included school administrators and teachers. Out of these 12 schools, 3 had always been CMI schools, 7 had just shifted to using Chinese as the MOI, and 2 new schools. Government as well as subsidised schools were also included. The locations included Hong Kong, Kowloon, and the New Territories. We also sent out questionnaires to teachers in these schools. Along with questionnaires sent to other teachers, a total of 250 questionnaires were sent, and 215 of these were returned. This report is based on the research findings of both the questionnaires and the interviews in the schools.

III. Result

The results below are reported in 5 different sections. The first and second sections compare the similarities and differences in teachers' attitudes toward mother-tongue education and their needs. Section 3 compares the similarities and differences between the perspectives of administrators and teachers toward the support needed for mother-tongue education. The last two sections summarise the suggestions and future expectations of administrators and teachers toward our Centre's services.

1. Teachers' attitudes toward mother-tongue education

As pointed out in our last study, parents' attitudes toward mother-tongue education often create a certain amount of pressure on teachers. The present survey reveals that 57.5% of teachers feel that the parents' attitudes are the major causes in preventing the development of mother-tongue education. This is a slight drop from the results of the previous survey. This result reflects that parents' resistance toward mother-tongue education has changed slightly, but it may take quite some time before parents can accept it totally. Also, the present survey reveals that a large portion of our colleagues believe that in order to give fuller play to mother-tongue education, curriculum reform (77.5%) and changes in examination content and format (77.6%) must be adopted. Even though this percentage is high, it is slightly lower than the results of the last survey, which may have been caused by the fact that teachers are beginning to adjust to using Chinese as the MOI. Moreover, 80.9% of teachers

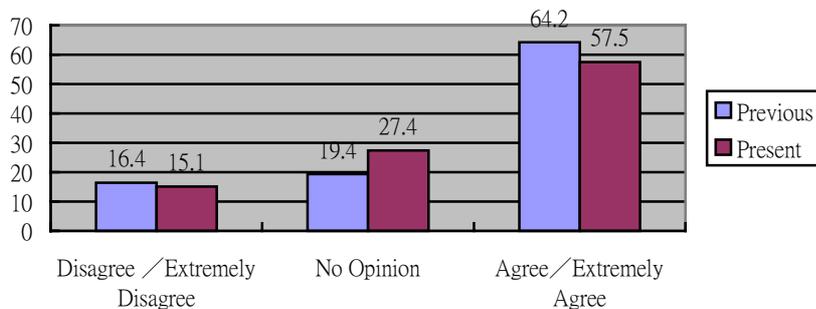
believe that mother-tongue instruction can raise the students' interest. This percentage is not significantly different from the result last time (80.2%). These high percentage points prove that mother-tongue education is in fact very helpful to students. Finally, 73.2% of teachers believe that mother-tongue education can stimulate the students to enter a higher level of learning, and raise the quality of education. This result is very close to the result of the previous survey (71.4%), which proves that after a year of practical experience in implementing mother-tongue education, teachers are reaching a conclusion similar to their initial opinions.

Table 1: Comparison between teachers' attitudes toward the development of mother-tongue education in the two surveys (shown in percentages)

	Disagree/ Extremely Disagree		No Opinion		Agree/ Extremely Agree	
	Previous Study	Present Study	Previous Study	Present Study	Previous Study	Present Study
A) Parents' attitudes prevent the development of mother-tongue education	16.4	15.1	19.4	27.4	64.2	57.5
B) Corresponding reforms in curriculum should be carried out	4.4	7.2	8.2	15.3	87.5	77.5
C) Coordination with examination content and formats should be adopted	4.4	4.8	8.2	17.6	87.5	77.6
D) Students' interest has been raised	5.9	5.3	13.9	13.9	80.2	80.9
E) Students can enter a higher level of learning	8.3	6.7	19.4	20.1	71.4	73.2

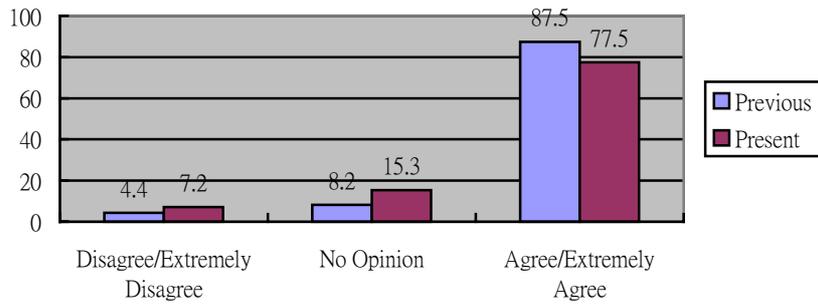
Graph 1: Comparison between teachers' attitudes toward the development of mother-tongue education in the two surveys

A) Parents' attitudes prevent the development of mother-tongue education
[See Graph 1.A, page 3 of original text]

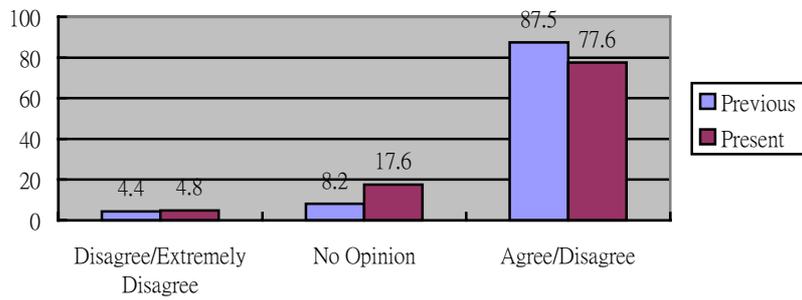


B) Corresponding reforms in the curriculum should be carried out

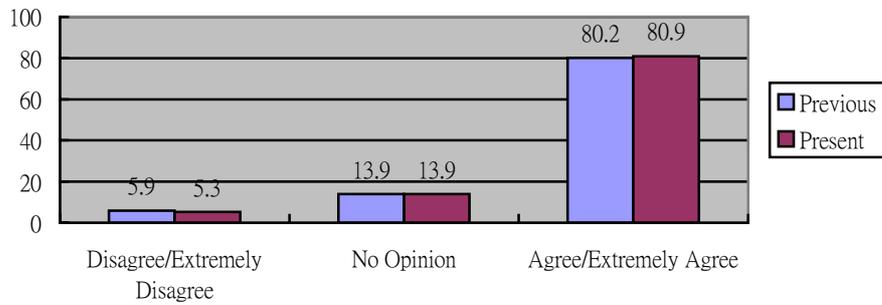
[See Graph 1.B, page 4]



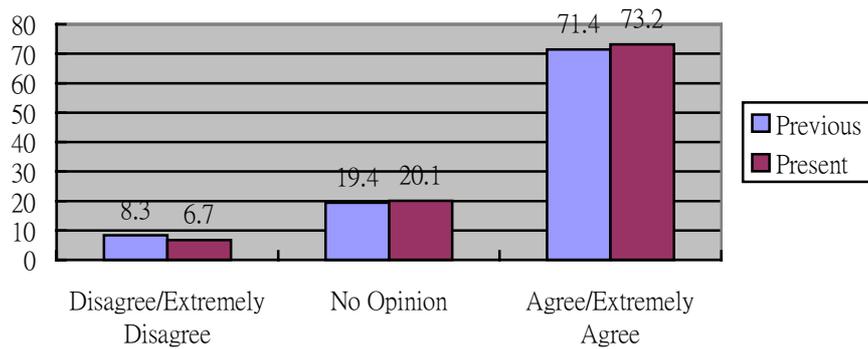
C) Coordination with examination content and formats should be adopted [See Graph 1.C, page 4]



D) Students' interest has been raised [See Graph 1.D, page 4]



E) Students can enter higher levels of learning [See Graph 1.E, page 4]



Summary:

Comparing the two surveys, the following are teachers' attitudes toward mother-tongue education:

1. 70-80% of teachers believe that using Chinese as the MOI can raise the students' interest, and stimulate them to enter higher levels of learning. This shows that after one year of practical application, the teachers have acquired experiences which verify their viewpoints a year ago.
2. Over 75% of teachers in both surveys believe that in order to give full play to the benefits of mother-tongue education, there must be appropriate changes in the present curriculum design, and examination content and formats.
3. The present survey reveals that teachers believe that parents' attitudes toward mother-tongue education have improved slightly, but there are still over 50% of teachers who believe that parents' attitudes prevent the development of mother-tongue education.

2. Problems encountered by teachers after adopting Chinese as the MOI

The previous study explored problems encountered by teachers in the initial stages of shifting to Chinese as the MOI. If we compare the results of the present survey with those of the last, we will discover what kind of changes have taken place in the problems encountered.

A year after shifting to using Chinese as the MOI, the problems encountered by teachers and their changes include the following:

1. 52.63% of the teachers experience problems in selecting textbooks. This is 6.53% higher than the last survey. They are experiencing problems because a large portion of current textbooks (73.64%) are translated from English.
2. 80.1% of the teachers indicate that they have problems finding teaching aids. This figure is 25.8% higher than the last survey, which is a significant difference.
3. Nearly half or 47.83% of the teachers indicate that due to unfamiliarity with the Chinese vocabulary of their subjects, their lectures lack fluency. This is not too different from the result of the last survey (44.1%). The main reason for their

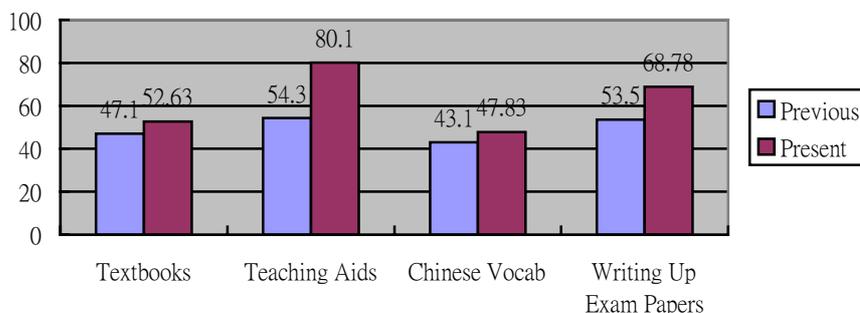
experiencing this problem is that the learning experiences of the teachers themselves were mainly based on English (78.43%).

4. 68.78% of the teachers indicate that in terms of designing or writing up examination papers and assignments, they experience a higher amount of problems than shown in the last survey (15.28%). This is mainly due to their inadequate knowledge of written Chinese (58.87%). As for the handling of Chinese word processing, the problems experienced by teachers have already been greatly reduced.

Table 2: Problems encountered by teachers [Table 2, page 6]

	No Difficulties		Difficult		Very Difficult	
	Previous Study	Present Study	Previous Study	Present Study	Previous Study	Present Study
A. Textbooks	53.9%	47.37%	36.9%	47.85%	9.2%	4.78%
B. Teaching Aids	45.7%	19.90%	43.9%	68.45%	10.4%	11.65%
C. Chinese Vocab	55.9%	52.17%	38.6%	38.65%	5.5%	9.18%
D. Writing Up Exam Papers	46.4%	31.22%	44%	58.54%	9.5%	10.24%

Graph 2: Problems encountered by teachers



As shown by the results above, problems encountered by teachers can be divided into two categories. The first category relates to language usage, and the second relates to Chinese teaching materials in Chinese.

2.1 Problems encountered by teachers in using Chinese

This survey reveals that teachers are still unfamiliar with the Chinese vocabularies in their subjects. The main cause comes from the fact that for the teachers themselves (78.43%), their own learning experiences in the past were mainly based on English. Some teachers believe that they are unable to adequately grasp appropriate subject-specific patterns of discourse and writing skills, which creates difficulties when they write up examination papers or homework assignments.

A comparison between the two surveys shows that the level of difficulty in handling Chinese word processing is gradually falling. In the questionnaire last year, about 53% of teachers experienced difficulties in designing or writing up examination papers and assignments. A closer look at the problem reveals that the majority (71%) was caused by lack of proficiency in handling Chinese word processing on the computer. However, the present questionnaire reveals that 68.78% of teachers have encountered difficulties when designing or writing up examination papers and assignments. This is higher than the previous study. But the handling of Chinese word processing has already dropped from being the greatest barrier to relatively unimportant. Only 51% of the teachers feel that they lack proficiency in handling Chinese word processing.

By comparison, what is notable is that in terms of skills in written Chinese, teachers do not seem to have hugely improved after one year. They still face rather big difficulties when it comes to language. The result of this survey shows that 58.87% of teachers have insufficient knowledge of the Chinese written language, which is not very different from the result of 57% last time.

In addition, on the question of the need to change the level of difficulty and the format of examination papers to coordinate with mother-tongue instruction, only 47% of teachers still have problems in this area. This is lower than the result of 54% last time, which shows that teachers are already beginning to get used to the new format in setting examination questions.

The Table below compares the reasons for the problems encountered by teachers in designing and making up assignments or examination questions:

Table 3:

Reasons for problems in designing and making up assignments or exam questions	Yes		No	
	Previous Study	Present Study	Previous Study	Present Study
Still exploring exam questions which can complement the new teaching environment (e.g. level of difficulty or format of questions)	54.1%	47.18%	45.9%	52.82%
Lack of proficiency in written Chinese	57.0%	58.87%	43.0%	41.13%
Lack of proficiency in handling Chinese word processing	71.0%	51.05%	29.0%	48.95%
Other problems	12%	8.51%	88.0%	91.49%

2.2. Difficulties in finding teaching materials in Chinese

This study reveals that teachers believe that on the whole, there is sufficient supply of textbooks on the market. However, because the majority of Chinese textbooks are still directly translated from English, their content tends to be informational, their style and level of difficulty have not been properly adjusted, and their quality is still uneven. Also, the translation of the terms used are not unified, which makes the selection process difficult for teachers. In addition, 89.1% of teachers believe that it is still rather difficult to find teaching aids and suitably-designed teaching materials for students. This is because the teaching materials offered on the market lack flexibility and there is a shortage of teaching aids written in Chinese. Therefore the teachers believe that our Centre should invest more resources in developing teaching materials on the internet, and expand the use of the internet for teaching purposes.

Summary:

1. Based on Table 2, a year after the adoption of Chinese as the MOI, although teachers experience more problems than what was predicted last year, their orders are not much different. They experience a higher level of difficulty than expected in finding teaching aids in Chinese which can complement the curriculum. Secondly, the other difficulty faced by teachers lies in the design and production of examination papers and homework assignments.
2. In the previous survey, 45% of teachers had difficulty selecting suitable textbooks and using the Chinese vocabulary of their subjects. But the figure has increased to 50% in the present study, which shows that they are even more aware of these problems in their actual teaching practice.
3. According to the previous survey, the reasons for the problems encountered by teachers in designing assignments and examination questions are listed in the following order: Lack of proficiency in handling Chinese word processing, lack of familiarity with written Chinese, and inability to grasp examination questions which complement the new teaching environment. On the other hand, the order of the results from the present study are: Lack of familiarity with written Chinese, lack of proficiency in handling Chinese word processing, and inability to grasp examination questions which complement the new learning environment. Based on the above, teachers are experiencing greater difficulty than expected in using Chinese as their written language.

3. Comparing the perspectives of teachers and administrators in the development of using Chinese as the MOI

In general, teachers and administrators have more or less the same views regarding using Chinese as the MOI. But their perspectives differ in the two areas of the selection of textbooks and the study of subject-specific patterns of discourses.

3.1 Selection of textbooks

In the selection of textbooks, administrators indicate that the situation of teachers' dependence on textbooks have decreased:

"...Within a few years, exchanges on the internet will certainly be popular...." Principal (School D)

"...Once a good website has been set up, and the 200 member schools have been contacted, everyone can contribute. Then textbooks will no longer be needed.... The students can learn on their own, without depending on textbooks." Principal (School F)

Teachers also hope to depend less on textbooks, especially because the usability, depth and breadth of current textbooks still need further improvement. This survey indicates that more than half of the teachers experience difficulties in selecting textbooks. The teachers being interviewed are in fact very concerned about the quality of textbooks, and hope for a set of excellent textbooks that they can adopt. But based on the present situation, on one hand they are hoping that the publishers will improve the quality of the textbooks, on the other hand, they are also hoping that this will be complemented by more teaching aids on the market.

3.2 Subject-specific patterns of discourse

After every interview, colleagues from our Centre will invite the administrators and teachers to fill out a simple questionnaire. One of the items on the questionnaire relates to subject-specific discourse, which is as follows:

"The Chinese used in different subjects is different from ordinary language. So subject-specific patterns of discourse needs to be studied."

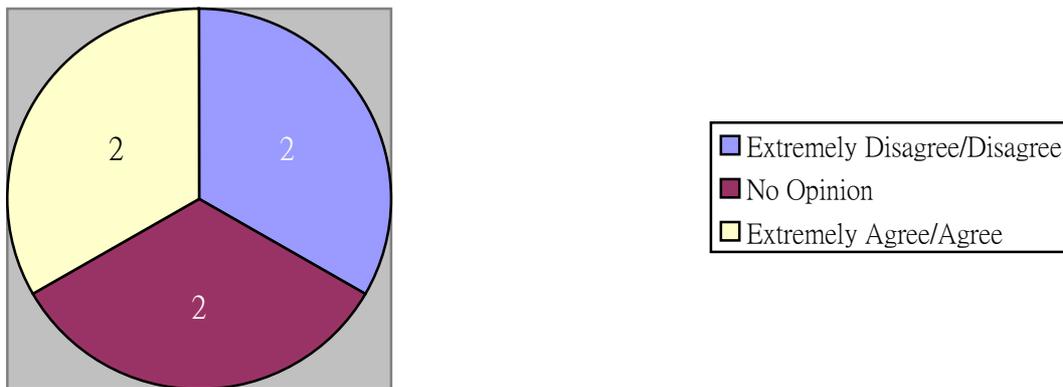
On this question, administrators' views are hugely different from those of the teachers. The administrators do not have a clear leaning, they do not feel the importance of subject-specific patterns of discourse. But for teachers, the situation is different. 70% of teachers agree that subject-specific patterns of discourse should be studied. So their opinion is leaning more toward one side. This may be because in their daily work, front-line teachers deeply feel the importance of grasping subject-

specific patterns of discourse to their teaching. And they feel that it should be studied.

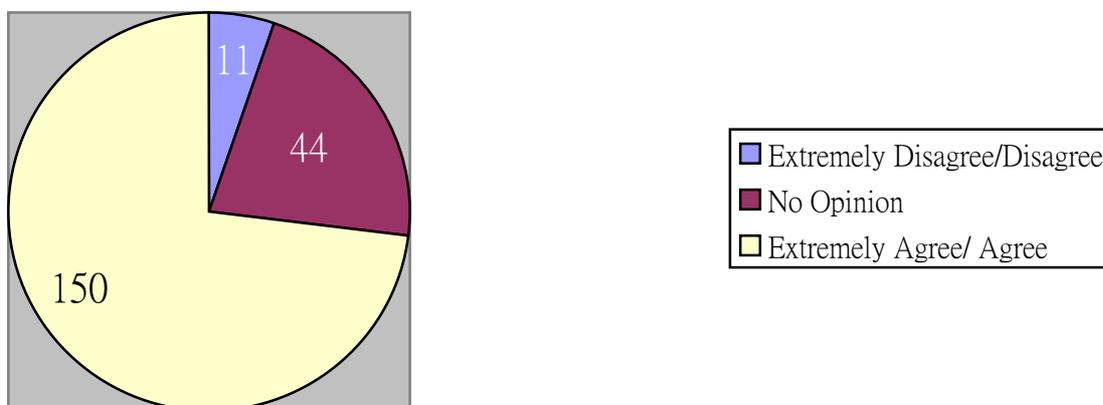
The Table below shows the opinions of administrators and teachers toward the study of subject-specific patterns of discourse: [Table 3.2, page 9]

	Administrators			Teachers		
	Disagree/ Extremely Disagree	No Opinion	Agree/ Extremely Agree	Disagree/ Extremely Disagree	No Opinion	Agree/ Extremely Agree
Subject-specific patterns of discourse should be studied	2	2	2	11	44	150

Attitudes toward subject-specific patterns of discourse: (Administrators) [Illustration, bottom of page 9]



Attitudes toward subject-specific patterns of discourse: (Teachers) [Illustration, top of page 10]



4. Suggestions for services by the CMI Centre

The following suggestions are results based on interviews of administrators:

Suggestion #1: Increase internet resources

Both school administrators and teachers believe that the internet resources currently provided by the CMI Centre, including Examination Paper Data Bank, Teaching Website, Curriculum Design, and Cyber Conference Corner, are very useful to teachers. And they have a rich content. They also agree that our Centre's network is worth promoting and one of the focuses for long-term development.

Just as one administrator says:

"...What can't be done in English, a lot can be done in Chinese. This provides a lot of room for developing new learning modes...."

(School E)

They like:

"...Categorised and preselected Examination Paper Data Bank , as well as the design of learning activities...." (School F)

They all believe:

"...The concept of Examination Paper Data Bank is excellent, and will surely be helpful to teachers...." (School D)

"...The Examination Paper Data Bank is very useful...." (School F)

However, whether administrators and teachers, they all believe that the Examination Papers Data Bank should be increased in volume, including collecting more examination questions on every subject from different schools and expanding the questions to Forms 4 and 5 (equivalent to grades 10 and 11 in the United States).

In terms of subjects, new subjects should be added to correspond with the senior secondary school curriculum. For example, Physics, Chemistry, Biology, and Economics. Some teachers also mention that once the examination questions have been collected, they need to go through selection and elimination, and the language and illustrations should be unified. Also, there should be an indication of the different levels of difficulty, as a reference for teachers when they select their examination questions.

In terms of the Teaching Website, some colleagues believe that in order for the teachers to benefit directly, the Teaching Website and the materials from news clippings must complement suitably-designed learning activities. For example, designing worksheets of different levels of difficulties, systematically extract materials which complement the topic of the lesson, in order to make use of it and further develop it. By so doing, teachers will download them for their own use. As one administrator mentions:

"...The resources must be downloaded directly for immediate use..."
(School E)

In terms of curriculum design, some colleagues believe that an immediate feedback column can be set up, to allow teachers who have used the materials from the website share their experiences. This will lead to mutual exchanges and improvements of teaching techniques. Besides, subject-specific teaching workshops are still welcomed by the teachers, which will provide teachers of the same subjects with more suitable teaching materials.

Suggestion #2: Continue the support in using Chinese as the MOI

Both the administrators and the teachers are worried that when mother-tongue education is expanded to senior high school, due to the current lack of Chinese teaching materials and internet resources on the high school curriculum, teachers will still run into many problems. As shown in the table below, only 15% of teachers

believe that the support for mother-tongue education does not need to expand to Form 4 and above level.

	Extremely Disagree/ Disagree	No Opinion	Extremely Agree/ Agree
No need to expand support to Form 4 and above level	48.3	36.5	15.3

Suggestion #3: Current lack of teaching materials in Chinese

As front-line educational workers, teachers are most concerned about teaching materials. One teacher believes that "...related Chinese references,...and workshops..." is what they need urgently. One administrator also believes that our Centre should play the role of "collecting and selecting teaching aids." In addition, some teachers also believe that a rich website data bank, and a website related to the topics studied will increase the breadth of the learning.

Suggestion #4: Parents lack confidence

School administrators as well as teachers discover that parents are still worried about their children's learning situation with the use of Chinese as the MOI. They believe that in order to persuade parents about the benefits of mother-tongue education, they must have evidences to show that mother-tongue instruction can raise a student's academic performance. Some schools have already received the following results after their initial study:

"...A comparison between the results of Form 1 two years ago and the same grade this year shows a lot of improvement..." (School G)

"...After switching to using Chinese as the MOI, not only grade E or above has risen in percentage, even the percentage for grades A to C has risen significantly..." (School F)

"...Parents have accepted the reality of their children learning in their mother-tongue. Some even request to use Chinese in teaching English language...." (School D)

Also, parents must see that after their children have chosen to answer questions with their mother tongue, they have more freedom for their expression. They also receive even better results during their Hong Kong Certificate of Education Examination (HKCEE). As one administrator says:

"...Whether the implementation of mother-tongue education is successful or not, one excellent indicator is the results of the HKCEE...." (School F)

Summary:

1. In general, school administrators and teachers are satisfied with the internet services provided by the CMI Centre, and feel that it is worth long-termed promotion and development.
2. But the present Curriculum Design, Examination Paper Data Bank, Curriculum Website...etc. must all meet the needs of future teachers. So it makes sense to increase our services to Forms 4 and 5 levels.
3. At the same time, every internet service should be expanded to other subjects, which means continuous improvements in terms of both quantity and quality.
4. Teachers, in particular, believe that there is a need to study subject-specific patterns of discourse.
5. Both school administrators and teachers believe that parents have not given sufficient support to mother-tongue education, so the achievements of using Chinese as the MOI should be spread to parents.

5. Future development of the CMI Centre

Based on suggestions provided by administrators and teachers, the CMI Centre will extend the following services:

Service #1: Expand internet resources

Since over 300 schools have become our member schools, we will continue to give full play to our role as the "assembler," and collect the curriculum designs and high-quality examination questions from every subject from different schools. These will be put on the internet for teachers to use. In terms of curriculum design, we hope that we will have even more opportunities to collaborate, and carry out teaching experiments in the schools. By adding the element of mother-tongue instruction, this will raise the quality of learning. As for examination questions, we will organise the examination questions that have been collected, edit and unify the illustrations as well as the language used, to make them more convenient for teachers to use. We will actively collect appropriate teaching websites, and organise the materials according to subjects and categories, and set up a system for the teachers' evaluation.

Service #2: Provide more opportunities for teachers to learn and share

In the future, we will organise seminar discussions in mother-tongue education, to allow teachers to share their experiences. Also, workshops in the uses of vocabulary and examination design will continue to be held, to help teachers become more fluent in their lectures, and more proficient in writing up examination questions or homework assignments.

Service #3: Expand the support service to senior secondary school

Summing up the results of the present survey, we discover that both administrators and teachers agree that after the adoption of Chinese as the MOI, the students' interest has been raised. Also, the students can enter higher levels of learning. However, three quarters of the administrators and half of the teachers believe that the support currently given to the first 3 years of junior secondary school is insufficient to meet the needs during the transitional period. In other words, they believe that the support should be expanded to Form 4 and above.

Service #4: Changing the content and format of examination papers

In order to give full play to the benefits of mother-tongue education, corresponding changes must be made in the content and format of examination papers. We will collect and design examination questions of different degrees of difficulty and different skills in formulating questions, to train students to enter learning modes with higher orders of thinking.

Service #5: Explore subject-specific patterns of discourse

Due to differences in their nature and content, different subjects represent different thinking modes in organisation, question formulation, argumentation, and conclusion. When reflected in language, different subjects have different ways of using language, which should be studied. Moreover, many teachers have agreed to this. Therefore, we will carry out research, in the hope that this will help raise the quality of mother-tongue education.

Service #6: Design and collect more Chinese teaching materials

Due to the shortage in teaching materials on the market to meet the needs of mother-tongue education, we will introduce innovative pedagogy, along with creative and practical curriculum designs, educational software, and exercises and worksheets in high-order thinking skills to make up for the current shortage. At the same time, we will strengthen our website data bank, along with appropriate examination questions to reduce the time used on collecting teaching materials. To make it easier for teachers to use these materials, we will also hold workshops to recommend ways to use them.

Service #7: Launching the handbook, "Research and Practice in Using Chinese as the MOI"

To solve the pressing problem for teachers, we plan to design and publish a handbook, "Research and Practice in Using Chinese as the MOI," and distribute it to teachers in Hong Kong who are engaged in using Chinese as the MOI. With this as a ready reference, we hope that during the full-scale implementation of using Chinese as the MOI, it will assist teachers in making the transitions. Synthesising the

suggestions by the teachers above, the "Research and Practice in Using Chinese as the MOI" handbook will include the following areas:

- Teaching Website Data Bank
- Glossary for different subjects in Chinese and English translations
- Interchange between oral and written language
- Standards in evaluating students' homework assignments with samples

Summary:

1. To allow mother-tongue education to develop better, the CMI Centre will increase our support to include Form 4 and above, collect and design all types of teaching materials in Chinese, and expand the categories of examination papers and improve their qualities.
2. We also plan to research subject-specific patterns of discourse and errors made in answering Secondary School Certificate of Education Examination papers. We will also launch the handbook, "Research and practice in using Chinese as the MOI," to help mother-tongue education advance to a higher level.

-- End --