

Study on Extended Learning Activities Conducted in English in Chinese-medium Schools in Hong Kong

Final Report Executive Summary

Objectives of the Study

Following the recommendation made in the “Report on Review of Medium of Instruction for Secondary Schools and Secondary School Places Allocation” published by the Education Commission in December 2005, the Education Bureau (EDB), in March 2007, commissioned the Open University of Hong Kong to conduct a study on Extended Learning Activities Conducted in English in Chinese-medium Schools in Hong Kong. The key objective of the Study was to explore how the time allocated for conducting Extended Learning Activities (ELAs) in English in Chinese-medium schools could be utilized effectively without prejudice to students’ learning of non-language content subjects, and in this regard, to develop ELA curriculum resources by collaborating with and providing professional support to schools participating in the Study. The Study focused on implementing ELAs over a complete school year in the 3 Key Learning Areas (KLAs) of Science Education, Mathematics Education and Personal, Social and Humanities Education (PSHE) while investigating the following research questions:

- (a) What forms can ELAs effectively take in Hong Kong schools?
 - (i) What types of ELAs are most readily acceptable to Hong Kong schools?
 - (ii) What types of ELAs are most effective in helping students develop coping strategies for EMI study in higher forms?

- (b) What are the design features which make ELAs more readily acceptable to teachers and students and more effective in terms of learning outcomes?

- (c) What are the determining factors which help ensure the success of ELAs?

The Study

2. In order to investigate these questions, ELAs were designed in a professional collaboration mode between the Teaching Consultants of the project team and serving teachers of the 30 partner schools in the 3 KLAs – Science Education, Mathematics

Education and PSHE. The partner schools selected covered the full spectrum of schools adopting Chinese as the medium of instruction (MOI) as represented by their different modes of financial operation, their localities across the territory and the abilities of student intakes during the period of Study.

3. The ELAs were administered in the 2008/09 school year in conditions controlled to facilitate measurement of effectiveness in terms of two of the issues addressed in the research questions:

- (a) acceptability to stakeholders (including school personnel and parents of the children concerned); and
- (b) effectiveness in developing coping strategies and achieving relevant learning outcomes for students.

4. Acceptability to schools was measured through the administration of questionnaire surveys before (baseline) and after implementation (post-implementation) of the ELAs. Effectiveness in terms of learner strategy development and learning outcomes was measured by means of student performance assessments. Statistical analyses were conducted on the baseline and post-implementation administrations of these instruments in a repeated measures design (repeated administration of the research instruments before and after implementation).

5. The process of developing ELAs in collaboration with serving teachers in the 3 KLAs and their implementation in the classroom was monitored and recorded by means of a range of qualitative research tools including field notes, interviews and classroom observations.

6. Collation of the results of statistical and qualitative analyses enabled investigation of the remaining issues addressed in the research questions:

- (a) the design features which make ELAs more readily acceptable to teachers and students; and
- (b) the determining factors which help ensure the success of ELAs.

7. Concurrently, the Study examined the kind of support required by teachers and students in teaching and learning ELAs more effectively.

Overall findings

Types of ELAs Most Readily Acceptable to Hong Kong Schools

8. Among the six forms of ELA envisaged in the “Report on Review of Medium of Instruction for Secondary Schools and Secondary School Places Allocation”¹, surveys conducted in the Study found that vocabulary learning and teaching was the most commonly reported activity across the three KLAs. Summer bridging programmes constituted the second most common approach across all KLAs. This was followed by the teaching of selected topic areas in English, corresponding broadly to two approaches mentioned in the Report, namely *adding on individual modules or themes to be taught in English* and *teaching certain subject content in English*. The least common form of ELA adopted was cross-curricular collaboration which was also found to be the least acceptable to either non-English subject teachers or to English teachers. Discussion with the subject teachers revealed that time constraints were the main reason for not adopting cross-curricular collaboration. Teacher interviews revealed that choice of the type of ELA was largely determined by the ELA programme objectives of the schools, their expectations of how much their students would be able to achieve, their competency and confidence in guiding students to achieve the language objectives in addition to the content objectives, as well as by whether teachers in the schools had positive attitudes towards ELAs.

9. Science and Mathematics ELAs were most commonly introduced as a means of preparing students for transition to English medium study of the subjects starting at S4.

Types of ELAs most effective in helping students develop coping strategies for EMI study in higher forms

10. The most effective ELAs should be able to help students develop academic English language and literacy skills, as well as learning strategies for EMI study in higher forms. In the Study, ELAs were delivered with appropriate methodology, building on concepts in students’ past Chinese-medium learning experience and emphasizing key instructional vocabulary by means of a variety of appropriate teaching techniques and strategies which involved encouraging student interaction, introducing problem solving and categorizing

¹ The six forms of ELA envisaged are conducting ELA in the form of cross-curricular enrichment; using EMI to go through relevant subject content already studied in Chinese; teaching English vocabulary; teaching English vocabulary related to a content lesson or for concluding the lesson/ conducting discussion in English; adding on individual modules or themes to be taught in English; teaching certain subject content in English depending on the nature of the learning materials; and strengthening bridging programmes to facilitate a smooth transition to senior school EMI

activities, and using different question types, appropriate to the content area, that required students to think.

What are the design features which make ELAs more readily acceptable to teachers and students and more effective in terms of learning outcomes?

11. There is a mismatch between what schools find acceptable and what research findings tell us about the most effective ELAs in terms of learning outcomes.

12. The findings of the Study suggest that ELA teachers favour two modes of ELA implementation: teaching topic-related English vocabulary contained in a bilingual glossary for each topic in the syllabus, and switching totally to using EMI to teach a whole new topic selected from the content syllabus. However, neither approach is supported by research findings and experience of effective ELA instruction. This reinforces the need for professional training to support ELA implementation.

13. The most effective ELAs are those which aim to develop students' academic English and literacy competencies by enabling them to learn content-specific knowledge through the English medium in preparation for subsequent transition to EMI studies at senior grades.

What are the determining factors which help ensure the success of ELAs?

14. Findings suggest that there are five key factors determining the success of ELA implementation:

(a) School's MOI policy

Whole-school language policies and the MOI policies of individual schools will determine the scope and scale of ELA implementation, as well as the objectives of their ELA programmes. Schools are more enthusiastic in implementing ELAs if they have EMI subjects in senior grades.

(b) Teachers' attitudes

Attitudes of teachers towards ELAs may affect their willingness to implement them, the degree of enthusiasm they have towards them, and their willingness to effect the changes in their current practices that ELAs might require. A positive attitude towards ELAs will better ensure their success.

(c) *Professional support for ELA teachers*

To ensure the success of ELAs, teachers need ELA-specific professional development rather than generic training in English language teaching techniques or in the use of EMI to teach content subjects.

(d) *Students' attitudes*

Results suggest that junior secondary students in schools adopting Chinese as the MOI (CMI schools) in general are quite positive towards doing ELAs when they perceive the value of doing so. They did not see the value when the school did not offer any subjects using English as the MOI at senior grades. Students in this type of school were very weak in English. They had no intention of studying in an EMI class at senior grades. Their ELA performance was not counted in school examinations, and their ELA teachers did not provide them with sufficient language support to meet the language demands of the ELA learning tasks. To motivate students, teachers should make clear early that the aim of ELAs is to develop their academic English proficiency and literacy skills. The extra time and effort spent may in the end prepare them to have a smooth transition to using English as a MOI in higher forms.

(e) *Instructional support for students*

Findings suggest that use of simple English which is comprehensible to students and encouragement for them to use the language more actively will motivate students with weaker English ability to do ELAs more successfully, and that their confidence can be boosted as a result. In the early stages of ELA implementation, it would be more effective to have all new concepts, ideas and thinking skills first taught and learned in CMI lessons, and then revisited during ELA lessons.

Conclusion

Most effective models of ELA implementation

15. In the Study, an effective approach to ELA implementation was found to consist of the use of English medium to go through relevant subject content already taught through CMI but with minor variations in, or extension of previously taught content to enhance interest and motivation. This approach was recommended to teachers in the partner schools. It is based on an incremental approach to learning and growth focussing on the gradual development of English competencies. Content subject learning in English is to be built on prior learning of the topic done in Chinese and the English specific to the KLA would be introduced once students had developed understanding of the content knowledge at the end of the teaching

activities. Students would be able to work on one or two activities in a KLA topic using English as the medium of learning.

Most effective mode of ELA implementation

16. The findings suggest that content subject teachers are more comfortable with modes of implementation centred on the curriculum of their own subject and that cross-curricular approaches, though theoretically appealing, in practice would take valuable time away from an already tight subject curriculum.

17. Re-teaching in English of subject content already learned through CMI was found to be valuable but needed to be executed with a different approach because students would soon lose interest if lessons simply be re-taught in English. For this reason, the re-teaching should involve the addition of thematically-related content or extension of the original topic content so as to motivate students in the process of learning.

18. Re-teaching should be undertaken with a deliberate focus on the development of the four English language skills as well as vocabulary acquisition through the re-learning or review of the subject content. A focus on productive use of English in speaking and writing needs to be combined with receptive uses in reading and listening so that students can practise the essential language skills such as listening to explanations, reading for information and participating in academic discussions by giving elaborated oral and written responses in class.

Strategies for effective ELA implementation for students of different ability levels

19. ELA materials pitched at lower levels of student ability should involve greater linguistic scaffolding to facilitate learning. Performance in ELAs can be enhanced when students have acquired sufficient background knowledge of the topic and are provided with clear models to follow. When teachers spoke slowly and provided reinforcement for concepts presented orally with clear audio-visual illustrations for difficult concepts, students had less difficulty understanding them.

20. Vocabulary learning is a problem across all three KLAs. First, learning effectiveness was a problem as students seemed to feel more than their teachers that they had learnt an item only when they were able to spell, pronounce and use it accurately in an appropriate context. Second, it was often not the subject-specific vocabulary included in bilingual glossaries which posed the greatest difficulty since this was often the focus of vocabulary teaching. It was the non-technical vocabulary that occurs across all disciplines which posed most difficulty. This non-technical lexis is academic but non-subject-specific. It includes

concepts such as *duration*, *similarity* and *rate*; verbs such as *indicate* and *demonstrate*, and linking adverbials such as *however*, *furthermore* and *in addition*. Such words pose a challenge for learners because they are abstract and of relatively low frequency and therefore may not figure in the English curriculum. Not only would they be unlikely to be taught in English lessons, but also they did not seem to be perceived by subject teachers as vocabulary in their specific subject area and hence were neglected. Students mentioned repeatedly that it was the vocabulary which was not in the subject glossary, which they found most difficult.

Most effective point of intervention for ELAs

21. Quantitative findings showed that S2 students enjoyed the greatest success overall in performance, particularly in the Science-related content. In Mathematics, there were no significant gains on overall scores. In PSHE, overall gains were restricted to S1 and S3 students from schools with students of medium learning abilities and in S3 students from schools with lower learning ability students. Such findings are difficult to interpret but they suggest that introducing ELAs early may not result in measurable gains until later. Prior experience of EMI instruction and prior experience of ELAs were reliable indicators of success in ELAs and this argues for gradual introduction of ELAs from S1, but with careful attention to the provision of learning support. This would seem to apply to all three KLAS in different school types.

Support and resources needed to ensure effective ELA implementation

22. The most obvious form of support to ensure effective ELA implementation is the provision of sufficient time to develop resources tailored to meet the needs of diverse levels of subject and English language ability. Time is needed also to facilitate the collaboration between English teachers and subject teachers which was so little in evidence during the Study, but so clearly beneficial. One feasible way to make this collaboration possible is to provide the needed time to English specialists within the school to serve as consultants and editors to work with content subject teachers to develop cross-curricular teaching materials.

23. A cross-curricular approach in which judicious selection of subject-related content is included within the English language subject curriculum or within English enhancement activities in a Language Across the Curriculum approach may help to raise student language proficiency to the required level for ELAs to be effective.

24. To raise levels of confidence, subject content should be selected for its intrinsic interest, topicality and generic value rather than only for its relevance to the KLA curricula and be incorporated into a cross-curricular approach to the English language curriculum rather than being included in the subject.

Form of professional development most effective for ELA teachers

25. The main area of professional development needed among teachers is for guidance in implementing ELAs with the appropriate language development orientation. In the Study, some teachers expressed the need for training in EMI teaching techniques. This could be addressed through the provision of courses/workshops on the use of English to teach content subjects. Ideally such courses should be specifically oriented to the needs of teachers who have been using Chinese as the MOI. Collaborative materials development on a cross-curricular basis involving English specialists within the school is useful to content subject teachers who are not experts in developing ELA materials which are both pedagogically and linguistically sound.

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