

Research report on QEF project to Develop Students' Independent Learning through Reading and Learning across Curriculum

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1 Introduction

- 1.1 The project has been carried out by SKH Bishop Mok Sau Tseng Secondary School. It has as its goal to enhance language learning and reading across curriculum (RAC), and boost language proficiency.
- 1.2 The following are the objectives of the project:
 - i. To develop an ICT platform and RAC courseware with Lexile indexing to facilitate development of self-learning habits and read to learn culture
 - ii. To arouse students' reading interest through developing their reading habits across curriculum
 - iii. To enhance teachers' confidence level and collaboration culture in using ICT, for promoting language learning on different subjects
 - iv. To enrich the school assessment practice for students, through the ICT platform, to promote assessment for learning.
- 1.3 This research report focuses on the academic rigour in terms of the planning and the execution of the project. Of course, the extent whereby the objectives of the project have been achieved should be the critical test of the relative success of the project. The aim of the project is to better student learning. The ultimate test of success, therefore, should be whether and to what extent that has been achieved.

2 Planning

- 2.1 The RAC programme is predicated on matching student reading ability with difficulty levels of the texts being read. This is of fundamental importance to the success or otherwise of the RAC being implemented. To that end, two initiatives were carried out by the project team:
 - i. Students were assessed in respect of their reading ability levels using a standardized test developed by Wiseman Education: FAST. FAST is an assessment tool developed by Wiseman and validated by Dr. Lee, the scale behind FAST called ELAC (English Language Ability Calibrated) which is correlated to Lexile framework and is designed for leveling the difficulty of reading texts by Dr Lee.
 - ii. Texts selected by teachers to be included in the RAC programme were then rewritten by a team of experts in Wiseman Education using four levels of difficulty in increasing order of difficulty: Intermediate, Advanced, Master, Legend, which is calibrated by the ELAC.

With these two steps taken, the primary aim of the RAC programme can then be achieved.

- 2.2 An electronic student performance tracking system was also implemented to monitor the conduct of the project.

Teachers will be informed for students' learning progress through the weekly automatic generated report to their email account or through the real-time download report. can download the real-time report or through the system weekly automatic reporting programme. Information such as lesson score, average lesson score, completion rate and usage time will be logged for teachers' review.

3 Execution

- i. Subject teachers were responsible to implement the RAC programme in their respective subjects.
- ii. Students were assessed with the FAST to establish their starting reading.
- iii. Student took responsibility to select content and level of their reading.
- iv. An online tracking system monitors student behaviour in the programme. (explained in 2.2)
- v. For the teachers' assigned articles, students could choose their suitable level as the starting points. At the end, they could comprehend the level of article assigned by their teachers.

4 Results

- 4.1 Table 1 reports percentages of student choice on themes of text. *English (Reading)*, *Economics*, *History*, and *Home Economics* themes were selected at 10% or above; *Biology*, *Science*, *Chemistry* around 9%. Other themes are 7% or lower in student percentages.

Subject	13. These are the theme of RAC I like: (choose more than one, if you like)	%
English (Reading)	179	12.52%
Economics	175	12.24%
History	157	10.98%
Home Economics	143	10.00%
Biology	141	9.86%
Science	136	9.51%
Chemistry	124	8.67%
English (Listening)	108	7.55%
Physics	91	6.36%
Mathematics	89	6.22%
Geography	64	4.48%
Computer	56	3.92%
Econ & BAFS	52	3.64%
Design and Technology	51	3.57%
Total	1566	

Table 1: Student Choice of Themes

- 4.2 In terms of effectiveness of the RAC programme, it is remarkable in that the RAC programme is a supplementary programme performing an ancillary role to the school subjects. Table 2 below reports completion rates with around 11% of students with full completion; a cumulative percentage of 57.77% with students completion rate of 75% or higher; 84.93% with 50% or higher. It can be concluded that a very large portion of students did complete half or more than half of the RAC programme under the school's encouragement.

Completion Rate	Lessons Completed	No.	%	Cumulative %
100%	80	107	10.27%	10.27%
90%	72	191	18.33%	28.60%
75%	60	304	29.17%	57.77%
50%	40	283	27.16%	84.93%

Table 2: Completion Rate

- 4.3 Table 3 below reports degrees of student agreement regarding the objectives of the RAC programme. Seven survey questions are listed in a descending order in terms of *Strongly agree to Slightly agree* with the RAC programme.

	Strongly Agree to Slightly Agree	%	Total
1. I am willing to learn cross-curriculum knowledge through reading extra-curriculum readers. 我願意閱讀課外讀物學習跨學科知識。	404	87%	464
8. I am able to select a suitable entry point to read the articles by myself. 我可以按自己的能力選擇合適的切入點來閱讀文章。	390	84%	464
4. RAC articles help me know more subject vocabulary. RAC的文章有助我學到更多學科詞彙。	363	78%	464
3. RAC articles help me increase my subject knowledge. RAC的文章有助我增加學科知識。	349	75%	464
5. RAC questions can help me better understand the article. RAC的讀後練習能幫助我理解文章內容。	336	72%	464
7. If I encounter articles that I can hardly understand, I will choose to read the same article in an easier level. 如遇上難以理解或過於深奧的文章, 我會選擇文章較淺易的版本來閱讀。	312	67%	464
9. I prefer learning cross-curriculum knowledge through an online-based approach. 我喜歡透過以網上為主導的形式學習跨學科知識。	279	60%	464

Table 3: Agreement with RAC Programme Aims

In terms of *Strongly agree to Slightly agree*,

- i. Item 1: *I am willing to learn cross-curriculum knowledge through reading extra-curriculum readers* and Item 8: *I am able to select a suitable entry point to read the articles by myself* have 80% or above of students agreeing;
- ii. Item 4: *RAC articles help me know more subject vocabulary*, Item 3: *RAC articles help me increase my subject knowledge* and Item 5: *RAC questions can help me better understand the article* with over 70% agreeing;
- iii. Item 7: *If I encounter articles that I can hardly understand, I will choose to read the same article in an easier level* and Item 9: *I prefer learning cross-curriculum knowledge through an online-based approach* with over 60% agreeing.

It should be observed from *ii.* that while more than 70% of students agree that the RAC contributed to their learning cross-curriculum knowledge. The supplementary nature of the RAC programme may be the reason for that result.

- 4.4 Table 4 below summarises the levels selected in student reading. Over 70% of students selected the middle two levels: *Advanced* and *Master*. That should be a positive sign that the levels do cover well the ability range of students in that both the weaker and the strongest students are able to selected suitable texts to read, one of the main aims of the RAC programme.

	Intermediate Level	Advanced Level	Master Level	Legend Level	Total
No.	78	183	139	59	459
%	16.99%	39.87%	30.28%	12.85%	

Table 4: Reading Levels Selected

- 4.5 Table 5 below reports student opinion as to what have been the main areas of knowledge gained through the RAC programme.

	Listening	Reading	Subject Knowledge	Subject Vocabulary	Critical Thinking	Total
12. RAC best improves these skills: (can choose more than one)	96	324	186	243	72	921
%	10.42%	35.18%	20.20%	26.38%	7.82%	

Table 5: Knowledge Gained

Reading and *Subject Vocabulary* are the two with highest percentage of students agreeing followed by *Subject Knowledge*. The result is very much in line with the project aims. It should be noted that there is also more than 7 % of students did find the RAC programme contributing to gaining *Critical Thinking*.

- 4.6 The results above are in line with issues raised in student focus group and teacher interviews. All students in the focus group agreed that the RAC programme did help them to both read more and read better. They particularly like the control they had in selected what to read and at which level to read. This allowed them to challenge themselves with higher level(s) initially to then pitch at a level that was right themselves. This should not be underestimated. Far too often students are fed and told what they should do and what is right and good for them. To allow students to make some of the decisions regarding their learning, not only gives them ownership of their own learning; but especially train them in making decisions regarding their learning and indeed their future. Self-directed learning should be the goal of all forms of learning.

- 4.7 Five teachers were interviewed: Ms WH Lee (English), Ms WL Lee (Geography), Ms KL Kam (Home Economics), Ms KP Tang (Science) and Mr YC Leung (Mathematics). All teachers interviewed agreed that the RAC programme had been beneficial in general. There was general agreement to the benefit for students' reading and English improvement. Slightly divergent views were expressed as to benefit to their respective school subjects. This agrees with the results of the students feedback reported in section 4.5 above. Teachers interviewed expressed the view that the choice could have covered a wider spectrum of interest and the levels could have been more distinct and more clearly communicated to students and teachers. The teachers expressed that it was a challenging task in the beginning and the launching stage as the idea was very new for both teachers and students.

With that view, the teachers did agree that the programme should be given a moderate degree of success and a chance to further implemented and improved.

5 Overall Evaluation

- 5.1 The project objectives are addressed according to my observation. The deliverables (mainly the ICT platform and RAC courseware) are with high quality and covered a list of subjects (*Table 1*), which help arouse students' learning interest. All students in the focus group agreed that the RAC programme did help them to both read more and read better (4.6). Students are also benefited in terms of improving different skills/knowledge through the project (*Table 5*). On the other hand, all teachers interviewed agreed that the RAC programme had been beneficial in general, and there was a general agreement to the benefit for students' reading and English improvement. (4.7).
- 5.2 Judging from the results examined my evaluation is a positive one. The RAC programme is founded in sound learning and teaching principles; its design is sufficiently rigorous and its execution is meticulous. In particular, it has been very well received by both students and teachers.

I am particularly impressed by the attempt to have texts written in several levels of difficulty. It has been a variant attempt even if, as always with pioneering programmes, improvements will be needed. To achieve that end, I am of the view that the RAC programme should be given further opportunity to improve on a very well thought out and soundly based programme. It has been a very worthwhile attempt.