「贏在起跑線」！?
Winning at the starting line

By Dr. Samuel Kai Wah Chu, Associate Professor
PhD in Education (e-Learning, UCL Institute of Education, UK)
PhD in Education (Information & Library Science, HKU, HK)
Faculty of Education,
The University of Hong Kong (HKU)
Outline of the talk   內容概要

• 起跑線在哪兒？
• 你的孩子/學生應該 和誰 競爭？
• 當你的孩子/學生落後了，要如何做？
• 如何透過學校、社區和網上資源去發展孩子 良好的閱讀習慣？
• 孩子如何能在 讀寫中找到歡樂？
• 「閱讀大挑戰」是甚麼？
熱身時間  Warm-Up

請瀏覽以下網址  並回答三條熱身問題

“https://kahoot.it”

Game PIN: ?
Question 1

Is your child (or the child that you concern about) failing behind the starting line?
A. Yes
B. No
C. Don’t know
D. There isn’t a clear starting line

你的孩子是否輸在起跑線上呢？
A. 是
B. 否
C. 不知道
D. 沒有所謂的起跑線

(Fischer & Silvern, 1985; Dale & Goodman, 2005; hk commercial daily, 2017)
Question 2

Who should he / she compete with?
A: His/her classmates
B: His/her peers
C: Himself/herself

孩子應該跟誰競爭？
A: 同學
B: 朋輩
C: 自己
Question 3

Select the most appropriate answer from below:
A: RB can help motivate children to read
B: RB can help improve children’s reading ability
C: RB provides hints/guidance to parents/students on things that they should pay attention to while reading a book.
D: All of the above

請選擇一個最適合的答案：
A: 閱讀大挑戰能鼓勵學生閱讀
B: 閱讀大挑戰能改善學生的閱讀理解能力
C: 閱讀大挑戰為家長/學生提供提示/指引，提醒他們在閱讀時須注意的地方
D: 以上皆是

贏在起跑線？
Winning at the starting line?

● 早在2009年已有香港媒體使用
● 早期常見於內地教育機構口號
(Yang, 2008)
● 在香港愈來愈流行
● 成為不少家長的教育方針和理念
● 亦引起不少爭議

"入學/升學/名校成學習目標"

"成績便是一切"

"催谷興趣班"

"童年時已失去對學習的興趣"
何謂教育？
What is Education?

"The function of education is to teach one to think intensively and to think critically. Intelligence plus character -- that is the goal of true education."

– Martin Luther King

何謂學習？
What is Learning?

教育的四大支柱：學會求知，學會做事，學會共處，學會做人
The four pillars of learning： Learning to know, to do, to be and to live together”

(UNESCO, 2017)

Question 1

你的孩子是否輸在起跑線上呢？
A. 是
B. 否
C. 不知道
D. 沒有所謂的起跑線（正確答案）
(Fischer & Silvern, 1985; Dale & Goodman, 2005; hk commercial daily, 2017)
失败乃成功之母

Awards

- Excellent Health Promotion Project Award, Health Research Symposium 2017, Food and Health Bureau
- Best Poster Award, Health Research Symposium 2017, Food and Health Bureau
- Faculty Knowledge Exchange Award 2016, Faculty of Education, The University of Hong Kong
- Faculty Outstanding Researcher Award 2013, Faculty of Education, The University of Hong Kong
- Early Career Research Output Awards 2010, Faculty of Education, The University of Hong Kong

http://web.edu.hku.hk/staff/academic/samchu
Question 2

孩子應該跟誰競爭？
A: 同學
B: 朋輩
C: 自己（正確答案）
Effective and gamified learning
有效及遊戲化學習
Reading Battle:
equiz.cite.hku.hk
System Demo 系統示範

Search by book ID, ISBN, etc.

* Most books need to be borrowed from the library. Only 30 e-books can be accessed from the e-books section.
The Chocolate Boy
Author: Sam Chu, Michael Sullivan
ISBN: 9789880024740
Publisher: Addison Wesley Longman Ltd
Book ID: 4001
Reading Level:

Start Battle

First Battle
You can try up to 3 battles (Only the highest score counts!). You will lose 10% of the total points in the 2nd battle and 20% in the 3rd battle. So please read the book carefully before going for a battle. Within each battle, you can attempt each question up to 2 times. You get half of the points if you get it right the second time.

Confirm
Scaffolding support – Provides a hint when answer incorrectly
「鷹架」學習支援 - 答錯時提供提示協助

[Information Retrieval]
What happened when I told mummy that people at school laughed at me?

- a. I smiled.
- b. I cried.
- c. I hugged my mummy. ❌ p.13
- d. I smiled at myself.

2nd attempt

Try Again
Provides immediate feedback

即時反饋

[Information Retrieval]

What happened when I told mummy that people at school laughed at me?

a. I smiled.
b. I cried.
c. I hugged my mummy.
d. I smiled at myself. ×

Explain correct answer

I tell mummy and I cry.
Many schools using Reading Battle
多間學校參與計劃
50 schools/ libraries in total

**Hong Kong** (6 of 32 primary schools)
1. Ho Lap Primary School (sponsored by Sik Sik Yuen)
2. Toi Shan Association Primary School
3. Xianggang Putonghua Yanxishe Primary School of Science & Creativity
4. Chinese Y.M.C.A. Primary School
5. Lam Tin Methodist Primary School
6. King's College Old Boys' Association Primary School No. 2

**Hong Kong** (2 of 11 kindergartens)
1. Tang Bik Wan Memorial Kindergarten
2. Tin Ka Ping Kindergarten

**Taiwan** (2 primary schools)
1. Keelung Municipal Ren-Ai Primary School
2. Taipei Municipal Wanxing Elementary School

**The US** (1 kindergarten, 2 public libraries)
1. Bright Horizons
2. North Miami Beach Public Library (summer program)

**Mainland China** (2 primary schools)
1. Zhonghua Road Primary School
We will announce the following awards at the end of the term (From Sept 1 to Jan 31):
- Top 30 for the inter-school across Forms Term score ranking "Chinese books"
- Top 30 for the inter-school across Forms Term score ranking "English books"
- Top 10 Worm Catchers

### Inter-school Form Life Score Ranking
(First 100 users with average score ≥ 80 will be listed)

<table>
<thead>
<tr>
<th>Name</th>
<th>Class</th>
<th>School</th>
<th>Total score</th>
<th>No. of books</th>
<th>Avg score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YAN HOI CHING</td>
<td>P3B</td>
<td>Sacred Heart Canossian School</td>
<td>43042</td>
<td>446</td>
<td>97</td>
</tr>
<tr>
<td>TSE HOI TUNG</td>
<td>P4E</td>
<td>Lam Tin Methodist Primary School</td>
<td>40996</td>
<td>418</td>
<td>97</td>
</tr>
<tr>
<td>LI HOI CHING</td>
<td>P4E</td>
<td>Lam Tin Methodist Primary School</td>
<td>39828</td>
<td>427</td>
<td>93</td>
</tr>
<tr>
<td>TANG HOI KI KYLE</td>
<td>P3A</td>
<td>Lam Tin Methodist Primary School</td>
<td>37480</td>
<td>400</td>
<td>94</td>
</tr>
<tr>
<td>MAK EUNICE</td>
<td>P6E</td>
<td>Lam Tin Methodist Primary School</td>
<td>29393</td>
<td>321</td>
<td>92</td>
</tr>
<tr>
<td>TSANG HO KONG</td>
<td>P4D</td>
<td>St. Patrick's School</td>
<td>27957</td>
<td>344</td>
<td>81</td>
</tr>
<tr>
<td>PANG SHUN LAP</td>
<td>P6A</td>
<td>Lam Tin Methodist Primary School</td>
<td>24783</td>
<td>264</td>
<td>94</td>
</tr>
</tbody>
</table>
A study that examines the top 20 students from each of the 3 rankings of Reading Battle

• One-to-one interview with 39 students

• Those students selected were interviewed during their lunch time with the help of teacher librarians of each primary school.

• Researchers did the interview according to the interview protocol.

• Each interview lasted for around 20 minutes.
Q1: 閱讀大挑戰有否改變你的閱讀習慣？（閱讀的模式，頻率，書目，自發性，獨立性）

Does Reading Battle change your reading habit? (Reading mode, reading frequency, choice of books, self-initiative and independency in reading, etc.)

Follow-up question: How have your reading habits changed? Please explain.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Items</th>
<th>Students (n=37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in reading habits</td>
<td>Change in reading mode 說明閱讀模式</td>
<td>8 (22%)</td>
</tr>
<tr>
<td></td>
<td>Change in selection of books 改變讀物選擇</td>
<td>22 (59%)</td>
</tr>
<tr>
<td></td>
<td>Enhance reading frequency 提升閱讀頻率</td>
<td>25 (68%)</td>
</tr>
<tr>
<td></td>
<td>Enhance reading independency 增進閱讀獨立性</td>
<td>6 (16%)</td>
</tr>
<tr>
<td></td>
<td>Enhance reading initiative 加強閱讀主動性</td>
<td>9 (24%)</td>
</tr>
</tbody>
</table>

Note: 35 out 37 (95%) students gave their answers about their changes in reading habits. One student could have changes in reading habits for more than one category, thus the total percentage could sum up to more than 100%.
學生回饋：讀物選擇和閱讀頻率
Students’ feedback on selection of books and reading frequency

• Change in Selection of books 讀物選擇:
  “I used to read more Chinese books. Now I read English ones too. And I will choose to read some more difficult books now.”
  “I used to read more comic books, but now I will read books with more texts like novels.”

• Change in Reading Frequency 閱讀頻率:
  “Before Reading Battle I think I have only read around 10 books. Now I have read around 200 books.”
  “In the past I only very few books, like 2-3 each week. Now I read 6-7 books each week.”
Q4: Did you improve academically in the past year? (If yes, in which area? Reading, writing, Chinese, English, General Studies, etc.)

Q5: Is your academic improvement owed to the use of Reading Battle or other methods?

Table 3 Aspects of students’ academic improvements and the reasons behind

<table>
<thead>
<tr>
<th>Domain</th>
<th>Sub-domain</th>
<th>Items</th>
<th>Students (n=37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspects of improvements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chinese-Reading</td>
<td></td>
<td></td>
<td>14 (38%)</td>
</tr>
<tr>
<td>Chinese-Writing</td>
<td></td>
<td></td>
<td>17 (46%)</td>
</tr>
<tr>
<td>Chinese-Vocabulary</td>
<td></td>
<td></td>
<td>6 (16%)</td>
</tr>
<tr>
<td>English-Reading</td>
<td></td>
<td></td>
<td>12 (32%)</td>
</tr>
<tr>
<td>English-Writing</td>
<td></td>
<td></td>
<td>12 (32%)</td>
</tr>
<tr>
<td>English-Vocabulary</td>
<td></td>
<td></td>
<td>4 (11%)</td>
</tr>
<tr>
<td>General studies</td>
<td></td>
<td></td>
<td>4 (11%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons for improvements</th>
<th>Items</th>
<th>Students (n=37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Reading Battle</td>
<td></td>
<td>16 (43%)</td>
</tr>
<tr>
<td>Other methods</td>
<td></td>
<td>4 (11%)</td>
</tr>
<tr>
<td>Both</td>
<td></td>
<td>11 (30%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>31 (84%)</td>
</tr>
</tbody>
</table>

Note: 34 out of 37 (92%) students thought they had academic improvements during the last year and 31 out of 37 (84%) students gave the reasons for their improvements. For the aspects of improvements, one student could have improvements in more than one aspect, thus the total percentage of this part could sum up to more than 100%.
Students’ feedback on their academic improvement as well as its reasons

- “My Chinese reading improved a lot. Normally I get grades around C and B range but now it’s always A.”

- “The results of my Chinese exam has increased from 80 something to 90 something marks. It helps my reading because it trains me to read a large amount of books in a short period of time.”

- “My English and General studies have improved. I got 10 marks approximately. But now, I get around 90 marks.”

- “I reckon my improvement in academic studies is due to the fact that I use Reading Battle. Books in the Reading Battle are harder, so usually I would not be interested in reading them. But the moment when I saw the ranking list, I realize that if I could complete the harder tasks with all correct answers, the average scoring increases, which then motivates me to read more of them.”

- “My academic improvement is owed to the use of Reading Battle rather than other methods, because it showed the level for each book that let me know which book is suitable for me.”
### Quantitative analysis: A Hong Kong primary school

#### Effect of RB on English Assessment (2013-2014 Term 2) between academically strong and weak groups

<table>
<thead>
<tr>
<th>English mixed grouping</th>
<th>E.Reading_T2A3</th>
<th>E.Dictation_T2A3</th>
<th>E.Listening_T2A3</th>
<th>E.Speaking_T2A3</th>
<th>E.Writing_T2A3</th>
<th>E.FullMark_T2A3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AC(Strong) &amp; RB(strong)</strong></td>
<td><strong>Mean</strong></td>
<td>90.33</td>
<td>29.78</td>
<td>17.89</td>
<td>19.33</td>
<td>29.11</td>
</tr>
<tr>
<td></td>
<td><strong>N</strong></td>
<td>9.00</td>
<td>9.00</td>
<td>9.00</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td></td>
<td><strong>SD</strong></td>
<td>6.80</td>
<td>0.67</td>
<td>1.69</td>
<td>0.71</td>
<td>1.17</td>
</tr>
<tr>
<td><strong>AC(Strong) &amp; RB(weak)</strong></td>
<td><strong>Mean</strong></td>
<td>87.90</td>
<td>29.30</td>
<td>17.30</td>
<td>18.70</td>
<td>28.40</td>
</tr>
<tr>
<td></td>
<td><strong>N</strong></td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td><strong>SD</strong></td>
<td>10.58</td>
<td>1.06</td>
<td>2.79</td>
<td>2.11</td>
<td>1.65</td>
</tr>
<tr>
<td><strong>AC(weak) &amp; RB(weak)</strong></td>
<td><strong>Mean</strong></td>
<td>66.06</td>
<td>18.41</td>
<td>12.35</td>
<td>13.24</td>
<td>26.35</td>
</tr>
<tr>
<td></td>
<td><strong>N</strong></td>
<td>17.00</td>
<td>17.00</td>
<td>17.00</td>
<td>17.00</td>
<td>17.00</td>
</tr>
<tr>
<td></td>
<td><strong>SD</strong></td>
<td>15.05</td>
<td>8.75</td>
<td>4.00</td>
<td>4.87</td>
<td>2.80</td>
</tr>
<tr>
<td><strong>AC(weak) &amp; RB(strong)</strong></td>
<td><strong>Mean</strong></td>
<td>76.67</td>
<td>24.67</td>
<td>13.67</td>
<td>17.33</td>
<td>28.67</td>
</tr>
<tr>
<td></td>
<td><strong>N</strong></td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td><strong>SD</strong></td>
<td>5.51</td>
<td>8.39</td>
<td>3.79</td>
<td>2.31</td>
<td>1.53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Mean</strong></td>
<td>78.08</td>
<td>24.31</td>
<td>15.00</td>
<td>16.36</td>
<td>27.69</td>
</tr>
<tr>
<td></td>
<td><strong>N</strong></td>
<td>39.00</td>
<td>39.00</td>
<td>39.00</td>
<td>39.00</td>
<td>39.00</td>
</tr>
<tr>
<td></td>
<td><strong>SD</strong></td>
<td>16.09</td>
<td>8.09</td>
<td>4.07</td>
<td>4.40</td>
<td>2.42</td>
</tr>
</tbody>
</table>
Q2: 閱讀大挑戰如何鼓勵你閱讀更多書？
Does Reading Battle motivate you to read more books? How did Reading Battle motivate you to read more books?

Q6: 閱讀大挑戰的哪一部分最能推動你閱讀？
Which feature in Reading Battle motivated you most to read more?

Q7: 在閱讀大挑戰中，完成一個挑戰能讓你獲得甚麼？
What can you gain after completing new battles in Reading Battle?

### Table 4: Motivations of students in using Reading Battle

<table>
<thead>
<tr>
<th>Domain</th>
<th>Sub-domain</th>
<th>Items</th>
<th>Students (n=37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic motivation</td>
<td>Affordance-Badges (awards)</td>
<td>5 (14%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordance-Leaderboard (ranking)</td>
<td>23 (62%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordance-Points (scores)</td>
<td>11 (30%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordance-Questions (function)</td>
<td>10 (27%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Affordance-Contents</td>
<td>8 (22%)</td>
<td></td>
</tr>
<tr>
<td>Intrinsic motivation</td>
<td>Novelty (Curiosity)</td>
<td>新鮮感 13 (35%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Potential challenges</td>
<td>成就感 7 (19%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sense of achievements</td>
<td>18 (49%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sense of enjoyments</td>
<td>6 (16%)</td>
<td></td>
</tr>
</tbody>
</table>

Note: 35 out of 37 (95%) and 33 out of 37 (89%) students gave their answers of their extrinsic and intrinsic motivations in using Reading Battle respectively. One students could have more than one kind of motivation, thus the total percentage of each of these two parts could sum up to more than 100%.
Students’ feedback on extrinsic and intrinsic motivation

• Extrinsic motivation 外在動機:
  • “In Reading Battle, ‘Ranking List’ is the most effective feature to motivate me to read more because it will list the result of top students and their ranking timely that provoke a competition among classmates. In such way, I will comprehend the book context more deeply in order to strive for the better achievement.”
  • “Yes. If I am scoring ten marks lower than others on the ranking list, I feel uncontended, as I want to surpass others and get to the first place.”

• Intrinsic motivation 内在動機:
  • “I want to learn more knowledge.” --- Novelty (curiosity)
  • “Yes, sometimes the questions for the level 5 books are difficult but if I got them right, I will feel a strong sense of achievement and motivates me to try doing the battles for the more difficult books with more wordy texts.”
Addressing Q7: What can you gain after completing new battles in Reading Battle?
Addressing Q8: After joining Reading Battle, has your understanding of characters’ feelings and behaviors and the cause-effect relationship from the context of a book improved?
Addressing Q9: After joining Reading Battle, do you think you have become more competent in reading, especially on some challenging books?

Table 5: Students’ improvements in reading competencies after using Reading Battle

<table>
<thead>
<tr>
<th>Domain</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>reading competency</td>
<td>Comprehension-General</td>
</tr>
<tr>
<td>Evaluation [PIRLS]</td>
<td>Competency</td>
</tr>
<tr>
<td>Inferences [PIRLS]</td>
<td>Interpretation [PIRLS]</td>
</tr>
</tbody>
</table>

Note: 21 out of 37 (86%) students thought student could have more than one aspect of reading competency, and items could sum up to more than 100%.

Four Processes of Comprehension

I. Focus on and retrieve explicitly stated information (e.g. recall sequence of events, character traits, making comparisons)

II. Make straightforward inferences (e.g. inferring cause-and-effect relationships, outcomes)

III. Interpret and integrate ideas and information across the text to provide (e.g. interpretations about characters’ feelings and behaviors)

IV. Examine and evaluate content, language, and textual elements, for example:

- Interpret figurative language and abstract messages
- Making judgement about the text comparing with external criteria
- Making judgement about worth, desirability, acceptability
- Identification with characters and incidents, e.g. how you would have reacted if you were the main character, or how would your mother feel if you decide to leave home and build a life of your own somewhere else?
- Comparing the contextual changes taking place and the changes in the character over her lifetime

Reading not only helps develop knowledge and ability, but also helps students develop character.

“I learnt some principles that can apply in my daily life. Such as Honesty. That’s important in our daily life.”

“For example in a book about interpersonal skills I have learnt what not to do to other people and how to take care of others’ feelings, etc.”
Gamification of reading experience and assessment to make the process enjoyable:

- In general, students dislike tests, but the competition elements (via ranking) and e-badges on RB gamify the reading assessment. It “turns something boring into something fun!”
- Before students can engage in tests on RB, they have to read. This promotes reading. RB has motivated hundreds of students in different parts of the world who didn’t like reading, but are now reading A LOT MORE! This works particularly well for boys as they enjoy competitions.
- Test questions are well-crafted based on the PIRLS framework (Mullis et al., 2009) and Bloom’s taxonomy.

### PIRLS 2011 assessment framework
- Information retrieval
- Making inferences
- Interpret and integrate ideas
- Evaluation

### Bloom’s Taxonomy

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Remember</strong></td>
<td>Recall facts and basic concepts define, duplicate, list, memorize, repeat, state</td>
</tr>
<tr>
<td><strong>Understand</strong></td>
<td>Explain ideas or concepts classify, describe, discuss, explain, identify, locate, recognize, report, select, translate</td>
</tr>
<tr>
<td><strong>Apply</strong></td>
<td>Use information in new situations execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch</td>
</tr>
<tr>
<td><strong>Analyze</strong></td>
<td>Draw connections among ideas differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test</td>
</tr>
<tr>
<td><strong>Evaluate</strong></td>
<td>Justify a stand or decision appraise, argue, defend, judge, select, support, value, critique, weigh</td>
</tr>
<tr>
<td><strong>Create</strong></td>
<td>Produce new or original work design, assemble, construct, conjecture, develop, formulate, author, investigate</td>
</tr>
</tbody>
</table>

### Inter-school Form Life Score Ranking

<table>
<thead>
<tr>
<th>Name</th>
<th>Class</th>
<th>School</th>
<th>Total score</th>
<th>No. of books</th>
<th>Avg score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YAN HOI CHING</td>
<td>P2D</td>
<td>Sacred Heart Canossian School</td>
<td>36909</td>
<td>362</td>
<td>97</td>
</tr>
<tr>
<td>TSE HOI TUNG</td>
<td>P3E</td>
<td>Lam Tin Methodist Primary School</td>
<td>35235</td>
<td>362</td>
<td>97</td>
</tr>
<tr>
<td>LI HOI CHING</td>
<td>P3E</td>
<td>Lam Tin Methodist Primary School</td>
<td>32839</td>
<td>351</td>
<td>94</td>
</tr>
<tr>
<td>TANG HOI KI KYLE</td>
<td>P2B</td>
<td>Lam Tin Methodist Primary School</td>
<td>32001</td>
<td>340</td>
<td>94</td>
</tr>
<tr>
<td>MAK EUNICE</td>
<td>P5E</td>
<td>Lam Tin Methodist Primary School</td>
<td>29297</td>
<td>320</td>
<td>92</td>
</tr>
<tr>
<td>TSANG HO KONG</td>
<td>P3A</td>
<td>St. Patrick’s School</td>
<td>24869</td>
<td>305</td>
<td>82</td>
</tr>
</tbody>
</table>
Underpinning Research – innovativeness - 2

• **Relieves teachers’ workload** on monitoring and assessing reading ability using time-consuming methods (e.g. comprehension worksheets). RB provides scaffolding support by offering a hint when students answered incorrectly. When a question has been answered, RB provides immediate feedback to students.

• **Caters for learning diversity** – Students can read books and answer questions on RB at their own pace. Students who can excel can get into the Life/Term Score Ranking. Students who can’t excel may still be excited by having a chance to be listed on the Improvement Score Ranking (拔尖，補底).

• Based on the reading profile in RB for each child, librarians, teachers and parents can make use of the data to help children develop in areas they are weak in.
Underpinning Research – innovativeness - 3

Motivate-Scaffold-Monitor (Wu et al., 2014)
建立動機-架式學習-考察進度

Motivate

“Reading Battle”

Reading children’s literature

Scaffolded reading experience

Monitor Progress

Post-reading Qs

Students’ reports

e-Badges to reward Achievements

In Reading Battle, every child can be a winner
**Engagement : innovativeness - Drawing on wisdom of the crowd**

- **Selecting books with stakeholders at Hong Kong Book Fair:**
  - RB needs to contain books that excite students.
  - A collection of over 500 books was developed by the HKU team advised by Tls, teachers, parents, and students:
    - In summer 2014, several trips were organized to the HK Book Fair so that students, teachers, Tls, and the project team could select books for the collection.
    - The process enabled us to draw on the wisdom of various stakeholders in discovering good books. **It was a fun and enjoyable evening, and it was also an effective promotion of RB.**

- **“Worm catcher”** draws on the wisdom of various users to help identify problems of RB. Many students paid great attention when using RB (& also in their reading) to help ‘catch worms’!
Innovativeness in the Engagement Approach – Participatory Design 多方參與

- The project involved collaboration between the project team (children story author, gamification expert, reading researchers), teacher librarians, teachers, game developers, parents, and students.

- Books were chosen from award-winning titles. Also, the project team went to book fairs with students, parents, and teachers to select books.

- At schools, teacher-librarians and teachers collaborated to create cross-curricular reading programmes with interesting reading materials.

- Feedback was collected from stakeholders to fine-tune the platform on an on-going basis.

<table>
<thead>
<tr>
<th>Levels</th>
<th>Chinese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>17</td>
<td>61</td>
</tr>
<tr>
<td>P2</td>
<td>53</td>
<td>84</td>
</tr>
<tr>
<td>P3</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>P4</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>P5</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>total</td>
<td>232</td>
<td>284</td>
</tr>
</tbody>
</table>

General coverage

Welcome recommendations by teachers

Encompass a variety of genres (e.g. fiction, fairy tales, folklores, biographies, science, history, fables)

Divided into 5 levels of reading difficulty

School-based titles

Covers P1-P4

Titles submitted by teachers

Each school has a quota of 30 titles

Over 500 titles in the system now!
Impacts Achieved: Hong Kong primary schools - 2

- 94% of the students agreed that Reading Battle was effective in improving their reading comprehension skills (Chan, Chu, Mok, & Tam, 2015). The effect was the most obvious among top performers, followed by students who improved the most (Chu et al., 2015).

- 84% of students thought that RB enhanced their interest in reading, and 94% of students considered the children literature collection in Reading Battle interesting (Chan et al., 2015).

- Students in Lam Tin Methodist Primary School voted RB as a Top 10 Website 3 years in a row!

---

### Comparing students’ interest in reading (Chu et al., 2015)

<table>
<thead>
<tr>
<th>Survey question</th>
<th>Top performers (n=33)</th>
<th>Bottom performers (n=14)</th>
<th>Most improved (n=6)</th>
<th>Sig. Kruskal-Wallis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. I like reading.</strong></td>
<td>Mean (SD)</td>
<td>Median</td>
<td>Mean (SD)</td>
<td>Median</td>
</tr>
<tr>
<td></td>
<td>3.36 (.60)</td>
<td>3.00</td>
<td>3.14 (.66)</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>30. I like reading more after using Reading Battle.</strong></td>
<td>Mean (SD)</td>
<td>Median</td>
<td>Mean (SD)</td>
<td>Median</td>
</tr>
<tr>
<td></td>
<td>3.31 (.74)</td>
<td>3.00</td>
<td>2.58 (1.00)</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Notes:

* Ratings are based on a 4-point scale: 4 - “very much so”, 3 - “quite a lot”, 2 - “just a little”, 1 - “not at all”; Mid-point = 2.5.
* Ratings are based on a 4-point Likert-type scale: 1 - “strongly disagree”, 4 - “strongly agree”; Mid-point = 2.5.
Impacts Achieved: Hong Kong kindergartens

• i-FUN Reading (RB for kindergarteners), a pilot project was launched Feb, 2016
  • The top 10 performers in i-FUN answered questions for about 4-5 books/month.
  • They all achieved an average score >80%.

<table>
<thead>
<tr>
<th></th>
<th>School</th>
<th>Form</th>
<th>English name</th>
<th>Total score</th>
<th>Average score</th>
<th>Complete book(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Tin...</td>
<td>K3</td>
<td>Leung...</td>
<td>2509</td>
<td>90</td>
<td>28</td>
</tr>
<tr>
<td>3</td>
<td>Che...</td>
<td>K3</td>
<td>Wong...</td>
<td>2334</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>Tam...</td>
<td>K3</td>
<td>Hung...</td>
<td>1926</td>
<td>96</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>Yic...</td>
<td>K3</td>
<td>Chung...</td>
<td>1503</td>
<td>94</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Tam...</td>
<td>K3</td>
<td>Tsang...</td>
<td>1386</td>
<td>87</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>Tin...</td>
<td>K3</td>
<td>Ng...</td>
<td>1292</td>
<td>92</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>Po...</td>
<td>K3</td>
<td>Jim...</td>
<td>1108</td>
<td>92</td>
<td>12</td>
</tr>
<tr>
<td>9</td>
<td>Po...</td>
<td>K3</td>
<td>Chan...</td>
<td>1067</td>
<td>97</td>
<td>11</td>
</tr>
<tr>
<td>10</td>
<td>Tam...</td>
<td>K3</td>
<td>Ma...</td>
<td>1031</td>
<td>86</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>Mrs...</td>
<td>K3</td>
<td>Chung...</td>
<td>943</td>
<td>94</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>Tan...</td>
<td>K3</td>
<td>Chung...</td>
<td>860</td>
<td>86</td>
<td>10</td>
</tr>
</tbody>
</table>

• This pilot project is being conducted in 11 Po Leung Kuk (PLK) kindergartens. Preliminary results showed that students are excited about RB, and teachers/parents are satisfied that RB encourages students to read.
• Kindergarteners like it and they view it as a game. One said “The badges encourage me and make me happy”.
• One parent said: “We play the games together... It helps cultivate our relationship”.
• Another parent said: “The best part is that they have the motivation in doing it. They do it themselves, without force, without pressure”.

35
Impacts achieved: A public library in the United States (Florida)

- “During the summer months, the majority of students will lose 10-30% of what was gained during the school year. Reading Battle participants did not experience a ‘Summer Loss’. Instead, they stayed on target or showed improvements.”

- “Our student participants increased their Reading Comprehension or remained on grade level, and also increased their confidence level in their ability to understand text. Top 3 students increased reading abilities between 10-60%” (Edenia M. Hernandez, Head Librarian, North Miami Beach Library).
Impacts achieved: Taiwan primary schools

• A parent whose child participated in RB shared her photos/thoughts on Facebook:
  「小五的暑作英文閱讀大挑戰(reading battle)激起了這幾位從小一起長大的孩子們鬥志，
  去圖書館借書，各自在家閱讀、線上作答，再互相分享、推薦有趣的書本，這種感覺真棒
  呀！也令人好羨慕這種純真的友誼。」("The English Reading Battle was the summer
  assignment of my P.5 child. It has inspired my child and friends who have been studying
  together since P.1 to learn together. They started to borrow books from the library, read at
  home, do the RB quests, share with friends and recommend books for each other. This makes
  me feel really great and I am even jealous of their pure friendship!")

• A Taiwanese teacher said in an interview that she noticed positive change in her students:
  「以前同學都會告訴我：『老師，我真的很怕讀英文書。』用了閱讀大挑戰之後他們不再
  害怕，甚至開始喜歡英文書。」("My students used to tell me that they are really afraid of
  reading English books. After using Reading Battle they started to accept the challenge and even
  like to read English books now.")
Question 3

請選擇一個最適合的答案:
A: 閱讀大挑戰能鼓勵學生閱讀
B: 閱讀大挑戰能改善學生的閱讀理解能力
C: 閱讀大挑戰為家長/學生提供提示/指引，提醒他們在閱讀時須注意的地方
D: 以上皆是
Reading Battle

可到 https://goo.gl/forms/HkmEREjAXWWwY2q8h1 註冊你的試用戶口

http://equiz.cite.hku.hk

• **Samuel Kai Wah Chu**, Ph.D. 朱啟華博士
  • Associate Professor
  • Faculty of Education, The University of Hong Kong
• **E-mail:** samchu@hku.hk
  • http://web.edu.hku.hk/staff/academic/samchu
References

http://notcomment.com/wp/wp-content/uploads/2013/12/%E8%B4%8F%E5%9C%A8%E8%B5%B7%E8%B7%91%E7%B7%9A.jpg

https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRZgeP-BbebD-4n5lf6KEoeGGMAfRYfrg2Ndm_JeZSkeVkb2afJ


楊麗媪. (2008). 走出幼兒教育的誤區. 中關村, (1), 81-83. Retrieved through HKU Library from http://big5.oversea.cnki.net.eproxy2.lib.hku.hk/kns55/oldnavi/n_Catalog.aspx?NaviID=48&QueryID=9&BaseID=ZGCI&BaseQueryID=9&turnpage=1&YearArea=2003%7C01,02,03,04,05,06,07,08,09-2017%7C11,10,09,08,07,06,05,04,03,02,01&Flg=local


