Effectiveness of Facilitating ESL Learning with Personal Response System

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Contents

1. Introduction

2. Complementation

3. Results and Discussion
   • Conclusion
Introduction

Research Background

- Literature Review: infancy
  
  *(Shapiro, 2009; Educue, 2003; Birdsall, 2002)*

- Learning problem: efficiency

- Institutional support: CTLD of SJTU
Introduction

Theoretical Framework

- Peer Instruction (PI)

- The Zone of Proximal Development (ZPD)
  Vygotsky, 1978
Introduction

- What I can’t do
- What I can do with help
- What I can do

Zone of Proximal Development
Implementation

- **Participants**
  35 First year postgraduate students

- **Period**
  one term

- **Tools Employed**
  - Questionnaire
  - Interview
  - Writing Test
  - Students writing of journal
Implementation
Teaching Activity Design

• At Term Beginning
  ➔ purpose: placement and warm-up

• In the midst of Term
  ➔ purpose: intensifying and promoting

• At Term End
  ➔ purpose: summary and reflection
Graph 1 Weakness in English Writing (Term Beginning)

- Vocabulary: 59.3%
- Grammar: 7.4%
- Content: 22.2%
- Organization: 11.1%
Chart 2 Important Elements in English Writing (Term Beginning)

- Vocabulary: 14.8%
- Grammar: 7.4%
- Content: 40.7%
- Organizing of Structure: 40.7%
Implementation
Highlights of Knowledge and Skills

- Essay structure
- Sentence structure
- Logic thinking
- Wording
- Rhetoric
- Punctuation
- Proof-reading
...
Writing Good Sentences

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Implementation
Learning Procedures

❖ Step 1
Students viewing of teaching slides (before class)

❖ Step 2
Students 1st voting for questions designed

❖ Step 3
Students discussing and debating with peers

❖ Step 4
Students 2nd voting for the same questions

❖ Step 5
Teacher’s explanation and extra materials provided
Implementation
A case study

Learning about punctuation

Question: Which of the following sentences is wrong grammatically?

A) It is fine, we go outing.
B) It is fine, so we go outing.
C) It being fine, we go outing.
D) It is fine; we go outing.
E) Since it’s fine, we go outing.
Implementation

Key: A
Results and Discussion

- Raised Performance
  5 writing tests: An increase in test scores

- Student Evaluation of PRS
  Likert scale rating
  Interviews both individual and collective
  Students journal writing
### Table 1 Writing Test Results

(Full score: 20)

<table>
<thead>
<tr>
<th>Student No.</th>
<th>Test 1</th>
<th>Test 2</th>
<th>Test 3</th>
<th>Test 4</th>
<th>Test 5 (GROUP)</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CAI</td>
<td>12</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>16</td>
<td>G1</td>
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<td>2 FU</td>
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<td>18</td>
<td>18</td>
<td>18</td>
<td>17</td>
<td>G2 C</td>
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<td>3 WANG</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>16</td>
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<td>4 FAN</td>
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<td>G3 C</td>
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<td>6 LI</td>
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<td>7 YOU</td>
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<td>Questions</td>
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<td>--------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>1. I participate more in class because PRS is used.</td>
<td>4.12</td>
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<tr>
<td>2. I try my best to get the right answer to PRS questions.</td>
<td>4.34</td>
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<td>3. I gets me more involved in communication with others in the PRS course.</td>
<td>4.25</td>
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<td>4. PRS helps me to learn better course materials.</td>
<td>3.37</td>
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<td>5. Given the chance to select, I prefer a PRS course to a non-PRS course.</td>
<td>3.90</td>
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<td>6. PRS helps me in identifying my problems in learning.</td>
<td>3.87</td>
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<td>7. I have difficulty in understanding the PRS questions.</td>
<td>1.76</td>
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<td>8. It takes me time to get used to PRS courses.</td>
<td>1.54</td>
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</tbody>
</table>

Likert scale: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree
Conclusion

📍 Effectiveness

◆ Encouraging contact between S & T
◆ Developing productive interaction and cooperation among students
◆ Promoting Active Learning
◆ Raising learning interest
◆ Easily knowing who knows what

…
Conclusion

☀ For future study

➤ Key: question designing

➤ Flexibility in use: conceptests

➤ Frequency of use: at intervals
Thank you!