Design of Resources and Activities for Postgraduates’
Online Pre-Class Lexical Learning on ESP

Shu-Hao Liu, Kai-Li Wang, Han Li, Xue-Ying Feng
Part 1

Research Questions
I. Documental Analysis

- ESP will become the mainstream of English Teaching in China with the development of internationalization of higher education.

- English for Educational Technology is an advanced course recommended by the Instruction Steering Committee of Educational Technology, and its learning is related to certain subject matter and postgraduates’ future vocation.

- However, complexity of the vocabulary of English for Educational Technology will lead to the decline of the students’ interest and learning outcome.
Ⅱ. Questionnaire about ESP Learning

Students' satisfaction with learning materials

The ease of different part of vocabulary learning

- Pronunciation & spelling
- Associative meanings of words
- Word class
- Collocation meaning of words
- Word style
- Others

Graph showing the distribution of satisfaction levels:
- Very satisfied: 52%
- Relatively satisfied: 24%
- Generally satisfied: 12%
- Dissatisfied: 8%
- Very dissatisfied: 4%
Ⅱ. Questionnaire about ESP Learning

The ease of different parts of vocabulary knowledge in students’ view

Students’ preference of different vocabulary learning materials

<table>
<thead>
<tr>
<th>Reference books</th>
<th>Courseware</th>
<th>Video tutorials</th>
<th>Related learning websites</th>
<th>Related digital documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>6</td>
<td>13</td>
<td>14</td>
<td>5</td>
</tr>
</tbody>
</table>

The role of learning platform

<table>
<thead>
<tr>
<th>Classroom teaching assistants</th>
<th>Student independent learning</th>
<th>Panel discussing</th>
<th>Product submitted</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>10</td>
<td>9</td>
<td>11</td>
<td>1</td>
</tr>
</tbody>
</table>
Results of the Questionnaire

1. Degree of satisfaction of teaching materials: 44% of the students are not satisfied.

2. Learning resource: Students prefer to get proper reference books, video tutorials, etc., and tend to interact with learning resources.

3. Learning strategy: The pronunciation, spelling and association meaning of words are difficult to grasp. Students prefer to learn these in context.

4. Learning platform: The platform lacks the part of self-preview. The students suggested that the self-preview part with the functions of voice score, translation, automatic push, learning supervision and teacher-student / student-student communication should be added.
Ⅲ．Interview with Teachers

01 Learning Resources
The learning resources which teachers provide are mainly authoritative papers. Authoritative papers contain massive messages and single form. What's more, they are always difficult to understand. Surveyed teachers think special glossary, courseware, and micro-lecture are more advantageous for students to learn and master vocabulary.

02 Learning Strategies
The teachers think that the intrinsic motivation of students to learn vocabulary is not strong. Various learning strategies should be used to help students to learn vocabulary.

03 Learning Platform
The present learning platform, is mainly used for auxiliary teaching, submitting assignments. It lacks of students' autonomous preview materials. Which should build the bridge between pre-class and in-class learning and solve the problem of time limitation of traditional instruction.
Summary

- **Questions**: the problems in ESP learning
- **Platform**: interactive online platform
- **Research content**: design of Learning Resources and Activities for Pre-Class Lexical Learning
- **Goal**: building the way leads to effective personalized classroom teaching strategies
Part 2
Pre-Class Learning Resources Design
Vocabulary Cognitive Strategy

Goal-decomposition Strategy
Using vocabulary,
Identifying vocabulary,
Skipping vocabulary

Associative Strategy
Understanding the whole word
by associating the meanings of
its constituent

Context Strategy
Acquiring knowledge of grammatical
patterns, habits, collocations, and related
semantic groups of words by sentence
examples
Pre-Class Learning Resources Design

Glossary design
Goal-decomposition Strategy

Courseware design
Association Strategy
Context Strategy

Micro-lecture
Multimedia Design Strategy: Proximity Learning Strategies
I. Glossary Design

Using vocabulary
Assimilation 同化
Accommodation 顺应
Equilibration 平衡

Identifying vocabulary
Gestalt Psychology 格式塔心理学
Information Processing Approach 信息加工方法

Skipping vocabulary
occipital lobe 枕叶
temporal lobe 颞叶
parietal lobe 顶叶
Ⅱ. Courseware Design

Association Strategy

**Edutainment Game**

*英*: edju'tenmənt gem*

*美*: ˌɛdʒuˈtenmənt ɡem

寓教于乐的游戏

-edutainment (n. 教育性娱乐)

+ game (n. 游戏)

= Edutainment Game

寓教于乐的游戏

Context Strategy

If there is no simulation the results are **edutainment games** (寓教于乐的游戏)，often with a simplistic format.
Ⅲ. Micro-Lecture design

Multimedia Design Strategy: Proximity Learning Strategies
Part 3

Pre-Class Learning Activity Design
Pre-Class Learning Activity Design with Micro-Lecture

**Procedual Task**

Set up several stage problems in the micro-lecture. The students can only continue to watch the micro-lectures after they have answered the questions.

**Preview Homework**

After watching the video, students need to complete a small quiz about the words in this section.

Types of exercises in the quiz respectively investigate the mastery of the pronunciation, word meaning and collocation.

Only when the quiz is finished, the task of watching the micro-lecture is finished.
I. Process Task

1. Do we need to get any experience from bottom to top?
   
   A. Yes
   
   B. No
Ⅱ. Preview Homework

1. What do you think of "cognitive structure"? (未保存)
   单选题
   - A. 认知结构
   - B. 认知心理学家

2. What are the stages of cognitive development?
   多选题
   - A. sensorimotor
   - B. pre-operational
   - C. concrete operational
   - D. formal operational

3. Which of the following phonics is the pronunciation of the rehearsal strategy? (未保存)
   判断题
   - A. 英[rɔ:zəl strætədʒi]
   - B. 英[rɔːzəl strætədʒi]
Part 4

Conclusion
Facing the current situation of lexical learning for ESP of Educational Technology, the learning resources and learning activities for pre-class learning are designed to solve the problems in ESP learning via TronClass platform, ensure learning resources meet the needs of the students' independent learning strategies, with the expectation of providing ESP instructional strategies in blended-learning circumstances.
Thank you!