Flipped language classroom: Using mobile-based activities to foster language learning

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✓ Why? (Addressing students’ needs)
✓ What is the flipped classroom?
✓ Flipped classroom model implementation
   ✓ Design
   ✓ Data collection
✓ Findings & Discussions
✓ Implications
Voices from Beginning-Level Learners*

• “I wish we focused more on these interesting points (like grammar) instead of taking the time to introduce each vocabulary word with a slide on PowerPoint.”

• “I wish we could have spent more time practicing listening, because that's the thing I have the most trouble with.”

• “I am a bit disappointed that the class pace was a bit slow, especially compared to the Chinese department here.”

*course evaluation

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Vocabulary: To be covered in class or Not?

• Many learners prefer to take advantage of class hours for more in-class activities.

• Some learners still need lectures on vocabulary!

• In-Class
  – New vocabulary and expressions
  – Grammars
  – Activities (speaking, listening, pair work, etc.)
Searching for Solution

- Study vocabulary outside the classroom individually.

- Spend more class hours to engage students in more in-class activities (esp. speaking and listening)

Flipped Classroom

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Flipped Learning?

• Inverting the classroom (Lage et al., 2000)

• Blended learning (Bluic et al., 2007; Picciano, 2013)

• **Flipped learning** (Baker, 2000; Bergmann & Sam, 2012; Hughes, 2012; Kim et al., 2014; Lage et al., 2000)
Flipped classroom?

- [E]vents that have traditionally taken **place inside the classroom** now take place outside the classroom and vice versa. (Lage et al., 2000, p.32)

- [A] specific type of blended learning design that uses **technology** to move lectures outside the classroom and uses learning activities to move practice with concepts inside the classroom. (Strayer, 2012, p.171)

- [An] educational technique that consists of two parts: interactive **group learning activities inside the classroom** and direct **computer-based individual instruction** outside the classroom (Bishop & Verleger, 2013)
Flipped classroom?

• [A]n open approach that facilitates interaction between students and teachers, and differentiated learning by means of flipping conventional events both inside and outside of the classroom and supporting them with digital technologies. (Kim et al., 2014, pp.37-38)
Definitions of the Flipped Classroom: Restricted vs. Broader (Bishop & Verleger, 2013)

<table>
<thead>
<tr>
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<tr>
<td>Flipped</td>
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<td>Video Lectures</td>
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Flipped classroom?

• Characteristic of all flipped classrooms is the desire to redirect the attention in a classroom away from the teacher and onto the learners and the learning. (Bergmann and Sams, 2012, p.96)
Flipped Classroom in Language Learning

• Research on classroom flipping mostly focused on general subject areas, such as biology, math & pharmacotherapy rather than language. (Han, 2015)

• Little research support the incorporation of flipped learning effectiveness in the English language teaching setting (Mehring, 2016)
Traditional Language Classroom

- Vocabulary and expressions learning *(limited interaction)*
- Reading and practicing dialogues
- Grammars
- Speaking activities
- Listening activities
- Pair/Group works
Flipped Classroom Model

- Vocabulary and expressions activities
- Reading and practicing dialogues
- Grammars
- **More** Speaking activities
- **More** Listening activities
- **More** Pair/Group works
Flipped Model Implementation:
Single Case Study
Data

• Setting: University, NJ
• Proficiency level: Beginning-level Korean
• Convenient sample: 9 students (13/17)  
  (freshman to graduate student)
• Textbook: Integrated Korean Beginning 2 (KLEAR)
• 5 days a week
  – Lecture Session (Traditional)
  – Drill Session (Flipped)
• Data collection
  – Survey
  – Informal interviews

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This Study Aims to

• Examine students’ perceptions on the flipped model.
  – Engagement
  – Motivation
  – Achievement

• Examine whether the different mode of instruction (flipped) affects student’s learning.
  – Scores on vocabulary quizzes (in comparison with the scores from the traditional model)

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Study Design

Lesson plan development → Online mobile-based quiz tool development → Quiz tool test-run → In-class materials development

Analysis ← Survey ← Informal Interviews ← Applying

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Flipped Model Implementation

• Reading New Words in the textbook and listening audio files on BlackBoard.
• Mobile-based online quizzes (16 times)
• Immediate and delayed individual feedbacks on quizzes
• In-class vocabulary activities
Prep-Vocab Quiz Format

• Test-run: 7 times*
  – Introducing quiz format; getting feedback
• **BlackBoard** Mobile-Compatible Test (on BlackBoard app)
• Multiple-choices, True/False, Fill in the blanks and Short answers
• Expected 5-10 min. long
• 5 questions for each set
• Total point: 10
• **Immediate and delayed feedbacks**
• Three attempts
• Twice a week; opens one day prior to class day (24-36 hours)
Prep-Vocab Quiz

- Part of assignment
  - Scores themselves not counted.

- Each quiz set
  - Covers most new words in each conversation

- Learners are expected to study new vocabulary before/while taking each quiz using the textbook.
Why Mobile-based Quiz Tool?

- Typing friendly (Korean keyboard)
- Flexibility (time and space)
- Immediate feedbacks
Flipped Model: Prep-Vocab Quiz

Please complete this test by 1:30PM and before coming to your drill session.

0 Attempts Used

Start Assessment

3 Attempts Remaining

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Flipped Model: **Prep-Vocab Quiz**

1. Which one of the following is least related to the other three?
   - While taking this prep quiz, you can freely use the textbook.

2. Fill in the blanks with the most appropriate advice as shown...
   - Fill in Multiple Blanks (2 Points)


4. True/False (2 Points)
   - True
   - False
Flipped Model: **Prep-Vocab Quiz**

Which one of the following is least related to the other three?

- 연극 - 극장
- 인터넷 - 입구
- 기차 - 역
- 골프 - 골프장

가족이 사는 도시 이름이 뭐예요?
(가족이 도시에 안 살아요? 그럼 가족이 사는 동네에서 가까운 도시 이름이 뭐예요?)

시카고예요.
Flipped Model: Prep-Vocab Quiz Feedback

Test Information

- Current Grade: 9.3 out of 10 points
  Grade based on Last Evaluated Attempt
- Status: Completed
- Attempt Score: 9.3 out of 10 points
- Time Elapsed: 3 minutes
- Started Date: 4/10/16 10:12 PM
- Submitted Date: 4/10/16 10:16 PM
- Due Date: 4/11/16 3:30 PM

Click Clear Attempt to clear this user’s attempt.
Click Edit Test to make changes.

Instructions: Please complete the test before coming to class.

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**Flipped Model:** Prep-Vocab Quiz Feedback

![Quiz interface screenshot]

<table>
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</table>

**Attempt History**

- Attempt #1
- Attempt #2
- Attempt #3 (You are viewing this attempt)

Instructions: Please complete the test before coming to class.

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Flipped Model: Prep-Vocab Quiz Feedback

Which one of the following is least related to the other three?

Given Answer: ☑️ 등산해요.
Correct Answer: ☑️ 등산해요.

QUESTION 2: MULTIPLE CHOICE

Which is the LEAST appropriate adverb for the blank (a)? 매운(spicy) 한국 음식을 (a) 좋아해요.

Given Answer: ❌ 이젠
Correct Answer: ☑️ 별로

QUESTION 3: FILL IN MULTIPLE BLANKS

프리스트(Frist) 학생회관은 주말에는 아침 8시에 문을 [id0]. (deferential style)

Selected Answer: 프리스트(Frist) 학생회관은 주말에는 아침 8시에 문을 ❌ 열어요. (deferential style)

Evaluation
Correct Answers for: id0

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Flipped Model: Prep-Vocab Quiz Feedback

**QUESTION 4: SHORT ANSWER**

이번 여름 방학 계획이 뭐예요?
Given: 일을하고있고여행도할거예요.
Answer: [None]
Correct Answer: [None]

Response Feedback:

*谋求* 하고 여행도 할 거예요.
### Feedback and Notes for Attempt

**Feedback to Learner**

Q3 열어야요 --> 열어야요. (polite ending), 염니다 (deferential)

**Path:** p » span  
**Words:** 4

**Grading Notes**

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Flipped Model: In-Class Activities

- 저하고 동생은 were grown up in Seoul.
- 머리가 grows fast.
- how long 기다렸어요?
- 할머니, long live!
Flipped Model: In-Class Activities

• **N1한테서 N2을/를 빌리다**
  - I borrowed money from my friend.
  - I checked out books from the library and read them.

• **N1한테 N2을/를 빌려주다**
  - I lent a computer to my younger sibling.
  - The library is a place to lend books to students.
# Flipped Model: In-Class Activities

**LESSON 11 C1: Vocabulary**

* Fill in the blanks using the given English words. Work in pairs.

* e.g., ‘milk’가 한국말로 뭐예요?/어떻게 쓰요?
  언제? 어떻게...? 누가/누구를/누구한테...?
  어디서/어디에? 왜...? 뭐를/뭐가...?

1. 지난 주말에 친구들에게 같이 Long Island **beach**에 놀러 갔어요.

2. 저는 한국 음식을 아주 좋아하는데 _____와 _____는 비싸서 자주 못 먹어요.

3. 프린스턴에서 **joyful life**을 하고 있어요?

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Single Case Study:
Findings and Discussion
Data Collection

• Informal Interviews
  – Twice per each learners throughout the semester
  – Focusing on learners’ perceptions
    • Achievement, Engagement, Motivation

• Survey
  – Google Forms
  – At the end of the semester
  – Getting feedbacks on the quiz, in-class activities and flipped class model
Findings: Informal Interview

Learners’ perceptions on Motivation

• Did you find taking the Prep-Vocab quiz a good way to prepare the class?
  – “When I first heard that I had to take EXTRA quiz, I was a little annoyed. I thought we already had too much homework, and I didn’t want to spend more time. I mean I just don’t have much time. But, after taking 2 or 3 quizzes, I found that it didn’t take much time. Taking the quiz including vocab study usually takes less than 10 minutes. Investing 10 min. isn’t bad considering how much I become more confident in class.”

  – “I found it fun because now I can type in Korean.”

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Findings: Informal Interview

Learners’ perceptions on Engagement

• Does taking the Prep-Vocab quiz help you engage more actively in-class activities?
  - “Before taking the prep quiz, I had never prepared the class, so I was spent most of class time understanding. But now I can actually produce my own sentence using the target words.”
  - “I feel I become more active in class. I don’t just listen and answer the questions, but become more active asking questions to others.”

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Findings: Informal Interview

Learners’ perceptions on Achievement

• Does taking the Prep-Vocab quiz help you feel more confident?
  - “Because I already know the words, I become more confident using them in class.”
  - “Somewhat more confident. I still need help on how to use them in context.”

• Do you feel that taking the Prep-Vocab quiz help you increase your learning?
  - “My vocab quiz score (in-class) has increased, but I’m not sure if taking the quiz directly causes this improvement. Maybe it does.”
  - “Spending more time studying vocab increases my score.”

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Findings: Survey

Learners’ Feedbacks on Prep-Vocab Quiz
• No need to retake the quiz even though their answers are wrong.
• Delayed feedbacks rarely read.
• More reminders preferred. (besides BB’s notification)
• Helpful to make study vocabulary ahead of class.
• Should be continued.
Findings: Survey

Learners’ Feedbacks on In-class Activities

• More pronunciation practices necessary
• In-class activities do not cover all the vocabulary.

• More engagement
• Focusing on usage more in a context
• Time is most efficiently maximized.
Findings: Survey

Learners’ perceptions on Flipped Classroom

• Engagement
  – Can initiate questions using target vocabulary.
  – Can engage more in class activities.

• Motivation
  – Can understand lecture more easily.
  – Too much going on.

• Achievement
  – Can retain more vocabulary.
  – Can retain vocabulary longer.
  – Have more confident in other in-class quizzes.

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Discussion

• **Flipped model will be more beneficial**
  – At a different level of proficiency (Han, 2015)
    • Advanced Level: Synonyms
    • Intermediate Level: Adverbs/ Idiomatic expressions/ Grammar

• **Flipped model is less beneficial in language classroom**
  – Teacher-student interactions needed
  – Needs to be carefully designed and well-aligned in- and out-of-class elements
Limitations

• Small sample size
• No random sampling
• Technical constraints (i.e., exact match only, delayed feedbacks, typo, etc.)
References


Bergmann, J., & Sams, A. (2012). Flip your classroom: Reach every student in every class every day. International Society for Technology in Education.


References


