A New Pedagogy for the Japanese EFL Classroom: Instructional Redesign with Flipped Learning

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Abstract

English has become the international language of communication in today’s globalized society. In order for the Japanese to become effective communicators in English, there needs to be changes to how the language is taught and used in the classroom. The flipped classroom technique offers a creative way for teachers to use face-to-face class time for more authentic, communicative uses of the language. This type of class allows students to construct and develop their language abilities through collaborative activities. This paper examines how the flipped technique, in conjunction with social-constructivism, can create a classroom where students negotiate meaning through constructive collaborative activities using authentic communicative language.

Changing trends

In order to take a more progressive role in the globalized world, Japan needs to improve its English language education system, as present and future employers desire people who are creative, innovative, can communicate effectively, work in teams, are self-confident, and able to adapt to the rapidly changing world environment (Robinson, 2011). English education in Japan has been hindered by a focus on grammar study in order for students to pass university entrance exams and a belief that the instructor is the all-knowing main provider of information (“English taught in English”, 2009). This focus has led to English study that typically results in more anxiety rather than improving communicative abilities. Japan needs to develop second language learners who can use English in authentic, communicative situations. This means instructors and students need to overcome traditional educational methods and beliefs, be willing to take risks and make mistakes, and be open to voicing their thoughts and ideas. The flipped learning classroom offers a promising possibility for Japan in its efforts to create a communicative learning environment.

Flipped Learning

Flipped learning, or inverted learning, is a teaching technique that incorporates the use of traditional video or audio lectures as students’ homework, typically viewed outside of class. In this model, class time focuses on the utilization of new learning and the construction of public artifacts, such as portfolios, webpages, or working models that demonstrate a student’s understanding of the new material. In a study at San Jose State, eighty-five students in an engineering electronics and circuits course watched edX lecture videos before class, attended class twice weekly to participate and practice as well as ask questions, while two other sections partook in the same course taught in the traditional format. Results of exams taken at midterm showed that students in the flipped section scored ten to eleven points higher than those in the traditional section, even though the questions in the flipped section were more difficult (Biemiller, 2012). Another study at the University of Michigan demonstrated that students in a flipped calculus course had gains about twice the rate of those in the traditional lectures (Berrett, 2012).

In a study conducted by Marlowe (2012), the effect the flipped classroom could have on student achievement and stress levels was examined. Nineteen students enrolled in an environmental systems and societies course while in the final semester of their senior year. For part of the course students were taught using traditional methods and then for the other part using the flipped classroom. In the flipped classroom, students would watch video lectures outside of class, and then submit questions or a summary, which were used to stimulate face-to-face (F2F) class time discussions. Students reported lower levels of stress in the flipped classroom and there was an average increase of three points in their grades.

In the United States in recent years, the flipped classroom technique has become widely adopted by higher education faculty. The Center for Digital Education conducted a nationwide survey to better
determine the reason why. Respondents stated the benefits to students are enhanced mastery of information (80% of respondents), higher retention of information (81% of respondents), and 86% of respondents strongly agreed or agreed that student attitudes improved once the flipped technique was adopted (Jackson, 2013).

The flipped technique opens up F2F class time to a variety of teaching methods, providing structure and strategies that enable instructors to fully transform their classes to learner-centered environments. Higher-level cognitive activities become the focus of the in-class activities in conjunction with some sort of mechanism to assess student understanding. Through the blending of technology and F2F learning, students can experience higher levels of interaction, participation, and use of the target language in authentic, communicative situations.

**What Flipped Learning In An EFL Writing Class Looks Like**

F2F class time involves not only changing in-class teaching methods but also adjusting the students’ perception of how they are accustomed to learning and the teacher’s role in the classroom. For instance, the purpose of an Academic Writing class could be to develop the students’ abilities to express their ideas in cohesive, clear reports and papers in an academic situation. The course prepares students to use the steps of research writing to critically analyze and compose logical academic papers.

Before class, the students review the flipped materials focusing on some of the major parts of a research paper such as, title, thesis, body, transition sentences, conclusions, citations and references. To confirm that students have reviewed the materials, the instructor opens a discussion forum on the school’s learning management system, or provides students with online practice exercises that require them to label various parts of a research paper, which the instructor participates in, or reviews before the next class. This process, called just-in-time teaching (JiTT), requires students to produce work, usually via a web platform, which instructors can read just before the next class (Edwards et al., 2006). Since instructors read students’ work just before teaching, they can teach to the students’ needs and interests. JiTT allows instructors to efficiently address students’ needs and interests while encouraging collaborative learning and modeling in class. In this setting, students are more prepared to engage and discuss during class time leading to stronger learning outcomes.

When students get to class, the room is arranged in a mini-workshop setting with small sections of three to four chairs scattered around the room. On top of each section of chairs is a number labeling its ranking in the overall grouping of chairs and a topic for students to focus on and discuss. The students, with their research papers in hand, are divided up and given a number, the number matching one of the sections of chairs. The instructor explains that students need to approach the small group of chairs and examine the parts of their paper that relate to the topic for that specific group of chairs.

As students sit in small groups, they collaborate and help each other through reciprocal learning, a collaborative learning method which requires students to teach one another through the use of four components including summarizing, questioning, clarifying, and predicting (Palincsar, A. S., & Brown, A. L., 1984). While focusing on the topic that accompanied each group of chairs, students can demonstrate their understanding using their papers as examples, as well as ask questions to better understand why they may be having difficulties. After a period of time, the instructor can ask students to move to a new group of chairs and a new challenge. During the entire process the instructor moves around the room, helping to clarify answers or questions and assessing student learning. The instructor can also keep students on task and change groups when he/she feels it is most appropriate.

Time on task is a key part of neuroeducational learning, referring to the amount of class time spent working on an activity and how a person’s brain processes new learning. When new input is in working memory, it is at a very critical juncture in the learning process. Information can only be held in working memory for roughly twenty-minutes, (Sousa, 2006; Willis, 2008), and if it is not moved into long-term memory within this time period, it is forgotten. For example, when someone receives directions to a friend’s house: As the person begins the journey they are sure of where they need to go, but soon become confused or lost and give up, only to ask again. The information was never placed in long-term memory so the information, although understood, was forgotten due to it not being transferred in time. According to Derry and Steinkuhler (2006), the success of a learning process can be measured by how well transfer of knowledge has occurred (p.801).

Additionally, the ability to stop, process or clarify new information as often as needed reduces the cognitive load (Schmidt et al., 2007). The cognitive load refers to the amount of information one must hold in working memory during learning. If the cognitive load is too great, information can be
forgotten or not processed into long-term memory correctly. The flipped writing class offers students better opportunities to process and transfer new information because they can practice and review the material at their own pace pre-class before having to demonstrate their competence in front of the teacher and their peers.

**What Flipped Learning In An EFL Content-Class Looks Like**

In reality, each class has its own dynamics and needs to be approached as such, being evaluated and modified by the teacher as needed to best serve the needs and goals of the students. American Studies is a content-based lecture course taught in English by the author. It is an elective course aimed at introducing students to the formation and development of America. In this flipped classroom, first students review the flipped materials on the topic, for example the American Revolution. These materials include basic facts as to why the Colonists wanted to be free and some of the major battles during the war like Lexington, Concord, and Bunker Hill. The materials conclude with driving questions the students need to consider before class, such as, questions considering the British army was larger, stronger, and better organized than the Colonist’s army, how were the Colonist able to win.

Following a review of the materials, students are asked to post their understandings on a class message board, such as Moodle. This is the initial start to further discussions that take place during class time. This germane asynchronous environment gives students the time necessary to process and make the learning their own. The instructor partakes in the discussions, pointing students towards further resources, clearing up misunderstandings, or asking students to further explain their postings. Students might also fill out a short questionnaire in order for the instructor to get a better understanding of each student’s understanding of the new material. As students complete the survey, the instructor compares the online discussions and survey responses to gauge each student’s understanding and capabilities with the new material, leading to JiTT for the F2F session.

Finally, in class, students apply the new learning through a project-based learning exercise. Project-based learning (PBL) is an instructional approach that engages student interest and motivation. PBL allows instructors to create authentic challenges where students collaborate, incorporate schemata and new learning to develop and build a public artifact while using English as the mode of communication and negotiation of meaning (Hmelo-Silver, 2004). During this activity, students need to accomplish more than simply remembering various facts and information; they need to use higher-order thinking skills, collaborate, and demonstrate mastery of the topic. The flipped classroom is a place where students learn by doing instead of learning first and doing later (Gee, 2003) in addition to unique challenges that encourage collaboration, critical thinking, and mastery of the topic.

**Troubleshooting the Flipped Classroom**

The flipped classroom creates a new learning environment and with it some obstacles that both students and instructors may encounter along the way.

Increased workload is one challenge, as students are surprised by the amount of preparation that needs to be done before class; therefore a gradual implementation of the system should be taken into consideration. In a study by Mehring (2015), workload was one area that participants felt was a negative aspect of the flipped classroom. Participants mentioned that in the beginning the flipped classroom was very difficult so it is important the instructor implements it step by step. Instructors need to be aware that the number of assignments or activities needs to be less in the beginning and grow slowly. In addition, the instructor may need to walk students through the process, demonstrating how students can start and stop videos, how to use the discussion forums, and what is expected of students in regards to the pre-class materials.

Additionally, the instructor will also realize the flipped classroom requires a lot of preparation, creating pre-class materials and redesigning the F2F learning environment (Bennett, 2013). For the benefit of both students and instructors, implementation of the flipped classroom should progress slowly.

Finally, what if students do not review the pre-class materials or are too shy to participate? By assigning online discussions or a survey the instructor can get a better understanding of which students are not doing the pre-class materials and talk with them. It is important that the pre-class materials build a foundation for the F2F activities and by not reviewing the pre-class materials, students will find it difficult to actively participate during the in-class activities.

For the shy students, the instructor needs to allow students a chance to just be an observer during the small group collaboration, with the understanding
that they will have the opportunity to share first during the next class. These students might need to be given the right to pass during small group time. They could then be asked to submit a brief written account of the small group experience to the instructor focusing on his or her understanding and contributions. The instructor could then respond directly to that student to provide encouragement on how well the student actually understands, or on how much the student actually has to offer the group. This process will help to build confidence and demonstrate that their questions are valued, important and helpful to everyone, in the hopes that this student will then be encouraged to speak up more in future small group scenarios.

Benefits of Flipped Classrooms

Learning in the flipped classroom involves the construction of identities, a learning journey between master and disciple where students are engaged in both instructor and learner roles, essentially learning by doing (Lave & Wenger, 1991). This is an inherently social process, where students interact among themselves, and the content being taught, rather than the instructor, is the focal point of the lesson. In the flipped class, students encounter more opportunities to learn independently, as well as sometimes becoming mentors by helping struggling students and working together to solve issues/problems in class.

The flip technique can change in-class pedagogy based on cognitive as well as social-constructivist theories. Knowledge is gradually acquired in an individual’s head, (Piaget, 1969), but individuals are situated in a social environment interacting with different groups on a daily basis (Vygotsky, 1978). In the flipped classroom, learning can take place on two levels, one the individual level and one the group level. From the cognitive point of view, three important discoveries about how people learn help justify the success of the flipped classroom: a) having a strong base of factual knowledge, b) an understanding of the facts and ideas in a coherent and organized manner that makes them easy to communicate to others, and c) organizing new learning in ways that assist retrieval and application (NRC, 2000). Flipped learning can enable students to link new content with their schemata, (Shuell, 1986), in turn better enabling them to organize their learning and partake in F2F class discussions/activities.

In addition to cognitive learning, the flipped classroom incorporates constructivist-learning theory. Social-constructivism theory is based on the idea that knowledge is acquired through interaction with others, (Vygotsky, 1981) and that the internalization of actions is demonstrated by the creation of a public artifact that demonstrates one’s new learning through an appropriate activity (Papert, 1980). Pre-F2F time can stimulate students to use proactive techniques to expand their knowledge and become more metacognitive as they discuss what they are doing and how their understanding is changing. While in-class activities focus on the construction of an artifact that demonstrates the student’s new learning from the flipped materials and increased student-student and instructor-student collaboration.

For example, in a conventional English as a foreign language (EFL) course, instruction and practice must occur during class time because EFL learners are handicapped by a dearth of opportunity to experience English in authentic settings outside of class. However, by using the flipped classroom method the task of learning can be performed as homework through a video or other appropriate resource, building upon the lower tier of Bloom’s Taxonomy (Krathwohl, 2001), remembering and understanding. During this cognitive learning time, students are able to strengthen their understanding of the course materials.

Subsequently, the instructor can structure F2F class time around social-constructivist activities to enhance learning outcomes. Students could collaborate with classmates as they discuss and expand their understanding of the content. During this time students would be required to create an artifact that would not only demonstrate their new knowledge, but also focus on Bloom’s higher tier, applying, analysis, evaluation, and creating, (Krathwohl, 2001). During the entire process, the instructor is present guiding and helping students apply new learning or referring them back to the flipped materials for further information. With constant feedback from the instructor and classmates as well as viewing examples of others’ work, the class becomes a community of learners. This community of learners is the central point where learning takes place, where students develop their abilities through peer-to-peer interaction. Through apprenticeships, instructors offer guidance as students learn from the instructor as well as classmates (Lave & Wenger, 1991). Participation in these communities tends to be highly educational, freeing up F2F class time in order to focus on more communicative, constructivist activities and offering students opportunities to further test ideas and apply new learning.

Conclusion

The push to create authentic, communicative English learning environments where students use
English to negotiate meaning and build critical thinking skills requires that present teaching methods change. Many calls have been made for change in higher education, and many beliefs have been expressed about the best way to bring about that change. A recent article by Anraku (2013) discussed Takeo city in Kyushu, the first municipality in the country to adopt the flipped teaching technique. This strategy that became popular in the U.S. during the 2000s is now being adapted in Japan. During a geology class offered in a middle school, small groups discussed the daily topic and later presented their conclusions to the class. This activity not only developed camaraderie but also increased opportunities for conversation and knowledge acquisition. Parents noted that the flipped classroom encouraged communication among students as well as between students and teachers. The mayor hopes that his city can be an inspiration to schools across the country and demonstrate the effective adoption of emerging technologies in the classroom.

The flipped classroom offers an exciting new alternative for language learning in Japan and a change from current practices. The flipped classroom model is not a panacea for all the challenges in language education. However, it is a valuable paradigm worthy of consideration by educators, administrators, and policy makers that will prove advantageous as Japan transitions into a new era of communicative language teaching and learning.

References


Ecstasy Hypothesis

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A pretty girl is like a melody
That haunts you night and day
Just like the strain of a haunting refrain
She'll start upon a marathon
And run around your brain
You can't escape, she's in your memory
By morning, night and noon
She will leave you and then come back again
A pretty girl is just like a pretty tune

(Irving Berlin)

Abstract

The "Din in the Head" is involuntary mental rehearsal of language that is a result of obtaining comprehensible and interesting input. Murphey (1990) has suggested that similar kinds of "dins" occur in areas other than language: music, visual experiences, and movement (e.g. dance). There might also be an intellectual din. Dins occur after we perceive novel stimuli: after hearing or reading language containing as yet unacquired vocabulary or syntax, hearing a new melody, after seeing or creating a particularly striking scene, learning a new movement, or developing a new understanding. The "Dins" are often perceived to be pleasant. There is one kind of Din that can be more than pleasant: infatuation, which occurs after encountering someone new. Infatuation produces a chemical reaction in the brain that produces a kind of ecstasy. This leads to a conjecture: The different Dins discussed here have a similar basis. They produce involuntary mental activity that can be pleasant and even ecstatic.

The Din in the Head

A linguist/archeologist, Elizabeth Barber, introduced the idea of the Din in the Head into the professional literature. She noted that after three days of using her (intermediate level) Russian while working at the Hermitage in Leningrad, she noticed “a rising din of Russian in my head: words, sounds, intonations, all swimming about in the voices of the people I talked with ... The constant rehearsal of these phrases of course was making it easier and easier to speak quickly ...” (Barber, 1980, p. 30).

Krashen (1983) speculated that this “din in the head” might be a sign that language acquisition