

A Japanese teacher of English's conceptualizations of a lesson grounded in professional discourse to better inform practice

Fumi Takegami, Ritsumeikan Keisho Senior High School, Sapporo, Japan

> This study examines the teaching practice of a high school Japanese teacher of English (JTE) to depict her efforts in professional self-development and to meet the curriculum demands of the national English curriculum in Japan requiring teacher change. A lesson is selected to show how it reflected approaches in her instruction away from static, traditional methods. The lesson uses a jigsaw technique that the JTE (the author) conceptualized as being embedded in approaches to her instruction supported by social constructivism, communicative language teaching and cooperative learning. The study is framed around Gee's theory of Discourse. The concept has a personal and social identity dimension; a way of being, thinking, talking and acting appropriately within the communities of which one is a member. For teachers, acquiring a "secondary" professional Discourse leads to conceptualizations of teaching that better inform practice. The study shows how conceptualizations of the JTE's instruction, enriched through professional knowledge gained in a postgraduate programme, were applied in practice. Conceptualizations of the lesson through Discourse are detailed. Results from student feedback show the success of the lesson to support the direction the JTE is taking in her self-directed professional development and meeting curriculum goals.

Keywords: teacher development; professional discourse; teacher autonomy; collaborative learning activity

Purpose of the study

This study depicts a lesson from a high school Japanese teacher of English (the author with 25 years of teaching experience), who continuously wants to improve on her own instruction and is trying to make adjustments in her teaching to meet the aims of the national curriculum in Japan. Changes in the curriculum have placed high demands on teachers to transform their approaches to instruction (Igawa, 2013; Nishino, 2011; Tsukamoto & Tsujioka, 2013). The lesson is built around a jigsaw activity, for it is seen as being embedded in teaching and learning approaches and methods that take shape in the author's conceptualizations of teaching associated with principles of social constructivism, communicative language teaching and cooperative learning (see Appendix 1). However, these pedagogic principles are not often found in the instructional practices of Japanese teachers of English (JTEs) (Laskowski & Waterfield, 2014; Nishimuro & Borg, 2013; Underwood, 2012).

The design of the lesson was conceptualized as a result of being involved in a postgraduate TESOL programme, in which the author gained professional knowledge that enabled her to formulate effective ways of teaching. In one particular course on learning theories and teaching methods, the author was able to accommodate ideas associated with social constructivism as learning theory aligned with communicative

language teaching (CLT) as a meaning-based, learner-centred approach to L2 teaching and cooperative learning (CL) as an instructional method that teachers use to organize students in collaborative learning.

In this study, professional knowledge gain is demonstrated in the planning of a lesson and expressed in "professional Discourse" (the upper-case "D" is used by Gee's theory (1990) to extend its meaning beyond language that is specifically used in most professions, such as in medicine, law, engineering, etc. to one that can apply to those participating in various work or social communities). This study will attempt to document the teacher's conceptualizations in the planning of a lesson informed by theory and method. The study has implications for teacher autonomy leading teachers to be free from limitations or restrictive external controls; and gaining autonomy through having the capacity for self-directed professional development, which leads to action (Anderson, 1987; Benson, 2000; Little, 1995; Smith, 2001; Tort-Moloney, 1997).

"Discourse" and teacher development

Gee's development of the term "Discourse" (with uppercase "D") is distinct from the normal lower case use of "discourse". While discourse denotes connected sequences of utterances between speakers, Discourse is designed to recognize the interrelationships between social relations, social identities, contexts, and specific situations of language use (Gee, 1990). Gee points out that there are various types of Discourses used within different social contexts, and that Discourse is more than language. He referred to Discourses as identity kits that represent ways of thinking, talking, valuing and acting which form both one's individual and social identities as a member in a group or profession or a community. The influences of Discourse on one's thinking, actions and values through social interactions within a community are linked to a Vygotskian view of language as a vehicle to develop and stimulate thought (Vygotsky, 1978). Vygotsky believed that social environments, such as a community play a vital role in the learning process. Gee's theory of Discourse has strong implications for teacher learning.

Freeman (1996) claims that by acquiring Discourse through professional development, teacher change occurs teachers are "renaming as experience/reconstructing practice" (p. 222). However, substituting one technical name for another does not necessarily involve learning and teacher change, therefore, the additional latter term of "reconstructing practice" is more applicable. The interrelated terms have social and cognitive benefits (Freeman & Cazden, 1991). Socially, articulations of teaching are shared by those in a professional community of practice. Practitioners articulate why they do what they are doing in practice in a manner that can be unilaterally understood or conceptualized by others in the field. Cognitively, when able to depict their practices through Discourse, they form conceptualizations of teaching to better inform their practice. Freeman (1996) also makes an important distinction between local and professional languages identified with teacher Discourse. Local language is the sort of the common language used for daily interactions that occur among teachers as they talk about what goes on inside the classroom and within the school environment. He adds there are two sources for local language. The first comes from the teachers' own experiences as learners and these represent primarily held beliefs about teaching formed when teachers were students (Lortie, 1975); the second derives from the normal ways of thinking and talking that occur within members of a particular school community. Freeman (1996) makes an important observation regarding local language. He writes, "These two often overlapping sources of local language provide static and limited explanations of classroom practice" (p. 228). The limited nature of local language is what Gee refers to as only having a single or primary, locally grown Discourse (see also MacKay, 2007). Freeman (1996) posits teachers' primary identity kits "expresses their tacitly held, unanalysed conceptions of practice... [and] can create a barrier to reconceptualising their teaching and to changing their classroom practices" (p.228). What is needed is to provide opportunities for teachers to acquire a secondary Discourse, one that challenges their singularly held primary Discourse based on solely on experiential knowledge. For teachers, developing a secondary professional Discourse is grounded in professional concepts of pedagogy found in the literature or in-service programmes. In this way, teachers develop a professional language, an acquired Discourse to both internalize and express concepts of teaching and learning in ways that better inform their instruction. In short, acquisition of secondary Discourse has an impact on professional self-development.

Background

In Japan, the overall goal of the Ministry of Education (MEXT) stated in the national curriculum for English in secondary schooling emphasizes the improvement of students' communicative abilities. Although this goal has existed for more than 25 years as the central purpose of English education in Japan (Kikuchi & Browne, 2009; Yoshida, 2013), a traditional approach to instruction labelled "yakudoku" (Hino, 1988; Underwood, 2012), which integrates a teacher-centred, textbook-based, grammar translation method with a heavy focus on the use of Japanese, still largely exists in the instruction of JTEs (Nagamine, 2013; Tsukamoto & Tsujioka, 2013; Underwood, 2012). Consequently, a mismatch has been occurring between the overall communicative goal stated in the national curriculum and conditions at schools and classrooms that influence what the teachers do in their daily instruction (Gorsuch, 2000; Tahira, 2012). An attempt by MEXT (2009) to shift JTEs away from a heavy reliance on traditional approaches and methods is seen in their position that the teaching of grammatical rules and terminology in English language classes "be minimized" (p. 43) and "grammar should be taught in a way to support communication and in a way that it is integrated into language activities" (p. 42). This means that MEXT has clearly set out to understate the role of grammar translation by prioritizing the development of communication skills of students and minimizing the focus in grammar instruction. However, as things stand, JTEs still often put English sentences into Japanese while explaining vocabulary and grammatical structures in reading classes and then they move on to the next reading material without going beyond text analysis.

Curriculum policy and teacher change

The problems of carrying out curriculum policies in the classroom have historically been acknowledged. A major dilemma emerges when formal policies made at the top rung of an educational system by administrators or university professor consultants, who often are not in the classroom and therefore may not know the particular realities teachers face, are not recognized as being practical by teachers (Fullan, 1991). Consequently, teachers will either ignore or alter policy mandates as they see fit to meet their particular concerns (Cuban, 2011; Lipsky, 1980), and this has implications for teacher development. Fullan (1991) argues formal policy initiatives asking for teacher change have to first recognize three areas that lead to change: new approaches to teaching, new /revised materials, and a change in teacher beliefs. Moreover, he states

that all three areas have to happen for change to occur. In this study, the author will demonstrate how teacher change developed within these three areas.

Conceptualizing the lesson plan through Discourse

In line with the premise of this study that professional knowledge materializes through an acquired Discourse, the followings are reflections grounded in pedagogical principles showing how I conceptualized the lesson. The new guideline objectives stated above affirm the shift from a behaviourist teacher-centred approach, emphasizing grammar instruction with a heavy reliance on L1 use toward a constructivist approach one, which coheres with communicative methods in the classroom (Igawa, 2013; Williams & Burden, 1997). In order to go beyond passive learning of textbook content that has limited activities to develop students' communicative skills, I wanted to integrate opportunities for my students to express their ideas fluently. Thus, I turned to constructivist learning theory which views learning as an active knowledge building process that develops internally within the learner. Moreover, a conceptualization of my approach to the lesson plan was formulized with the concept of social constructivism, which emphasizes the social nature of learning. In social constructivism, learning is a collaborative process, which implies that if learners are given chances to participate in activities that are designed to create or increase social interaction, they will improve on their communicative abilities (Richards & Rodgers, 2001; Swain, 2000; Willis, 1996).

Communicative language teaching (CLT) provides a framework to bring a social constructivist approach into the classroom. Placing an emphasis on problem-solving tasks in a meaningful context, based on real world settings are principles that underpin both CLT (Doughty & Long, 2003; Nunan, 1991) and social constructivism (Williams & Burden, 1997). With this understanding, it was a logical choice to include a problem-solving task in the lesson plan. Following principles of CLT and social constructivism that learning occurs in meaningful and collaborative contexts, I designed the lesson to involve students in group work and to include information gap challenges. However, merely putting students in groups does not ensure learning (Chiu, 2004), but getting them to be socially and cognitively engaged in a group actively is the learning challenge, and this was conceptualized through principles found in cooperative learning.

Cooperative learning (CL) is one of the most commonly used forms of active pedagogy (Tsay & Brady, 2010). Following a social constructivist view of learning and having similarities with CLT, CL is largely based on the idea that students learn through social contexts, taking place through an individual's interaction with his/her environment and peers (Adams & Hamm, 1994). In the lesson, strategies attributed to CL were used to organize classroom activities around pair or group work to increase engagement among students. CL has useful criteria that are adopted in the lesson for making group work effective, such as creating positive interdependence through individual and group accountability as students take on role responsibility; group assessment of their performance, and the development of interpersonal and social skills as students work together in teams building leadership, decision and conflict resolution skills (Brown & Ciuffetelli, 2009; Johnson & Johnson, 1994; Siltala, 2010).

Finally, my role would be one of facilitator, a concept expressed in the Discourse of pedagogy. Moving from "a sage on the stage, to a guide at the side", the teacher's role is conceptualized as one who goes around to the groups carefully not to control students but to guide them in carrying out the task, using as much English as possible when intervening with students in their groups.

The above describes the conceptualizations of how the lesson was built using theory and methods. The following discussion of the jigsaw technique shows how the above was incorporated into the lesson.

Jigsaw technique

A jigsaw technique is a method of organizing classroom activity to have students engage in learning though social interaction. Students work together in groups to solve a problem, so it is task-based. Bygate, Skehan, and Swain (2000) describe a task as "an activity which requires learners to use language, with emphasis on meaning, to attain an objective" (p. 11). Students not only achieve good academic performance, but also develop skills in oral communication. The jigsaw task requires each participant to hold, supply and request information to complete the task, and this necessitates two-way interaction between participants in order to achieve a mutual understanding (Pica, Kanagy, & Falodun, 1993). Responsibility is given to students as they are first put into a home group, given a particular role in regard to the overall task, and then come back to the home group to report their information. Thus, each student has a particular piece of information that is needed by other members to complete the whole task, i.e. like a jigsaw puzzle.

Through re-conceptualizing my teaching, I was able to see how a jigsaw technique incorporated many of the principles that were affecting new directions in my teaching informed by social constructivism, CLT and CL (see Table 1).

Table 1. Jigsaw activity embedded in learning approaches and method

	Relevant	t approach and	methods
	Communicative		
Principles of Jigsaw activity	Social	Language	Cooperative
	Constructivism	Teaching	Learning
Students are put in socially interactive situations in groups.	✓	✓	✓
Students construct meaning through struggling.	✓	✓	
Students take on an active role in their learning.	✓	✓	✓
Students as active participants evaluate their own learning			✓

The study

The lesson was designed to incorporate the jigsaw technique in poster presentations. The teacher's observations and the feedback from students were used as data. The purpose was to investigate how outcomes from students who participate in a particular lesson that reflects a change from a traditional teaching approach have an impact on professional secondary Discourse of a teacher.

The situation

Although MEXT emphasizes improving students' communicative abilities, a criticism of the approved textbooks is that few communicative activities are found. Since approved textbooks by MEXT play an important role in the teaching of English in Japan, Glasgow and Paller (2014) have concluded that the textbooks have done little to address changes in the new curriculum, especially because the contents of the new textbooks continue to emphasize grammar and translation activities with fewer spoken or written tasks. Noting the limitations of the textbook to meet curriculum aims of developing students' communicative abilities, a jigsaw technique was adapted as a process of giving poster presentations, for it was seen as a suitable framework to provide opportunities for students to engage in fluency-focused speaking, and accuracy-focused writing activities for careful attention to grammatical, vocabulary and spelling accuracy of text on posters and presentation scripts.

Participants

Two classes of first-year high school students of a private senior high school in Sapporo in Japan participated in the study. Each class consists of 32 students. As for students' proficiency level, two students have passed EIKEN pre-1st grade, fifty-four students hold level 2 and the other eight students hold the pre-level 2. The EIKEN consists of certified English tests commonly used to evaluate the proficiency level in Japan (see Appendix 2 for a comparison of EIKEN and other international standards).

Materials

The reading material from the course book created by a publisher and authorized by MEXT was used to give impetus to the implementation of the jigsaw activity. The title of the reading material was "Vertical Farming" suggesting using vertical space for farming for a growing population and land-use decisions. It consisted of four parts with a total of 701 words.

Data collection

The data consisted of video-recorded classroom observation and a student self-report questionnaire. Questions used a 5-point likert scale.

Procedure

The study was conducted in relation to an English course called Communication English which was conducted in five 50-minute sessions per week for 2 weeks in May 2015. The first two hours were used for a reading task (Step 1) and the third and fourth hours were for the jigsaw technique activity (Steps 2 and 3). Another four hours were used for poster and related script making and practice (Steps 4 and 5) and the other two hours were for poster presentation and feedback (Step 6).

Step 1: Reading the material on vertical farming

Students read the material to gain background information on the context. New vocabulary and grammatical explanations were shown on a teacher-made handout to help students understand the text. After having students read aloud, a comprehension

quiz containing true or false questions was given to confirm understanding of the material. Grammar translation was applied only when needed.

Step 2: Make home groups

Each class of students was divided into two big groups of 16 and each group was divided into four sub-groups of four, which were called home groups. They decided their home group name to establish home group identity. Each home group had to be a consulting company to promote their unique project to solve the problems of a growing population with limited space. In order to establish the responsibility of each member in the home group, each student was assigned different specialist roles such as Pitchman, Designer, Financial planner and Troubleshooter. The student who had a pitchman's role had a role as a group leader in order to manage their home group activity.

Step 3: Work in expert group

Four students, one from each home group, got together in expert groups to work on assigned tasks for generating ideas. In the expert groups, students were supposed to brainstorm their roles, discuss the problems and make a draft of their shared ideas in English on their handouts. At this point, though all specialists might hold similar ideas, students had opportunities to discuss all of the ideas and make final decisions about the home group proposal. The teacher worked as a facilitator to encourage students to use English in asking questions and helped them with writing English on posters and in their presentation scripts. The teacher tried to use English as much as possible during these group interactions.

Step 4: Back to home group

After working in the expert group for twenty minutes, students went back to their home groups in order to bring the specialists' ideas together and made final decisions to start preparing proposals and designing posters. Two A3 sides of paper were distributed for each group and they freely made any arrangements on the posters. They designed their poster to attract people and made their scripts for their presentation (see Appendix 3 for an example of poster and script). Each poster presentation was supposed to last 5 minutes.

Step 5: Practice for the poster presentation

Students practiced their presentation after finishing making posters and scripts. They were given English phrases to use in their presentations (see Appendix 4). Eye contact, gestures, voice intonation and memorizing their script were required for smooth delivery.

Step 6: Presentation

The posters were located in four areas of the classroom and the first four groups started to present their projects. Students had 10 minutes for practice before starting the presentation. The other groups who presented later acted as rotating viewers. Each group of four members had 4 chances to present to each rotating group. Question and

answer sessions between viewers and presenters were conducted in English and viewers and teacher evaluated the poster presentations (see Appendix 5).

Results of students' feedback

Before the task

After the task

After all poster sessions were completed, students reflected on their work with feedback sheets (see Appendix 6). Table 2 shows that most of the students thought the task was difficult before they got started but after they completed the task they found it was not as difficult as they had thought, and no students answered that the task was very difficult after the task. Feedback shows that meeting a task that students initially thought was difficult and then achieving it through principles associated with CL, such as working interdependently in groups (see above for criteria of CL and in Appendix 1) could imply that structuring an activity in this way could reduce their anxiety to complete the task.

Very low Low Neither High Very high % % % %

6.35

50

25

9.38

29.7

3.16

39.1

0

0

37.5

Table 2. Comparison of the difficulty of the task between before and after the task (N=64)

In order to determine accountability of cooperative work, nearly 80% of the students responded that they helped each other to complete the task, and all were involved in this activity as Table 3 shows.

	Not at all %	Not much %	Neither %	Strongly involved %	Very strongly involved %
Degree of cooperation	0	3.13	25	43.75	28.16

Table 3. Cooperative attitude (N=64)

Table 4 shows the areas where students felt this activity helped to improve on their language learning. It shows that a fair percentage answered that their vocabulary learning and grammar knowledge were improved, which can be related to the high percentage of the positive answers in sentence writing production.

The results reporting student feedback present an overall positive assessment of student interest in performing the activity; a perception of language skill development, and an increase in confidence due to successful completion of a task that required critical thinking. Collaboration with others was also seen as an effective means to complete the activity.

Table 4. Studen	ts' feedback	on impact	of activity
I dole 1. Stadell	is recaeaci	on mpace	or activity

	Very low %	Low %	Neither %	Improved %	Strongly improved %
Vocabulary Learning	0	3.13	18.75	59.38	18.75
Grammar Knowledge	0	3.13	28.13	56.25	12.5
Sentence Production	0	9.38	12.5	31.25	46.88
Expressing idea	0	3.13	6.25	46.88	43.75

Discussion

Outcomes of teacher observations of jigsaw activity

Through facilitating students' work, six salient findings were observed. The first three are from observations of the group work, and the last three are observed while students made their presentations.

1. Spiralling

Learning is enhanced when the teacher presents a topic with basic information and then creates a situation where students can revisit the topic and build on it (Bruner, 1960; Williams & Burden, 1997). While students were working on making posters and scripts, they revisited the reading material several times to search for suitable vocabulary and they confirmed grammar structures to produce sentences.

2. Integrated subject learning

Students applied knowledge of what they have gained from other subjects such as biology, physics and mathematics. For example, they examined the ways of generating sufficient energy from sunlight in the high-rise building and estimated cost for their project. They put knowledge learned into English by using the dictionary and asking the teacher for assistance to complete the script and posters.

3. Student engagement

During observations of the lesson, it appeared that a few learners who seemed rather hesitant to participate at the beginning of the activity, eventually joined the lively interactive atmosphere as their group work was progressing.

4. Language output

Students produced their own sentences expressing their ideas in English in order to attract the audience's attention during poster sessions rather than solely reading their scripts. More English was used.

5. Interaction with students

Unexpected interactions emerged during Q and A sessions, which led to improvisational use of English going beyond the scripted presentations. This outcome led to a gain in communicative competence in English.

6. Gradual attainment of linguistic proficiency development
Since students had four chances of presentation, gradually they were able to
manipulate their presentation performances through gaining feedback from their
output, which further advances fluency in the target language (Swain, 2000).

It could be said that the students developed their skills because the lesson was situated within an appropriate Zone of Proximal Development (ZPD) that challenges the learners to go beyond what they can do solely on their own (Vygotsky, 1978). The results (Table 2) indicate a positive change in students' consciousness to accomplish the goal of the task within the collaborative setting. Therefore, they could develop concepts to achieve the learning goal, which might not have occurred in their own learning setting. In creating this environment, the role of a mentor (defined here as someone with higher level or mastery of knowledge, such as a student at a higher-level or a teacher in the classroom) assists the learner in understanding. As the teacher, I defined my role as a facilitator, helping the students develop from what they could do themselves to what they needed assistance to do within their ZPD. In other words, they learn how to learn by scaffolding. Eventually, the aim is to reach an automatization stage (see Figure 1), where the learner goes through a process of mastering the learning goal and no longer needs assistance (Tharp & Gallimore, 1988).

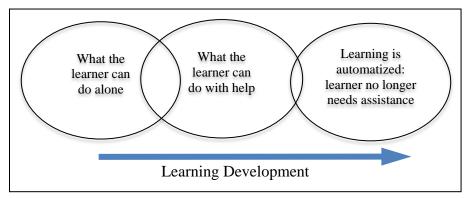


Figure 1. ZPD model

The outcomes above suggest that the aims of the lesson were achieved. Based on the observations of student performance and results from the survey, students were able to develop their communicative skills and produce more of the target language.

An additional outcome of this study, and one that this study did not have time to focus on is the role of learner autonomy and Discourse (MacKay, 2007). In the lesson, the students were presented with opportunities to critically work through an academic learning task, generating their own uses of English. Participation in the task enabled them to examine constructions of their own Discourse as language learners, and to practice them in a social context. Thus, learners' development of Discourse was helped on two levels: cognitively, students were able to improve on academic language proficiency, and thus gain a linguistic sensitivity (Huang & Laskowski, 2014) to academic uses of the target language found in meeting the linguistic demands of the task; affectively, their identity as learners in a learning community of practice (especially, their identity as a foreign language student) became strengthened as they

were given opportunities to be aware of their own "being" communicating in a social context without anxiety of failure. Teacher awareness of finding ways to help learners construct their own Discourse is an area that should be studied more.

Conclusion

The study offers documentation of how a teacher (the author) attempted to make changes in her practice in order to meet the new curriculum aims. The emphasis is on how teacher development occurred through acquiring Discourse to better inform the instructor's teaching practice, which centred around a lesson. Gee's theory of Discourse was useful to frame the study. The holistic nature of the concept goes beyond the commonly used language sense of "discourse" as stringing utterances together, or rather; it is through Discourses (or sub Discourses) that we reflect various forms of our identity. We use them appropriately within particular social or institutional contexts that represent who we are; how we think, act, talk; and what we value. Following Freeman (1996), through professional development, teachers can acquire or advance their Discourse in ways that better inform their practice. Thus, developing a secondary professional Discourse that goes beyond a traditionally formed primary one is essential for ongoing teacher development. Possessing only a primary Discourse infers less professional growth and fossilization of practice because it suggests those teachers are limited to knowledge gained from their own experiences as learners or through their daily work experiences. However, a secondary professional Discourse can be acquired in teacher development, and this has implications for teacher autonomy.

A dimension of teacher autonomy is empowerment, and this occurs when teachers take control of their own professional development (Benson, 2000). Rather than being dazed and confused over ways to improve professional self-development, and feeling disconnected with the task of meeting the teacher changes that are required to satisfy the revised curriculum goals, this study demonstrated the author's attempts at making changes in her teaching. In particular, changes in the approach to the lesson reflect Fullan's (1991) position on what must occur in teacher change by revising and selecting new materials, and after seeing the success of the lesson, a change in beliefs. In the latter case, Guskey (2002) claims that teacher' beliefs change when they see something that works in practice. In my own case, I could see how learning was enhanced by creating more socially interactive activities that improved target language skills, giving students more opportunities to solve tasks a little above their levels, and that more English could be used by students in my role as a facilitator. The distillations of these changes are shown in this study through depictions of the lesson through Discourse and how they materialized in the forming of the lesson. Through being adept at Discourse, one becomes better informed of the social or institutional contexts one is identifying with (Gee, 1990; MacKay, 2007). Strategies that were conceptualized in this study could provide recommendations for JTEs to conduct classes with challenging interactive activities that require high-level linguistic skills requested by MEXT (2014), such as presentations, debates and negotiations.

This study, therefore, has implications for teacher education and supports Freeman's (1996) call for teacher development programmes to include: a unified professional Discourse; opportunities to demonstrate the Discourse in practice; and as this study has depicted, involvement of teachers in different contexts of teaching. In teacher education, there should be more of an emphasis on helping teachers to acquire a secondary, professional Discourse, one that liberates them to take a critical look at their profession and at the same time empowers them to take more control of their practice.

References

- Adams, D., & Hamm, M. (1994). *New designs for teaching and learning*. San Francisco, CA: Jossey-Bass Inc.
- Anderson, L. W. (1987). The decline of teacher autonomy: Tears or cheers? *International Review of Education*, *33*(3), 357-373.
- Benson, P. (2000). Autonomy as a learners' and teachers' right. In B. Sinclair, I. McGrath, & T. Lamb (Eds.), *Learner autonomy, teacher autonomy: Future directions* (pp. 111-117). London: Longman.
- Brown, H., & Ciuffetelli, D. C. (Eds.). (2009). *Foundational methods: Understanding teaching and learning*. Toronto, Canada: Pearson Education.
- Bruner, J. S. (1960). The process of education. Cambridge, Mass: Harvard University Press.
- Bygate, M., Skehan, P., & Swain, M. (2000). Researching pedagogic tasks: Second language learning, teaching, and testing. New York: Longman
- Chiu, M. M. (2004). Adapting teacher interventions to student needs during cooperative learning: How to improve student problem solving and time on-task. *American Educational Research Journal*, 41(2), 365-399.
- Cuban, L. (2011). Teachers as classroom policymakers: The Case of the kindergarten. Retrieved Oct 31, 2013, from http://larrycuban.wordpress.com/2011/08/17
- Doughty, C. J., & Long, M. H. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology*, 7, 50-80.
- Freeman, D. (1996). Renaming experience/reconstructing practice: Developing new understanding of teaching. In D. A. Freeman & J. C. Richards (Eds.), *Teacher learning in language teaching* (pp. 221-241). Cambridge, UK: Cambridge University Press.
- Freeman, D., & Cazden, C. (1991). Learning to talk like a professional: Some pragmatics of foreign language teacher training pragmatics and language learning In L. Bouton & Y. Kachru (Eds.), *Monograph Series* (Vol. 2, pp. 225-245). Champaign-Urbana: University of Illinois.
- Fullan, M. (1991). The new meaning of educational change. New York: Teachers College Press.
- Gee, J. P. (1990). Social linguistics and literacies: Ideology in discourses. London: Falmer Press.
- Glasgow, G. P., & Paller, D. L. (2014). MEXT-approved EFL textbooks and the new course of study. In N. Sonda & A. Krause (Eds.), *JALT 2013 Conference Proceedings* (pp. 113-122). Tokyo: JALT.
- Gorsuch, G. J. (2000). EFL educational policies and educational cultures: Influences on teachers' approval of communicative activities. *TESOL Quarterly*, *34*(4), 675-710.
- Guskey, T. R. (2002). Professional development and teacher change. ###Teachers and Teaching: Theory and practice, 8(3), 381-391. doi: 10.1080/135406002100000512
- Huang, J., & Laskowski, T. (2014). Developing of linguistic sensitivity of ESL teacher candidates for linguistically responsive instruction. *The International Journal of Literacies*, 20(2), 29-50.
- Igawa, K. (2013). Language proficiency development needs of NNS English teachers in Japan. *Shitennouji University Kiyo*, *56*, 191-216.
- Johnson, R. T., & Johnson, D. W. (1994). An overview of cooperative learning. In J. Thousand, A. Villa, & A. Nevin (Eds.), *Creativity and collaborative learning*. Baltimore, MD: Brookes Press.
- Kikuchi, K., & Browne, C. (2009). English education policy in Japan: Ideals versus reality. *RELC Journal*, 40(2), 172-191.
- Laskowski, T., & Waterfield, M. (2014, August 1st). *Revitalizing lesson study in Japanese high schools through redefining the process.* Paper presented at the The Asian conference on education. Osaka Japan. Official conference proceeding. Retrieved from http://iafor.org/archives/conference-programmes/ACE ACSET/ace-acset-2014.pdf
- Lipsky, M. (1980). Lipsky, street-level bureaucracy; dilemmas of the individual in public services. New York: Russell Sage Foundation.
- Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System*, 23(2), 175-182.
- Lortie, D. C. (1975). Schoolteacher: A sociological study. Chicago: University of Chicago Press.
- MacKay, T. (2007). Gee's theory of D/discourse and ESL research in teaching English as a second language: Implications for the mainstream. *University of Manitoba*, 1-28. Retrieved August 10, 2015, from www.umanitoba.ca/education/symposium03/documents/mackay
- MEXT, [Japanese Ministry of Education, Culture, Sports, Science and Technology]. (2009). COS for foreign languages in senior high schools; provisional version [in Japanese]. Retrieved July 31st, from www.mext.go.jp/a_menu/shotou/new-cs/youryou/eiyaku/1298353.htm.
- MEXT, [Japanese Ministry of Education, Culture, Sports, Science and Technology]. (2014). The New English education reform plan. Retrieved January 7, 2015, from from www.mext.go.jp/english/.../2014/01/.../1343591_1.pdf

- Nagamine, T. (2013). Preservice and inservice EFL teachers' perceptions of the new language education policy to "conduct classes in English". Paper presented at the Japanese senior high schools multiculturalism in Asia: Proceedings of the second afrasian international symposium, 123-139.
- Nishimuro, M., & Borg, S. (2013). Teacher cognition and grammar teaching in a Japanese high school. *JALT Journal*, 35(1), 29-50.
- Nishino, T. (2011). Japanese high school teachers' beliefs and practices regarding communicative language teaching. *JALT Journal*, *33*(2), 131-155.
- Nunan, D. (1991). Communicative tasks and the language curriculum. TESOL Quarterly, 25(2), 279-295.
- Pica, T., Kanagy, R., & Falodun, J. (1993). Choosing and using communication tasks or second language research and instruction. In G. Crookes & S. M. Gass (Eds.), *Tasks and second language learning* (pp. 9-34). Clevedon, UK: Multilingual Matters.
- Richards, J. C., & Rodgers, T. S. (2001). *Approaches and methods in language teaching*. Cambridge: Cambridge University Press.
- Siltala, R. (2010). *Innovativity and cooperative learning in business life and teaching*. Turko, Finland: University of Turku.
- Smith, R. C. (2001). Teacher education for teacher-learner autonomy. Retrieved August 10, 2015, from http://www.warwick.ac.uk/~elsdr/Teacher_autonomy.pdf
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97-114). Oxford: Oxford University Press.
- Tahira, M. (2012). Behind MEXT's new course of study guidelines. The Language Teacher, 36(3), 3-8.
- Tharp, R. G., & Gallimore, R. (1988). Rousing minds to life. Cambridge: Cambridge University Press.
- Tort-Moloney, D. (1997). Teacher autonomy: A Vygotskian theoretical framework *CLCS Occasional Paper No. 48* (pp. 54). Dublin: Trinity College, CLCS.
- Tsay, M., & Brady, M. (2010). A case study of cooperative learning and communication pedagogy: Does working in teams make a difference? *Journal of the Scholarship of Teaching and Learning*, 10(2), 78-89.
- Tsukamoto, M., & Tsujioka, N. (2013). Teaching English through English to senior high school students in Japan: Towards the implementation of the new course of study. *The Bulletin of Shitennoji University*, *55*, 309-324.
- Underwood, P. (2012). The Course of study for senior high school English: Recent developments, implementation to date, and considerations for future research. *Toyo Eiwa University, Jinbun Shakaikagaku Ronshu*, *30*, 115-145.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard university press.
- Williams, M., & Burden, R. L. (1997). *Psychology for language teachers: A social constructivist approach*. Cambridge: Cambridge University Press.
- Willis, J. (1996). A framework for task-based learning. Harlow, UK: Longman Addison-Wesley.
- Yoshida, K. (2013). *Reconsidering Japan's English education based on the principles of plurilingualism* Paper presented at the Twenty-second International symposium on English teaching English teachers' association-republic of China, Crane, Taipei.

Appendix 1: Linking jigsaw activities with principles of social constructivism (SC), communicative language teaching (CLT) and cooperative learning (CL)

Social Constructivism Theory

- * Learning is social: --We learn by interacting with others.
- * Knowledge is socially constructed, rather than received or discovered.
- * Learners 'create meaning,' 'learn by doing,' and work collaboratively 'in mixed groups on common projects'.
- * Learning is based on active participation
- * ZPD (Zone of Proximal Development) is expected (Vygotsky, 1978)

CLT Approach

Focusing on learning to communicate through interaction in the target language [including 'information gap' situations].

- Using authentic text or 'real' objects from real life are used in classroom instruction.
- Enhancing the learner's own personal experiences as important contributing elements to classroom learning.
- Providing opportunities for learners to focus not only on language, but also on the learning process itself [ex: not only on structures, but strategies to complete tasks].
- Promote learning by doing.
- Promote cooperative and collaborative learning (adapted from Nunan.1991)
- Use tasks as an organizational principle (Doughty and Long, 2003)

CL Approach

- Positive interdependence :
 - Students must fully participate and put forth effort within their group.
 - Each group member has a task / role / responsibility, therefore they must believe that they are responsible for their learning and that of their group.
- Face-to-face promotive interaction:
 - Members promote each other's success and students explain to one another what they have or are learning and assist one another with understanding and completion of assignments.
- Individual and group accountability:
 - Each student must demonstrate mastery of the content being studied.
 - Each student is accountable for their learning and work.
- Interpersonal and social skills:
 - Social skills must be taught in order for successful cooperative learning to occur.
 - Skills include effective communication, interpersonal and group skills such as:
 1) Leadership, 2) Decision-making, 3)
 Trust -building, 4) Communication, 5)
 Conflict-management skills
- Group formation or group processing:
 - Every so often groups must assess their effectiveness and decide how it can be improved. (adapted by Brown, Ciuffetelli & Parker 2009; Siltala 2010, and Johnson & Johnson 1994)

Jigsaw Activity

- Students are put in socially interactive situations in groups (SCT, CLT, CL)
- Students construct meaning through struggling (SCT, CLT)
- Learners actively participate (SCT, CLT, CL)
- Learners are active: Students evaluate their own learning (CL)

Appendix 2. Comparison table of Eiken levels

(Source: http://stepeiken.org/comparison-table)

EIKEN CEFR		TOEFL [®] score					
Grade	CEFK	PBT	iBT				
1	C1	600	100				
Pre-1	B2	550	80				
2A	B1+	500	61				
2	B1	450	45				
Pre-2	A2	400	32				
3							
4	A1						
5							

TOEFL® is a registered trademark of Educational Testing Service (ETS), Inc.

Appendix 3. Example of poster worksheet with guidelines using A3 size paper

Catch Phrase (title)

This is what our vertical farming design looks like:

This is a description of our vertical design:

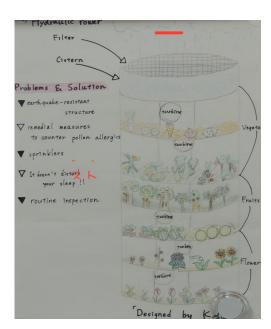
This is how we will motivate the public to support our vertical farm idea:

This is how we will get money for our plan:

Please remember that:

Closing statement





Appendix 4: Phrases for presentation

Hello, let me introduce myself (ourselves)..

Now, I will explain our catch phrase...

Next, I'd like you to look at our vertical farming design....

Now, let me explain the design. First, then, after that...

Here is how we will motivate the public to support our plan, first...

Now, I will tell you how we will get money to support our plan. First....

Please remember (remind audience of one good idea in plan)...

Finally, (closing statement)...

Are there any questions?

Appendix 5. Students' feedback evaluation sheet on group poster performance

Evaluation: Group () Total score: <u>points</u>						
Score points: 5: very good, 4: good, 3: OK, 2: poor, 1: very p	oor					
Interesting content of topic	5			2		
Smooth delivery (eye contact; gestures, voice)	5			2		
Easy to understand	5	4	3	2	1	
Well-designed poster	5	4	3	2	1	
Free Comments: Strong points / Weak points						

Appendix 6. Student feedback sheet on task difficulty, collaboration, and language gain

1. How would you rate the difficult	lty o	f the task	before	you st	arted?	
1 2 3 4 5	-					
2. How would you rate the difficult	ty of	the task a	after y	ou finis	shed?	
1 2 3 4 5	;					
3. How would you rate the helpfulr	ness	of workir	ig with	your g	group to complete the	
task?	,					
1 2 3 4 5	1					
4. In what areas did this activity ha	1	i		. 100 000	ogo looming?	
4. In what areas did this activity help you improve your language learning?						
Vocabulary learning: Grammar knowledge Producing your own sentences:	1	2	3	4	5	
Grammar knowledge	1	2	3	4	5	
Producing your own sentences:	1	2	3	4	5	
Expressing your own ideas:	1	2	3	4	5	
(1 = very weak, 2 = weak, 3 = so so)	o, 4 =	= strong,	5 = ver	ry stror	ng)	
				-	·	