Willingness to Communicate (WTC) Intervention Activities for the EFL Japanese University Context

Willingness to Communicate (WTC) Intervention Activities for the EFL Japanese University Context

Kevin Garvey

Jeremy Eades

Abstract

Willingness to Communicate (WTC) has been usefully adapted to the SLA context and a number of recent studies have adapted it to the EFL context (Hashimoto, 2002, Yashima, 2002). However, research on WTC has not been applied directly to the Japanese university context for L2 learners of English. This study aims to assess task-based group and independent work on the basis of how strongly it generates WTC among students, and makes suggestions for how instructors might include "increasing WTC" as a goal in additional to standard L2 learning goals. Using quantitative analysis of survey results before and after two task conditions, this study found that across the three types of data collected: (1) external WTC, (2) classroom WTC, and (3) learner style and behavior, external WTC question scores *decreased* overall in all four participant groups, with a slightly *larger* decrease in the *group work* condition. These findings suggest that whereas group work may lower affective filters and create collaborative, enjoyable tasks, independent work may have a better chance of generating genuine WTC amongst students. However, if students perceive the primary objective of L2 instruction to be successful communication *within the classroom,* any WTC generated within the context of the classroom runs the risk of remaining there. Further research might investigate the dynamics between task effectiveness for increasing WTC, and student perception of the purpose of classroom task work.

Willingness to Communicate (WTC) in the Second Language Acquisition (SLA) context

Willingness to communicate (WTC) as originally conceived by McCroskey and Baer (1985) was "a personality-based, trait-like predisposition which is fairly consistent across a variety of communication contexts and types of receivers" (McCroskey & Baer, 1985). In this context, WTC was measured in L1 speakers of English and believed to be trait-like. While attempting to apply WTC to the second language acquisition context, MacIntyre, Clément, Dörnyei & Noels (1998) highlighted not only personality but also affective and situational contexts in which WTC may vary, designing a pyramid-shaped, layered description of the psychological and situational factors that were thought to affect WTC (see *Figure 1*).
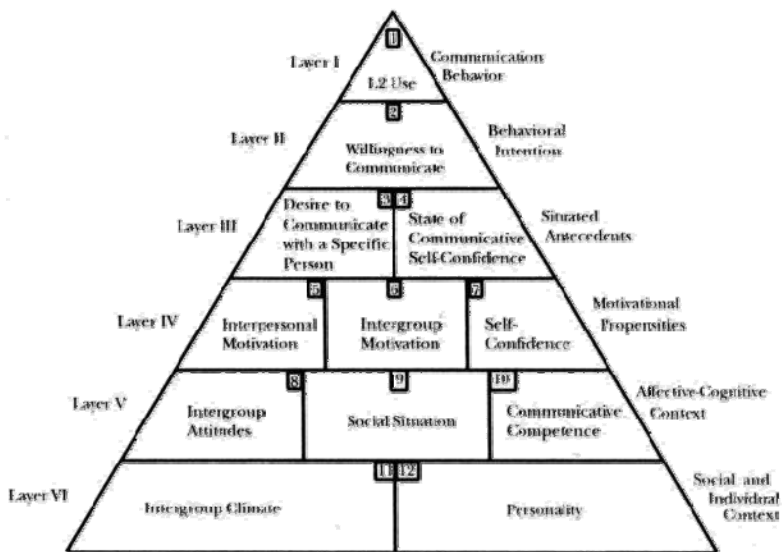

Figure 1. Heuristic model of variables influencing WTC (Macintyre, Clément, Dörnyei, & Noels, 1998, p. 547)

At the top rests L2 Use, with related traits and contexts spread out below, the assumption being that as speakers satisfy the requirements of each layer, moving from layers VI-I, they will achieve high WTC and thereafter, use their L2. Criticism of this model includes its failure to indicate any interrelationship between its components and its limited focus on ESL learners rather than EFL learners (Bradley, 2013).

Further adaptations of McCroskey and Baer's original concept followed. Gardner and Lambert's approach to motivation (1959) proved highly influential on various studies of L2 motivation, (Hashimoto, 2002), and Gardner later developed and modified the Attitude/ Motivation Test Battery (Gardner, 1985; 2004) to "assess various independent difference variables based on the socio-educational model" (Hashimoto, 2002). The AMTB consists of over 130 items to assess independent WTC and researchers have supported its validity and reliability in multiple studies (Hashimoto, 2002). In a study of 56 Japanese undergraduates and graduates using English as their second language, Hashimoto used a shortened version of the AMTB and found a correlation between perceived competence of L2 to L2 communication frequency (2002).

In a review of the SLA literature related to group dynamics, Leeming (2012) points out that "there is a lack of research into groups in the field of SLA" and suggests that "This is puzzling as, perhaps more than in any other academic subject, the interaction that occurs in groups is thought to contribute directly to learning through the medium of the language used, and the use of groups is considered integral to the pedagogy of language learning" (Leeming, 2012). Leeming also makes a sharp criticism of methodology related to assessing WTC in general, stating that an over-reliance on the mono-method of the self-report (such as the AMTB) to assess WTC weakens the argument many studies attempt to make (2012).

The current study seeks to build on the literature related to WTC in the SLA context (Fushino, 2010; Robson, 2015), specifically within the Japanese university context at Kanda

University of International Studies. Considering Leeming's criticism of the mon-method of the single-instance self-report, we have expanded and adapted the AMTB format into two parts administered before and after an intervention task designed to increase self-reported WTC. Through a quantitative analysis of potential changes between participant answers in our AMTB before and after the task, we hope to assess whether our task and task conditions had an effect on participant WTC. Research Questions and more details on our methodology follow.

Research Questions

1. Is there any correlation between the social structure of a task (in this case, independent versus group work) and an independent learner's WTC following the completion of said task?
2. If a correlation is found, is it possible to design an intervention available to EFL classroom instructors that will positively affect students' WTC inside the classroom?

Methodology

(Participants, Materials, and Procedure)

This research project consisted of two separate interventions, occurring at the fifth and tenth week (of fifteen total weeks) of the first semester for two freshman English courses in the International Communications (IC) department. These courses meet four times a week. The fifth week of the semester was chosen as a time when incoming freshman students would be reasonably comfortable with their classmates and ready to communicate. We used this first run of our project ("Task 1") as a pilot study. The tenth week of the semester was chosen as a

time when freshman would have presumably more comfort in their L2 and with their classmates, and data from this trial ("Task 2") comprises our final results. In total, we analyzed data taken from 81 participant answers to questionnaires administered before and after our intervening task.

Both tasks (of the pilot study and final study) asked the participants to create a brochure for incoming freshman of the university. In Task 1 (pilot), the brochure should introduce one of the campus buildings. In Task 2, the brochure should introduce an on-campus cafe. Both tasks were part of the regular coursework and completed during class time. Both tasks were graded and the scores were included as part of the students' final mark for the course. There were four participant groups in total, split into two task *conditions*: "group" or "independent", depending on the manner in which they were instructed to complete the task by their teacher. In our pilot study, group A and group C completed Task 1 in the "group" work condition, while group B and group D completed Task 1 in the "independent" work condition. In the second round of data collection, conditions for the groups were flipped (group-independent), to account for the ordering effect (*see schedule below*).

The tasks were designed to be nearly identical in form so that performance variations could not be said to depend on increased language acquisition from week five to week ten (i.e. both tasks were relatively simple, and should not have reflected student progression in their L2 over the course of the semester). The focus of the research was on WTC and the effect of the social context, not on an increase in overall language proficiency from week five to week ten.

5

Data Collection Schedule

Class	PILOT	PILOT	PILOT	PILOT	Pre-Survey	Task	Post-Survey	Recorded
	Pre-Survey	**Task**	**Post-Survey**	**Recorded Interaction**				**Interaction**
	Week 5 *pilot* **Day 1**	**Week 5** *pilot* **Day 1/2**	**Week 5** *pilot* **Day 2**	**Week 5** *piot* **Day 3**	**Week 10** *final* **Day 1**	**Week 10** *final* **Day 1/2**	**Week 10** *final* **Day 2**	**Week 10** *final* **Day 3**
Group A (01)	Pre-task survey 1	Task 1 - Group	Post-task survey 1	Extended Interaction	Pre-task survey 2	Task 2 - Indie	Post-task survey 2	Extended Interaction
Group B (06)	Pre-task survey 1	Task 2 - Indie	Post-task survey 1	Extended Interaction	Pre-task survey 2	Task 1 - Group	Post-task survey 2	Extended Interaction
Group C (04)	Pre-task survey 1	Task 1 - Group	Post-task survey 1	Extended Interaction	Pre-task survey 2	Task 2 - Indie	Post-task survey 2	Extended Interaction
Group D (05)	Pre-task survey 1	Task 2 - Indie	Post-task survey 1	Extended Interaction	Pre-task survey 2	Task 1 - Group	Post-task survey 2	Extended Interaction

Data from the pilot questionnaire given in week five pointed to three distinct "types" of answers: (1) external WTC (related to WTC in the "real world"), (2) classroom WTC (WTC in the classroom setting), and (3) general study habits and behaviors. This characterization of the data lead to small revisions in the questionnaire items for the data collection of week ten, to more consciously target these categories of answers.

The pre and post-task surveys were based on the AMTB as adapted by Hashimoto (2004) for Japanese university EFL speakers. The post-task "extended interaction" was a recorded interaction which consisted of an open-ended, free-form conversational activity, in which participants were given minimal instructions, and their WTC was monitored in a live, communicative environment.

The 3-day data collection procedure was as follows: on the first day, participants completed the pre-task survey and began the intervention task (in either the "independent" or "group" condition). On the second day, participants completed the intervention task and completed the post-task survey. On the third day, participants participated in a video recorded

extended interaction activity based on their task-work from the previous two days. Our data consisted of the pre-task survey answers, post-task survey answers and the video recording of the interaction. At the end of each data collection period, data was analyzed quantitatively (through the surveys) and qualitatively (through the video recording of participant group interaction), with the goal of assessing overall WTC and determining if a correlation exists between self-reported WTC, changes in WTC, performance in the extended interaction, and the social structure of the task. As stated above, the first round of data collection in week five was treated as a pilot for the data collection of week ten, the results of which comprise our findings. Qualitative analysis of the video record has been left out of this report, as it will serve to inform future research into multiple methods analysis of WTC.

The presence of the recorded interaction on Day 3 of data collection was intended to address criticism of previous research into group dynamics and WTC as relying on the "mono-method bias" of "self-report questionnaires" (Leeming, 2011). Recording the interaction of the full groups of participants was meant to provide a qualitative assessment of independent WTC in a "live", communicative environment. However, we predicted some limitations related to this method: issues of audio clarity, difficulty determining the initiating interlocutor in a conversation, and difficulty in monitoring and assessing WTC in fluid, unstructured conversation. Despite these limitations, however, it was the goal of this study to address criticism of data collection methods for WTC. Data was collected with the help of two (2) cameras that captured a 360 degree view of the research environment. Due to some limitations with the quality of the video as well as the difficulty of generating suitable criteria by which to judge external displays of WTC, qualitative analysis of this video will be used to inform future research designs, which are discussed in the final section.

Results

Questionnaire data from the week ten (final) procedure comprises our data for this study. The pre-task and post-task questionnaires comprised of 15-items, making for a total of 30 items, with each item falling into one of three categories of data type: assessment of WTC outside the classroom, assessment of WTC within the classroom, and general learner style and behavior. Out of the total 30 items, 18 items were selected (9 from the pre-task questionnaire and 9 from the post-task questionnaire) and paired for quantitative comparison. These items were paired on the basis of their assessing essentially the same learning scenario. For instance, question #3 from the pre-task questionnaire (*You are lost in the city in a foreign country. Will you ask for help?*) was paired with question #4 in the post-task questionnaire (*You are looking for the train station in a foreign country. Will you ask someone for help?*), and an analysis of if, or how, participant answers changed (in a 4-point Likert scale) gave us our primary dataset. For a full list of questionnaire items, please see appendix A. For each participant, we analyzed 18 of their answers; across 81 participants, this gave us 1,458 items for our dataset, which we felt provided a robust dataset for a study of this nature. Results will be shared and discussed in the context of our original research questions.

Research Question #1: Is there any correlation between the social structure of a task (in this case, independent versus group work) and an independent learner's WTC following the completion of said task?

Overall, the data shows only a very slight correlation between the work condition (group or independent) and the change in participant answers related to WTC. All four groups, in either conditions, showed little change in their self-reported WTC before and after the task. However, there are some small changes worth reporting.

Across the three types of data collected: (1) external WTC, (2) classroom WTC, and (3) learner style and behavior, external WTC question scores *decreased* overall in all four groups, with a slightly *larger* decrease in the *group work* condition. In other words, all participants reported a slight decrease in their willingness to communicate in scenarios occurring outside of the classroom (e.g., navigating cities in foreign countries; approaching peers in a conversation center as a foreign exchange student), with participants working in groups reporting a slightly larger decrease.

Classroom WTC questions asked students to report how often they volunteer answers in class or their preference of solo, partner, or group presentations for class projects. Scores for these question types *increased* overall, with a slightly larger increase in the *independent work* condition. Finally, scores for the learner style and behavior question types, which asked students to report their preference for studying - solo, as partners, or in groups, increased overall, with a slightly larger increase in *group work* conditions.

In summation, external WTC question scores slightly decreased, especially in the *group work* condition, whereas classroom WTC and learner style and behavior question scores slightly increased, particularly in the *independent work* condition and *group work* condition, respectively.

Research Question #2: *If a correlation is found, is it possible to design an intervention available to EFL classroom instructors that will positively affect students' WTC inside the classroom?*

Lacking support in the data for a strong correlation between work conditions and WTC, we do not have strong guidance in terms of designing tasks that might better elicit WTC within the classroom. This lack of a correlation may be considered "good news" for teachers:

if task-type does not have a significant *negative* impact on WTC, both independent and group work would seem to be acceptable conditions for L2 task-based learning.

It is possible, however, to pursue the question of whether this type of task, particularly in the group work condition, might in fact *decrease* external WTC amongst students, while *increasing* student preference for working with others as a learner style and behavior. At the same time, this task type, when completed in the *independent work* condition, might slightly *increase* student WTC within the classroom. Possible reasons for these variations will be discussed in the following section.

Discussion & Limitations

The slight decrease seen in student scores concerning questionnaire items related to external WTC scenarios might be explained by the following theory: as students spend their class time consistently working in their L2, they exhaust their cognitive resources and, by the time they took our post-task questionnaire, reported being less willing to continue to use their L2. Group work, as it calls upon students to negotiate meaning with their peers in their L2, can be presumed to be more socially demanding than independent work. independent work, meanwhile, draws only on a student's personal cognitive and L2 resources, so that by the time students in the *independent work* condition took our post-task questionnaire, they may have been "ready" to socialize with their peers more than the students who worked as groups.

In addition to this variation in task conditions, we should also consider the students' own perception of their L2 learning objective. Our participants were enrolled in a speaking and listening English course, in which a great deal of class time is spent in interactive, communicative and task-based learning scenarios. The communicative environment no doubt influences the students' perception of acceptable L2 objectives. The *group work* condition in this study more closely resembled the day-to-day activities of our courses. The *independent*

work condition represented a far less frequent task-structure: solo work conducted in silence. In the *group work* condition, participants may have felt that they had successfully completed the L2 objective for that day: communicative task-based learning - and therefore felt it less necessary, by the time of the post-task questionnaire, to further communicate in their L2. With their objective fulfilled, their WTC decreased. During the *independent work* condition, however, participants might not have perceived the L2 objective as having been fulfilled. Therefore, when asked in our post-task questionnaire about their willingness to communicate in their L2, there was more enthusiasm amongst a greater number of participants.

This theory is useful for two reasons. First, it explains the variation in scores from the *students'* possible point of view. Secondly, it points to the importance of considering student L2 objectives in designing task conditions. Teachers should, when deciding what outcomes their course seeks to meet, consider how these outcomes are received, and thus perceived by, their students. During the *independent work* condition, it's possible that participants were confused by the sudden change in the classroom atmosphere; independent work, after all, does not produce a communicative environment. By the time they were free to speak again, they reported a higher enthusiasm for using their L2, while the *group work* condition expended their communicative "energy" sooner. Our study suggests that teachers should consider the resources and planning that students undertake when they know they are facing a task-based L2 objective.

Despite all this, we have to recognize that classroom interventions of the type we designed will be inherently limited in measuring real-world WTC. As teachers we can only really be sure of controlling, to some extent, the actions, goals, and motivations of our students within the classroom. While task type might have an effect on WTC within the classroom, it is beyond the scope of this or any other controlled study to determine what motivates a student to exhibit WTC outside of the school environment.

Whereas group work may lower affective filters and create collaborative, enjoyable tasks, independent work may have a better chance of generating genuine WTC amongst students. However, if students perceive the primary objective of L2 instruction to be successful communication *within the classroom,* any WTC generated within the context of the classroom runs the risk of remaining there. Further research might investigate the relationship between tasks designed to increase WTC, and *student* perception of the purpose of task-based lessons.

References

- Bradley, N. (2013). Promoting a Willingness to Communicate in Japanese Students. **言語と文化：愛知大学語学教育研究室紀要**= *Language and culture: bulletin of Institute for Language Education*, (29), 23-38.

- Fushino, K. (2010). Causal Relationships Between Communication Confidence, Beliefs About Group Work, and Willingness to Communicate in Foreign Language Group Work. *TESOL Quarterly, 44* (4), 700-724. Retrieved from http://www.jstor.org/stable/27896760

- Gardner, R. C. (2004). Attitude/motivation test battery: International AMTB research project. *Canada: The University of Western Ontario*.

- Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context. *University of Hawai'i Second Language Studies Paper 20* (2).

- Leeming, P. (2012). Group Dynamics and SLA: A Review of the Literature. *Kwansei Gakuin University humanities review*, (16), 147-154.

- McCroskey, J. C., & Baer, J. E. (1985). Willingness to communicate: The construct and its measurement.

- Robson, G. (2015). A Model of Situational Willingness to Communicate (WTC) in the Study Abroad Context. *International Education Studies*, *8* (10), 114.

- Yashima, T. (2002). Willingness to communicate in a second language: The Japanese EFL context. *The Modern Language Journal*, *86* (1), 54-66.

- Macintyre, P. D., Dörnyei, Z., Clément, R., Noels, K. A. (1998). Conceptualizing Willingness to communicate in a L2: A Situational Model of L2 Confidence and Affiliation. *The Modern Language Journal, 82*(4), pp. 545-562.

Appendix

Pre-task Survey (W5 & W10)

Q#	Question	Answer Options
Q1	A new student looks lost on campus. Will you help them?	Definitely no (1) - Definitely yes (4)
Q2	An international traveler looks lost on the subway. Will you help them?	Definitely no (1) - Definitely yes (4)
Q3	You are lost in the city in a foreign country. Will you ask for help?	Definitely no (1) - Definitely yes (4)
Q4	You can't understand the menu in a restaurant in a foreign country. Will you ask for help?	Definitely no (1) - Definitely yes (4)
Q5	You are studying abroad. You are lost on campus. Will you ask for help?	Definitely no (1) - Definitely yes (4)
Q6	How important is it for your to learn English?	Not important (1) - Very important (4)
Q7	How good are you at learning English?	Not good (1) - Very good (4)
Q8	How often do you volunteer answers in your English classes?	Never Once a week Every class More than once every class
Q9	In a week, how often do you use English outside of class?	0, 1, 2-4, 5-7 (times)
Q10	How do you like to study for a test?	Alone In pairs In small groups
Q11	Which of these is your favorite way to practice English?	Alone In pairs In small groups
Q12	Which of these is your favorite way to prepare a presentation?	Alone In pairs In small groups
Q13	Overall, when do you feel most comfortable studying English?	Alone In pairs In small groups
Q14	Which do you prefer: giving a presentation by yourself, giving a presentation as a group, or writing a paper by yourself?	Presenting by myself Presenting as a group Writing by myself

Q15: Imagine yourself in the following situations. How likely are you to communicate in English in each of the following situations?

	Very unlikely	Unlikely	Likely	Very likely
Speak in public to a group of strangers (about 30 people)				
Volunteer an answer in class				
Volunteer to be a group leader during a class activity				
Talk to your teacher after class				
Ask a question during class				
Talk in a small group of strangers (about 5 people)				
Talk in a large meeting of people you have met once (about 10 people)				
Volunteer your opinions in class				

Post Task Survey (W5 & W10)

Q#	Question	Answer Options
Q1	An international student is sitting at the yellow sofa. Will you speak with them?	Definitely no (1) - Definitely yes (4)
Q2	A new student is looking for building 8. Will you help them?	Definitely no (1) - Definitely yes (4)
Q3	You are looking for the train station in a foreign country. Will you ask someone for help?	Definitely no (1) - Definitely yes (4)
Q4	You can't understand the map in a subway in a foreign country. Will you ask for help?	Definitely no (1) - Definitely yes (4)
Q5	You are studying abroad. You see an area similar to the yellow sofa. Will you sit down?	Definitely no (1) - Definitely yes (4)
Q6	How interesting is it for you to learn English?	Not interesting (1) - Very interesting (4)
Q7	How easy is learning English for you?	Not easy (1) - Very easy (4)
Q8	How often do you answer the teacher's questions in your English classes?	Never Once a week Every class More than once every class
Q9	In a week, how often do you use English outside of class?	0, 1, 2-4, 5-7 (times)
Q10	How useful was this activity?	Useless (1) - Very useless (4)
Q11	How difficult was this activity?	Very difficult (1) - Very easy (4)
Q12	If you did this activity again, which would you prefer:	Working alone Working in a group
Q13	How do you like to study?	Alone In pairs In small groups
Q14	What's the best way for YOU to practice your English skills?	Alone In pairs In small groups
Q15	What's the best way for YOU to prepare for a speaking test?	Alone In pairs In small groups
Q16	Overall, when do YOU feel most comfortable practicing English?	Alone In pairs In small groups
Q17	Which do you prefer: giving a presentation by yourself, giving a presentation as a group, or writing a paper by yourself?	Presenting by myself Presenting with a group Writing by myself

Q18: Imagine yourself in the following situations. How likely are you to communicate in English in each of the following situations?

	Very unlikely	Unlikely	Likely	Very likely
Speaking in public to a group of strangers (about 30 people)				
Volunteering an answer on the yellow sofa				
Discussing a class project outside of class				
Talking to your classmates after class				
Asking a question in the SALC				
Talking in a small group of strangers (about 5 people)				
Talking in a large meeting of people you have met once (about 10 people)				
Volunteering your opinions on the yellow sofa				

W10
Type 1: External WTC
PreQ3-Post Q3

3. You are lost in the city in a foreign country. Will you ask for help?

4. You are looking for the train station in a foreign country. Will you ask someone for help?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	*Value*	*Freq of change*	*Value*	*Freq of change*	*Value*	*Freq of change*	*Value*
0	2	0	2	0	2	1	2
3	1	1	1	2	1	5	1
11	0	13	0	14	0	9	0
4	-1	4	-1	5	-1	4	-1
0	-2	0	-2	0	-2	1	-2

PreQ4-PostQ4

4. You can't understand the menu in a restaurant in a foreign country. Will you ask for help?

4. You can't understand the map in a subway in a foreign country. Will you ask for help?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	*Value*	*Freq of change*	*Value*	*Freq of change*	*Value*	*Freq of change*	*Value*
0	2	1	2	1	2	0	2
7	1	3	1	4	1	8	1
7	0	11	0	15	0	6	0
6	-1	3	-1	1	-1	6	-1
1	-2	1	-2	0	-2	0	-2

PreQ5-Post Q5

5. You are studying abroad. You are lost on campus. Will you ask for help?

5. You are studying abroad. You see an area similar to the yellow sofa. Will you sit down?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	*Value*	*Freq of change*	*Value*	*Freq of change*	*Value*	*Freq of change*	*Value*
0	2	0	2	1	2	0	2
0	1	0	1	0	1	0	1
3	0	9	0	5	0	8	0
13	**-1**	8	-1	9	-1	10	-1
4	-2	2	-2	5	-2	2	-2

Type 2: Learner Style and Behaviors

PreQ9-PostQ9

9. In a week, how often do you use English outside of class?

9. In a week, how often do you use English outside of class?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	Value	Freq of change	Value	Freq of change	Value	Freq of change	Value
0	2	0	2	0	2	1	2
6	1	1	1	2	1	1	1
14	0	16	0	17	0	17	0
1	-1	2	-1	2	-1	1	-1
0	-2	0	-2	0	-2	0	-2

PreQ10-PostQ13

10. Which of these is your favorite way to practice English?

13. How do you like to study?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	Value	Freq of change	Value	Freq of change	Value	Freq of change	Value
1	2	1	2	1	2	0	2
5	1	5	1	8	1	4	1
7	0	10	0	9	0	5	0
8	-1	3	-1	2	-1	7	-1
0	-2	1	-2	0	-2	4	-2

PreQ11-PostQ14

11. Which of these is your favorite way to practice English?

14. What's the best way for YOU to practice your English skills?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	Value	Freq of change	Value	Freq of change	Value	Freq of change	Value
2	2	2	2	1	2	2	2
5	1	6	1	7	1	6	1
8	0	10	0	13	0	8	0
7	-1	1	-1	0	-1	4	-1
0	-2	2	-2	0	-2	1	-2

PreQ13-PostQ16

13. Overall, when do you feel most comfortable studying English?

16. Overall, when do YOU feel most comfortable practicing English?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	Value	Freq of change	Value	Freq of change	Value	Freq of change	Value
3	2	3	2	1	2	1	2
3	1	3	1	5	1	3	1
11	0	12	0	14	0	13	0
4	-1	2	-1	0	-1	4	-1
1	-2	1	-2	1	2	1	-2

Type 3: Classroom WTC

PreQ8-PostQ8

8. How often do you volunteer answers in your English classes?

8. How often do you answer the teacher's questions in your English classes?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	Value	Freq of change	Value	Freq of change	Value	Freq of change	Value
2	2	0	2	0	2	1	2
1	1	6	1	1	1	3	1
18	0	12	0	20	0	15	0
0	-1	0	-1	0	-1	1	-1
0	-2	1	-2	0	-2	0	-2

PreQ14-PostQ17

14. Which do you prefer: giving a presentation by yourself, giving a presentation as a group, or writing a paper by yourself?

17. Which do you prefer: giving a presentation by yourself, giving a presentation as a group, or writing a paper by yourself?

Group (01)		Group (04)		Group (05)		Group (06)	
Freq of change	Value	Freq of change	Value	Freq of change	Value	Freq of change	Value
3	2	2	2	0	2	1	2
4	1	6	1	0	1	2	1
10	0	8	0	21	0	14	0
3	-1	3	-1	0	-1	2	-1
2	-2	2	-2	0	-2	2	-2