Creating Conditions for Collaborative Learning in the Language Classroom

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Collaborative learning is more than just a collection of pair and group work techniques. Effectively employing collaborative learning requires that teachers re-conceptualize their classroom as a 'created' space. This space is designed by the teacher to create the kinds of learning opportunities that make collaborative learning an effective pedagogical tool. This paper describes the use of techniques grounded in collaborative learning theories to bring about two of the necessary conditions for successful collaborative learning — group cohesion and scaffolded interaction – in a university ESP classroom. As a result, there was better cooperation between students and greater engagement in a group design project.

コラボレーティヴ・ラーニングは、単にペアワークとグループワークの合作と思われがちであるが、 実際はそれ以上ものである。効果的なコラボレーティブ・ラーニングを行うためには、教師が「教室」 という場を「創造された場」として再概念化する必要があるとされている。教師がこの「創造された 場」を構築することで、コラボレーティヴ・ラーニングを効果的な教育的手段として用いることが可 能となる。この研究では、コラボレーティブ・ラーニングの場が奏効するために必要な2つの要素で ある「グループの結束力」と、「相互作用の促進」の二つを用い、コラボレーティヴ・ラーニングの技 術を適用することで、結果として工学部の大学講義において生徒間のより良い強調と、優れた設計 プロジェクトへと繋がったため報告する。

Pair-work and group activities are an accepted part of most teachers' practice. Working in pairs or small groups, learners can act as mediators who help to explain new ideas or information (Gillies, 2003), serve as a pool of resources, as a source of motivation and a base of support as well as helping to facilitate language learning (Dörnyei, 1997). Yet, as Gillies (2003) notes, "placing students in groups and telling them to work together" (p. 45) does not always end up in learning or even positive interaction.

The motivation for this study came out of an English for Special Purposes course for architectural

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students in a Japanese university. In one portion of the course, the students work in groups to create an architectural design and present it to the class. While the majority of the students enjoyed the project and found it worthwhile, there were difficulties in some groups that did not seem to interact or cooperate very effectively or with some members who did not seem engaged in the group or the project. This led to the question of how to increase engagement and cooperation in the groups and among the members.

Collaborative learning and its range of techniques, such as the jigsaw, think-pair-share or the three-part interview, aimed at getting students to interact in a group, seemed to offer a way out of this situation. However, as Abrami, Chambers, Poulsen, Korous, Farrell, and d'Apollonia (1994) found, teachers often neglect to put into place one or more the important aspects of collaborative learning.

To effectively employ collaborative learning in the classroom, teachers need to re-conceptualize their classroom as a 'created' space - one that has been designed to create the kinds of learning opportunities that make collaborative learning an effective pedagogical tool (Oxford, 1997). Berkeley, Cross, and Howe (2004) state that in a collaborative classroom, teachers "purposefully create a learning environment in which students interact with each other" (p. 29) and they make the intentional design of learning activities the first feature of collaborative learning.

The purpose of this study was to attempt to create such a space in the teacher-researcher's classroom and, using theories underlying collaborative learning, to design a collaborative learning environment. Widdowson's (1990) framework for pedagogic mediation was employed as the means to guide the development of principles grounded in professional knowledge but adapted to fit the context of the teacher-researcher's classroom (the process of developing these principles is described in Xethakis, 2016). These principles guided the design and implementation of activities aimed at creating conditions for successful collaborative learning in the

classroom. The effectiveness of these principles and the collaborative learning techniques employed were then assessed by means of classroom observation, teacher journals and student surveys. This paper focuses on the use of these activities to bring about two of these conditions.

Condition 1: Creating a Cohesive Team

One of the most essential conditions for collaborative learning to succeed is motivating students to work as a group (Cohen, 1994), ensuring that they feel that they are part of team and "working together in a coherent group," (Scrivener, 2012, p. 85). Working in a cohesive group provides several benefits to students, including higher L2 motivation (Clement, Dörnyei & Noels, 1994), and a greater likelihood of active interaction between students (Levine and Moreland, 1990). Figure 1 summarizes the procedure and techniques used to create a cohesive team in this study.

An important factor in creating a sense of cohesion in a group is establishing a zone of comfort and a good relationship between group members, and one good way of doing this is for learners to share personal information (Dörnyei, 1997). Both Dörnyei

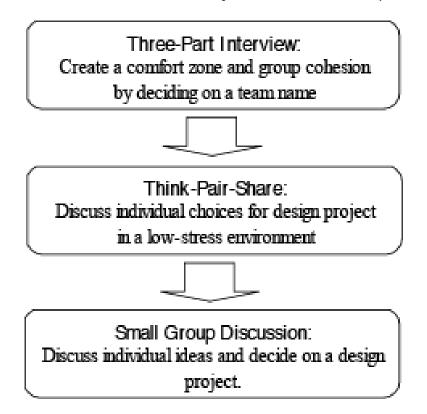


Figure 1. Collaborative learning techniques and aims in creating a cohesive team.

and Berkeley, et al (2005) recommend the use of icebreakers for this purpose. The three-part interview is a collaborative learning technique that is well suited for this purpose (Berkeley, et al, 2005). In this technique a group of four students is broken into pairs. The pairs interview each other, and then switch partners and repeat the process.

In this study, this technique was used to create a sense of cohesion by having the students discuss six prompts to find things they had in common, such as a favorite food, a place they would like to travel to, or an activity they enjoyed. All four members then used this information to come up with a team name based on those things all four team members had in common. The goal of creating a team name encouraged the beginnings of a sense of rapport between team members, as shown in a classroom observation,

While a few of the students weren't very outgoing, the large majority of the students began talking with each other using the questions prompts on the sheet. There was a lot of conversation and interaction. There were a lot of smiles and laughs as well, so the students seemed to be enjoying the activity. The groups worked together to find common points for everyone in the group, and coming up with group names went very quickly (less than five minutes). (Note 1-1)

While the ice-breaker helped to establish a rapport and a sense of cohesion, the overall purpose of this first class was to have the students discuss their ideas, decide on an architectural design and discuss some of its basic characteristics (size, location, access, etc.). This would then serve as a basis for more detailed discussions in the following classes.

Levine and Moreland (2004) note that for groups to work together creatively, the members of the group need to be motivated to share their ideas and feel that their ideas are useful to the group, they must communicate their ideas, and the group as a whole needs to take the time to consider the ideas and come to a consensus. To encourage this, the think-pair-share technique was employed. In the 'think' stage of this activity, the students are given time to consider an

answer to a question or problem individually. Next, the students discuss their answers in pairs or small groups. This is the 'pair' stage. After voicing their opinions and hearing those of their partner, the students then 'share' their opinions with the larger group. This activity allows students to try out their response in a more low-risk situation before 'going public' with them, increasing students' willingness to express their opinion. Allowing the students to practice their comments first also tends to increase the quality of response (Barkley, et al, 2005). These features of the activity are especially important in a language learning context where student anxiety is always a factor.

In this class, the students were given twelve choices to consider for their design project. They were asked to pick three and write out their reasons for choosing each. The students then paired-up with another member of their group, reading their choices and reasons while their partner listened and gave simple feedback on their ideas before changing roles. This process gave the students the time to prepare an answer and the opportunity to rehearse the answer before contributing to the more high-stakes whole group discussion.

The effect of the think-pair share technique in building a sense of comfort can be seen as well,

Some of the students were hesitant to start talking to their partner. However, after the first partner had read their first or second choice, the pairs seemed to relax and there was more physical interaction (Bodies moved towards each other, heads began to bob up and down). By the end of the task most of the pairs were talking more freely. (Note 1-1)

The outcome of these two techniques on the closing group discussion, where it seemed that the teams came together better and were more willing to share their preferences with each other, was noted in a journal entry,

I saw many of the students willing to read out their choices (as opposed to just showing their sheets) and this may have been a result of the earlier activities. There were lots of people turned around in their

seats (tough to do in this classroom, so if they do it they must be interested in talking with each other). In all the groups the students were involved in the process and really working as groups, with lots of interaction, talking about design ideas, and asking other members opinions. (Entry 1-1)

In addition to the teaching journal and classroom observation, a short survey was given to the students at the end of class to gain their point of view of on the activities. The results (See Appendix, Table 1) showed that the students enjoyed the activities overall and that they also felt that the set of activities helped them work better in their groups.

Condition 2: Scaffolding Interactions

For collaborative learning to succeed, teachers also need to consider how the students are expected to interact in each activity - a simple give and take of information or a more open exchange with a more elaborated discussion – and also the interplay between task, interaction and learning (Cohen, 1994).

McGroarty (1992) discusses the distinction between one- and two-way tasks in this context. Oneway tasks, where one student speaks, the other listens and then they switch roles, can provide learners with more practice in extended speaking and listening. This may give them greater confidence in their ability to express themselves as well as understand others. The think-pair-share task discussed above is can be seen as an example of this. Two-way tasks, such as a jigsaw activity, where learners interact with partners, sharing information to complete a task, are suitable when more substantial interaction is expected.

Cohen (1994) adds two additional dimensions to the conception of tasks adopted in this study the level of cooperation required and the degree of structure found in the task. Low-cooperation tasks merely require students to share information, as in a standard information-gap. High-cooperation tasks require students to work together to plan and make decisions in order to complete the task. The jigsawlike activity below is an example of this type. Tight

structure in a task includes explicit instructions or procedures, designated roles for students and a definite answer, whereas in loosely structured tasks the procedures for reaching a solution are not so clearly stated and there may not be a single correct answer.

In this study, the ultimate aim was for the students to engage in a loosely structured, highcooperation, two-way task - discussing and making decisions about aspects of an architectural design. To do this, the students' interactions in each class were scaffolded, through a series of activities moving from one-way, low-cooperation tasks, with tight structures to a loosely structured, highly cooperative group discussion. Figure 2 shows an example of how this was done in a class where students decided the layout of their groups' designs.

First, the students engaged in a tightly structured, low-cooperation activity - describing the position of several shapes while their partner attempted to draw an identical picture - to help them build confidence in their ability to explain locations.

The effect of the tightly structured one-way tasks on the students' degree of comfort and confidence is shown in the following observation:

The fun involved in the confusion of drawing the partner's picture gained the students' interest and the level of noise rose as it went on. Many students were actively gesturing, trying to explain where things were in the pictures, with the focus on getting the picture right rather than getting the language perfect. There was laughter and chatting as they did the activities and a lot of laughing when they compared pictures. (Note 1-3)

The next task - where students had to draw a quick sketch of their own house and then describe it to their partner - was similar, if a bit looser in structure, to the first task in level of cooperation and direction of communication, however it moved the content of the exchanges closer to the discussion activity.

The students then worked together as a group on a jigsaw-like task to fill in locations on the floor plan of a design using the different clues they had each been given. The nature of this activity provided

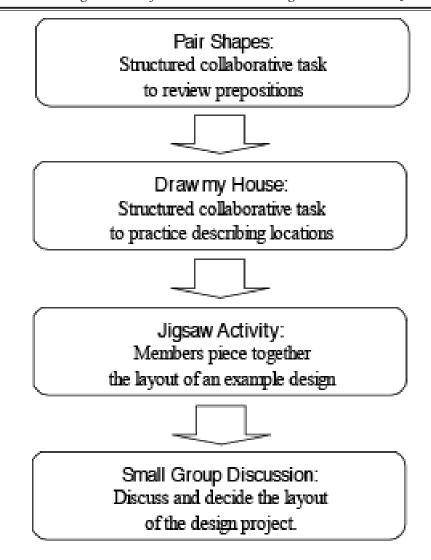


Figure 2. Class activities and their role in scaffolding students' interaction.

an opportunity for two-way interaction between group members with a lesser degree of structure, as well as introducing and providing students with an opportunity to practice language for expressing opinions about location, which they could use in planning their designs later in the class. It was hoped that this would allow the students to focus on understanding how the language related to an architectural design, rather than on understanding the language itself, as well as allowing the students to use the language more easily in their discussions of their own designs.

Another comment from the teaching journal shows the overall effect of scaffolding on the groups' interactions:

There was a continued level of interest and focus throughout the class and the amount of interaction

in the groups - asking for opinions, talking about ideas and no one person doing a majority of the work - shows that the pair-work and jigsaw-like activities contributed to the group work on the design project. It seemed that the movement from simple to more complex practice allowed the students to use more English in their group planning and five of the six groups were focused on doing their project with lots of talking, gesturing for explanations, nods and smiles in their interactions. (Note 1-3)

The results of the in-class survey (See Appendix, Table 2) also showed the students felt that the pair work and group activities helped them to work on their project, and that working in their groups on their project and interacting with the other group members helped them to learn English.

Discussion and Limitations

Barkley, Cross, & Howe (2005) stress the importance of designing tasks and structuring procedures to actively engage students and effectively employ collaborative learning. The series of activities discussed above helped to create conditions for successful collaborative learning by encouraging cohesion among the members of a team and scaffolding their interactions through the intentionally designed progression of the activities, moving from simple forms of one-way, highly-structured, low-cooperation interaction to more complex, two-way, 'ill-structured' (Cohen, 1994), high-cooperation forms. These activities were focused on a specific group project, however, by re-conceptualizing the use and aims of collaborative learning activities, as well as conventional pair and group activities, in their own classrooms, similar progressions of activities could be employed by teachers to improve student cooperation and interaction, as well as building confidence (McGroaty, 1992).

While this paper has shown the use of these activities in creating conditions for collaborative learning, some limitations should be noted as well. First, all the students were in the same department and have had many classes together. The cohort-like nature of the students might have predisposed them to working as a group, after overcoming some initial hesitancy. Because of this, and the fact that the study deals with only a single group of students, future research should examine the use of intentionally structured collaborative learning in other classrooms.

Moreover, though the overall levels cooperation and interaction improved greatly, there were still groups that didn't gel completely and this might be helped by more time for team-building. Prichard, Stratford and Bizo (2006) suggest that even ninety minutes of team-building training can provide longerterm benefits.

It should also be noted that while many of the interactions between group members were carried out in English, a large part of the group discussions took place in Japanese, so it is difficult to say if the techniques employed in this study helped to improve the students' English abilities. That being said, the primary aim of this study was to improve the quality of interactions and level of cooperation between group members and so this was considered an acceptable trade-off considering the overall level of the students. (For an example of activities to enable student discussions in the context of a group project, see Fushino, 2010.)

References

- Abrami, P. C., Chambers, B., Poulsen, C., Kouros, C., Farrell, M., & D'Apollonia, S. (1994). Positive social interdependence and classroom climate. Genetic, Social, and General Psychology Monographs, 120(3), 329-346.
- Barkley, E. F., Cross, K. P., & Howe, C. (2004). Collaborative learning techniques: A handbook for college faculty. San Francisco, CA: John Wiley & Sons.
- Clément, R., Dörnyei, Z., & Noels, K. A. (1994). Motivation, self-confidence, and group cohesion in the foreign language classroom. Language learning, 44(3), 417-448.
- Cohen, E. G. (1994). Restructuring the classroom: Conditions for productive small groups. Review of Educational Research, 64(1), 1-35.
- Dörnyei, Z., & Malderez, A. (1997). Group dynamics and foreign language teaching. System, 25(1), 65-81.
- Fushino, K. (2010). Let's try cooperative learning group projects! In A. M. Stoke (Ed.), JALT 2009 Conference Proceedings. (pp. 359-369). Tokyo: JALT.
- Gillies, R. M. (2003). Structuring cooperative group work in classrooms. International Journal of Educational Research, 39(1), 35-49
- Levine, J. M., & Moreland, R. L. (1990). Progress in small group research. Annual Review of *Psychology*, 41(1), 585-634.
- Levine, J. M., & Moreland, R. L. (2004). Collaboration: The social context of theory development. Personality and Social Psychology *Review*, 8(2), 164-172.
- McGroarty, M. (1992). What can peers provide?. Georgetown University Round Table on Languages and Linguistics (GURT) 1991:

- Linguistics and Language Pedagogy: The State of the Art, (pp. 40 – 55). Washington, DC: Georgetown University Press.
- Oxford, R. L. (1997). Cooperative learning, collaborative learning, and interaction: Three communicative strands in the language classroom. The Modern Language Journal, 81(4), 443-456.
- Scrivener, J. (2012). Classroom management techniques. Cambridge, England: Cambridge University Press.

Prichard, J.S., Stratford, R.J. and Bizo, L.A., (2006).

- Team-skills training enhances collaborative learning. Learning and instruction, 16(3), 256-265.
- Widdowson, H. G. (1990). Aspects of language teaching. Oxford, England: Oxford University Press.
- Xethakis, L. J. (2016). Bringing theory into the classroom: Widdowson's framework for pedagogic mediation in individual practice. In G. Brooks, M. Porter, D. Fujimoto, & D. Tatsuki (Eds.), The 2015 PanSIG Journal (pp. 205-213). Tokyo, Japan: JALT.

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Larry Xethakis lectures in the Faculty of Engineering at Kumamoto University. His research interests include collaborative learning, student engagement; English for special purposes and vocabulary learning; pedagogy and the role of theory in practice; teacher autonomy and conceptions of practice.

Appendix

Results from In-class Student Surveys

Stude	nt replies regardir	Table 1:	cohesive team. ((n=22)
Q1: Was today's class int	(M=4.36)			
It was boring.		It was OK.		It was interesting.
1	2	3	4	5
_	_	3	8	11
Q2: Do you think your g	(M=4.36)			
It was boring.		It was OK.		It was interesting.
1	2	3	4	5
_	1	1	9	11
Q3: Did you enjoy doing	(M=4.14)			
It was boring.		It was OK.		It was interesting.
1	2	3	4	5
_	_	4	11	7
Q4: Did today's class hel	(M=4.14)			
No, not at all		It helped some.		Yes, a lot.
1	2	3	4	5
_	1	3	10	8
Q5: Did working in a gro	(M=3.50)			
No, not at all		It helped some.		Yes, a lot.
1	2	3	4	5
_	3	11	2	6
Q6: Did you use English	(M=3.36)			
No, not at all		I used some English		Yes, a lot.
1	2	3	4	5
_	4	10	4	4

Table 2: Student replies regarding activities aimed at scaffolding interaction. $(n=18)$						
Q1: Was today's class in	(M=4.06)					
It was boring.						
1	2	3	4	It was interesting.		
_	_	6	5	7		
Q2: Did today's pair and	(<i>M</i> =3.83)					
No, not at all.		Yes, a lot.				
1	2	3	4	5		
_	_	7	7	4		
Q3: Did working on you	(M=3.89)					
No, not at all.		It helped some.		Yes, a lot.		
1	2	3	4	5		
_	_	5	10	3		
Q4: Did working in a gr	(M=3.89)					
No, not at all		It helped some.		Yes, a lot.		
1	2	3	4	5		
_	_	7	6	5		
Q5: Did talking with th	(M=3.61)					
No, not at all		It helped some.		Yes, a lot.		
1	2	3	4	5		
_	2	6	7	3		
Q6: Did you use English	(M=3.33)					
No, not at all		It helped some.		Yes, a lot.		
1	2	3	4	5		
1	2	8	4	3		