

# STUDENTS' PERCEPTIONS AND SATISFACTION TOWARDS COOPERATIVE LEARNING IN A UNIVERSITY COURSE IN CHINA

Yvonne Marie Tiandem-Adamou, Ed.D. Lecturer, English Department, Wenzhou Kean University, China ytiandem@kean.edu ORCID # https://orcid.org/0000-0001-6716-8818

Jace Hargis, Ph.D. Professor; Vice President Academic Affairs, Kean University jace.hargis@gmail.com ORCID: http://orcid.org/0000-0002-9372-2533

# ABSTRACT

This study aimed to explore Chinese students' perceptions and satisfaction with cooperative learning (CL) in a University Course. The researchers employed qualitative data using teacher observation and notes, students' endof-course reflective papers, and a survey questionnaire asking about students' satisfaction with the group activities to gain insight into participants' perspectives. The results revealed that although students were unfamiliar with cooperative learning methods at first, they later enjoyed learning while working in groups. A composite scale of all ten satisfaction survey questions showed a mean score of 4.392 and a standard deviation of .69259 to establish overall student satisfaction with CL methods. Cooperative learning is an efficient method to promote students' engagement, help students form a social bond, and improves students' communication skills with enhanced confidence and autonomy. Some challenges of the cooperative learning methods were attributed to time constraints, standardized curriculum, group dynamics, and scheduling issues. Nevertheless, students' perceptions and satisfaction with cooperative learning were positive.

Keywords: Cooperative learning, English as a foreign language, group work, teamwork in learning.

# Introduction

For Chinese students, Cooperative Learning (CL) promotes peer interaction to assist in language development and content learning. CL ingeniously combines various learning processes to challenge students at the highest intellectual and social levels (Millis, 2014; Stenlev, 2003; Palmer, 2008; Romney, 1996). For example, assigning students to small groups allows them to observe peer learning, work together in solving problems and motivate each other in completing group tasks (Kagan & Kagan, 2009). Studies show that CL promotes interaction, communication, and discussion, encouraging students' academic, cognitive, and social development. In addition, there is evidence that CL fosters reading comprehension, listening, and communication skills to improve interaction during learning.

Moreover, students' participation in group discussions enables content-based language to negotiate agency within the group and utilize key language concepts to explain ideas and promote learning (Palmer, 2008; Zhang, 2010; Keeler & Steinhorst, 1995). In addition, small group discussion allows for thought-provoking discussion and exchanging ideas amongst group members to enhance cognition and motivate students. At the same time, they engage in a heated debate over real-life issues affecting their communities. Finally, with group dynamics focusing on peer interaction, students' social skills develop through active learning techniques, interaction with the teacher improves as students build confidence, and a positive classroom setting is established (Johnson & Johnson, 1991; Millis, 2014; Stenlev, 2003).

In China, the traditional teaching methods, which are often teacher-centered, limit opportunities for students to initiate and engage in conversation in the classroom (Juan, 2012). With considerable attention given to educational reform and foreign language education, there has been more emphasis on the communicative aspect of mastering English as a foreign language. Although teacher-centered methods are standard, examining student-centered learning strategies to promote increased communication and interaction amongst students in classrooms is essential. Studies show that CL promotes exchange, communication, and discussion, encouraging students' academic, cognitive, and social development (Zhang, 2010). There is evidence that CL fosters reading comprehension, and listening and communication skills to improve interaction during learning (Stepanovienė, 2013). Moreover, students' participation in group discussions enables content-based language to negotiate agency within the group and utilize key language concepts to explain ideas and promote learning (Romney,1996). In addition, small group discussion promotes thought-provoking discussion and the exchange of ideas amongst group members to enhance the cognition processes and motivate students to discuss real-life issues on select topics. With group dynamics focusing on peer interaction, students' social skills are developed through active learning



techniques. Interaction with the teacher improves as students build confidence when cooperation is established in the classroom (Celik, Aytik, Bayramc, 2012).

Despite studies on the importance of cooperative learning in promoting CL and many other socio-emotional issues in education, there remains a gap in second language-related research on cooperative learning in university classrooms in China. Therefore, understanding students' perceptions and satisfaction toward collaborative learning in the EFL classroom context in China are necessary to address this gap and gain insight into suitable methods for foreign language instruction. This research exploring students' perceptions and satisfaction toward cooperative learning in university is necessary to inform policy and practice additional strategies to support language learners attain proficiency goals effectively.

Hence the study aimed to answer the following research questions (RQ). **RQ1**. What are Chinese students' perceptions of cooperative learning in the EFL classroom? **RQ2**. What is Chinese students' satisfaction with cooperative learning in the EFL classroom?

## Literature Review

#### **Cooperative Learning**

Cooperative learning (CL) explores the effectiveness of collaboration in education. It is a learning method based on small groups of diverse learners working together towards a common goal (Laal & Laal, 2012). This form of learning is effective when working with students that emphasize individual abilities and contributions. It allows them to work in teams and recognize others' responsibility toward achieving set group goals. Doing so improves students' knowledge acquisition and academic achievements. If implemented effectively, this method can systematically improve learners' self-esteem, perception of tasks, and peer comprehension (Laal, & Ghodsi, 2012; Olsen & Kagan, 1992). In addition, CL effectively creates social interaction among students and helps EFL students overcome public speaking phobia (Palmer, 2008; Celik, Aytik, & Bayramc, 2012; Johnson et al., 2014). There is also evidence that group work helps reduce anxiety amongst learners as students work together to discuss questions and find solutions to problems.

Assigning group roles such as reporter, recorder, timekeeper, and materials manager allow students to develop different skills needed to be effective collaborators. They seek solutions to the problem together and contribute to collective group work without experiencing direct pressure to do so alone (Kagan et al. 2008). By allowing students to acknowledge various perspectives, they become more tolerant towards each other and develop diverse views, thus strengthening their autonomy as each member recognizes their responsibility towards the group (Romney, 1996). According to Stelev (2003), CL is democratic teaching exposing students to diverse contexts and challenging students to explain their perspectives and listen to others reflect and feel connected throughout the learning process. Through CL, students' attitudes are improved, and its versatility appeals to the various bits of intelligence and fun learning for students. Through CL learning, students can clarify ambiguity, seek the meaning of new vocabulary, and examine necessary grammatical structures. By collectively researching the functions of certain language concepts, students understand new concepts, seek support from each other, and speak more fluently. Through group dynamics in CL, students' communication and social skills significantly increase as they engage in active listening, sharing, persuasion, and argumentation activities. These also promote developing constructive social relationships among learners (Stepanoviene, 2013).

To successfully implement CL, it is critical for tasks to be distributed amongst students. Each group member must accomplish their assigned job using the same material and information. Also, tasks/information could be repartitioned in various parts/sections assigned to each member in the group. For example, the tasks could include problem analysis, peer interaction, communication when researching the topic, and interpretation and presentation to the class (Coelho, 1992; Stepanovienė, 2013). Online learning tools such as Google Documents and discussion boards can promote student collaboration (Johnson et al., 2014; Revere & Kovach, 2011). However, the learner's attitude when using cooperation is critical for completing the activities (Edmunds, Thorpe & Conole, 2012; Liaw, Chen & Huang, 2008). In second language classrooms, focusing more on improving communicative skills and allowing the students to communicate is vital. Hence the determining criterion is to determine how much output each student is given a chance to produce to achieve language acquisition and communicative competencies (Stelev, 2003). Another study showed students engaging in cooperative learning help students attain higher achievement than peers engaging in competitive and individualistic learning settings. Students in collaborative classrooms have relationships, and self-esteem and retention improve with better mastery of course material (Zhang, 2010). According to Kennedy Harvard School (n.d.). CL allows for active learning and instructional flexibility as the classroom layout enables shifts to small group discussions and the use of technology to promote critical thinking and problem-solving skills. Through CL, students can access polling and wireless projection and engage with virtual guests from other parts of the world.



## Advantages of Cooperative Learning.

Studies show that CL helps students improve problem-solving skills, perform better on quizzes and examinations, allows students to develop more positive attitudes toward mathematics, and enhances students' learning experience in small groups. There is also evidence that students' performance in critical thinking significantly improves when working in small groups (Laal & Gdohi, 2012; Keeler & Steinhorst, 1995). College writing courses involve learning new concepts, problem-solving, and critical thinking skills. Hence a structural approach to teaching that promotes student interaction and cooperation is necessary to keep motivated rather than the isolating and competitive climate of many college courses. There is also evidence that students learn better and retain more when engaging in critical thinking rather than passively listening to lectures. Using CL techniques promotes active learning (Stepanovienė, 2013). Garfield (1993) points out that CLs focus on improving students' collaboration, communication, engagement, and participation. When students engage in cooperative work, each group member continuously interacts throughout the learning process. When sharing information, peer communication improves, encouraging group work involvement (Johnson & Johnson, 1991).

Furthermore, CL enables students to overcome learning anxiety, overcome self-restraint and timidity and gain opportunities to enhance communication through frequent exchange with group members. Students begin using the language more creatively when completing group activities when reading, listening, speaking, and writing (Romney, 1996). Another significant advantage is that students get more opportunities for comprehensible input, output, and negotiation processes due to social interaction maximizing communication in the target language (Johnson et al., 2014; Zhang, 2010).

Unlike traditional classrooms, where teachers often initiate conversations, CL classrooms allow students more communication opportunities, like mimicking real-life social situations in which language is typically used (Romney,1996).

Moreover, students produced more diverse speech or communication when engaging in group work than in teacher-centered activities. Since CL allows students to fearlessly request, clarify, or make suggestions, agree/disagree, and negotiate meaning when working in small groups (Johnson et al., 2014).

#### Method

The study aimed to determine students' perceptions and satisfaction with CL. Hence, qualitative research design uses teacher observation and notes and students' reflective papers and qualitative surveys with questions to gather participants' satisfaction and gain insight into their perspectives on engaging in CL activities in a course (Leech & Onwuegbuzie, 2007).

### **Research Design**

The qualitative data determined EFL students' perception of CL in an EFL course. Qualitative research allowed for purposive sampling to gather the most relevant information to inform the research questions (Fraenkel & Wallen, 2008; Patton, 2002). Observation and reflective notes are among the most effective methods of collecting qualitative data since it allows detailed inquiry into participants (Creswell, 2007). In psychological research, self-report questionnaires are standard, mainly when the construct under investigation requires understanding the respondent's perceptions or beliefs. The respondent's perspective is essential for these constructs, especially in the absence of published theory from which to derive instrument content. Qualitative methods' information-rich nature allows researchers to comprehensively summarize the research topic (Olshansky et al., 2012).

Students' qualitative responses to working in groups were evaluated by asking students to rate their degree of satisfaction with the group format, the value of group work, and the degree of satisfaction working group format. These questions were borrowed from a similar study exploring student satisfaction with CL (Keeler & Steinhorst, 1995). Participants were asked to complete an anonymous survey at the end of the course. The survey was delivered electronically via a google form, and results were tabulated after submitting the final grades in the course. The survey examined ten satisfaction areas using a five-point Likert scale rating with 1-lowest to 5-highest satisfaction, including questions related to writing activity workgroups. A pilot test was of the research instruments conducted with N = 15 students not involved in the study but reflecting the same characteristics as participants (undergrads EFL students) to check language and translation issues, determine the reliability, and guide changes in the final version of the instrument. Participation in the study was voluntary. Thirty-nine students completed the satisfaction survey questionnaires after gaining informed consent. Also gathered from students' end-of-course reflective essays and teacher's notes and observations. Besides suggesting methods for forming and using groups, the extra time committed to planning and implementing the CL activities is discussed.



#### **Role of the Researcher**

The researchers' roles were to thematize and answer the research question, establish why the topic was necessary, and determine the research method. Answering these questions provided the format for the study background, data collection, analysis, and reporting (Fink, 2000). In addition, the researchers prepared and planned the study design and selected the data collection technique, which kind of data to use—teacher observation and notes, students' reflective essays, qualitative survey—and determined how to categorize the data. The researchers also performed data verification analysis to ensure the findings could be generalized, reliable, and valid before writing the research report to present the study findings.

#### **Study Context**

The study context was a university course in an English Medium Instruction (EMI) university established as a research institution located in China with an enrollment of approximately 3000 students. The class met for one hour and 45-minutes twice a week, using various online texts, videos, and other resources from open educational resources (OER). Weekly assignments and activities were based on topics covered in class with the same content and difficulty and scored using an analytical rubric to award full and partial credit. The course requirements included weekly discussion forums, assignments, group activities, and presentations. All these activities counted towards the final grade. Students cooperated on in-class group activities and homework but were individually responsible for the final exam. Several approaches were used to form cooperative groups (Garfield, 1993). Past studies relied on heterogeneous groups with high to medium to low-ability students (Lindow, Wilkinson, & Peterson 1985), while others used a narrower range of ability in groups. However, mixed abilities groups are preferable since it allows students to select their groups while mixing ability levels (Cumming, 1983).

The instructor formed the groups for this cooperative learning by randomly selecting students. Each group included teams with different genders and ability levels to make the groups as heterogeneous as possible. There were also six groups of four formed and three groups of five. Group activities were frequent throughout the semester. The group activities required collaboration to complete questions previously prepared in a google form during the one-hour and 45-minute period. After introducing the main topics and vocabulary, students watched a short 7–10-minute video on a set concept taught. Then, a google link to questions related to the material covered. Groups were encouraged to reflect, share their thoughts, and answer questions. The responses for each lecture were graded after each group member's submission of the google form responses. Groups notified the instructor of compliance, who immediately verified accuracy. If a group answered all the questions for the weekly group activity correctly, they were given automatic credit for the homework (Discussion post) due that week. Group members were also expected to assist each other with questions on the assignment and to support each other's learning.

Since the class met twice a week for one hour and 45 minutes, the second class meeting each week was devoted to discussing weekly homework due on Friday. Groups were required to work together in writing answers to homework questions and share them in class presentations using a smartboard. The instructor was available during this session to answer questions from the groups. Questions were collected and randomly chosen for review with the whole class on Fridays. Groups received credit for the response only if all group members were present. Each team member received five bonus points if the group answered all the questions correctly, four bonus points if they missed one or two questions, and two bonus points if they missed three or four questions. Teams missing five or more questions received no points.

Students also engaged in gamified group activities to compete with other groups. These activities required the teams to assign a rep to compete against other teams. Groups collaborated in hinting at their rep on the correct answer. Teams who came up with the correct solution first received the points. Since group rewards encourage interaction and help behaviors among group members (Webb,1991), group rewards in the form of stickers are redeemable for bonus points added to the lowest assignment. Additionally, grades were awarded for a group performance on gamified group activity. Although outside meetings were encouraged amongst group members, these were not very common due to schedule conflicts and social reasons, and outside meetings were not mandated or monitored in this study.

#### Data analysis and Process

The survey was analyzed and interpreted, researchers' field notes and students' reflective essays were read several times, and recurring themes were identified and tagged (Hatch, 2002; Leech & Onwuegbuzie, 2007). The data was later organized into main themes and narrowed down to subcategories, and the results were interpreted based on the research questions. Peer debriefing was performed by a colleague not directly involved with the study to verify the interpretations of the data, and the investigators concluded to establish study trustworthiness (Creswell, 2007; Fraenkel & Wallen, 2008).



## Findings

The first research question was to determine Chinese students' perceptions of cooperative learning in the EFL classroom. Students' understanding of CL and perceived benefits of engaging in CL activities in class were also explored.

## Chinese EFL students understanding of Cooperative learning.

When asked about the understanding of cooperative learning at the beginning of the semester, many students were observably confused. They had never experienced such a learning method. Introducing students to group work and giving detailed guidelines on CL were significant throughout the semester. At the end of the course reflection, a student pointed out

"This English class was different from my English class during high school. We have team works in the class, and everyone has their part". To reiterate their first encounter with CL, another student mentioned that:

"I still remember the first-day professor arranged five of us to be together. We had never met. We did not talk about anything and remained silent" One student also reiterated, "the teacher divided us into several groups to encourage learning from each other at the beginning of the course"

Although students were a little reluctant *at the beginning of the semester, a few weeks later it was apparent* they began a consensus as to the benefits of working together in groups and collaborating on classroom activities. Mutual interdependence was gradually instilled in students' learning habits as they realized that everyone played a vital part in completing one part of the task; thus, they must rely on each other, as noted by this student.

"At the beginning of the work, I was afraid of expressing my perspectives. However, my partners are all friendly and encouraged us to present different aspects." Another student reported, "It is beneficial for me to reflect on myself by comparing the strengths and weaknesses of my classmates."

## Benefits of Cooperative Learning

Students expressed that collaboration was essential to writing and communicative language learning. Students revealed the benefits of working as a group. One student shared that "we learned and completed the papers together. When we studied in a group, I found that everyone could contribute. Whenever we meet difficulties, there will be someone in the group who had already understood and taught us."

CL learning allowed students to sample each other's work and learn from their peers, as revealed by one student, "I participated in the DQ comments, and I can gain peer suggestions and better understand knowledge by scanning others' responses after finishing my comment. It is beneficial for me to reflect on myself by comparing the strengths and weaknesses of my classmates."

Students benefited from learning from each other and only sought the instructors if they could not get an answer from their peers. A student revealed, "We ask questions in the group, such as problems about assignments or if we need to use the class on any day or give some advice on each other's essays. This way, we don't need to send many emails to the professor. We can get the answer quickly because we always use WeChat".

Most students cherished their experience with cooperative learning, noting, "*I will cherish the precious experience*. *I* will employ the knowledge I have learned in the future. Moreover, the teamwork of a whole essay by Group 1 is impressive. The whole group brainstormed to come up with a topic through heated discussion. Everyone completes their task through negotiation. Finally, everyone gives suggestions to polish the whole essay"

The online forum discussion was also helpful in promoting learning and collaboration; a student noted, "*Those* exercises like DQ and peer review allow students to comment to others. I learned many ideas from other students, which can improve my ideas. Learning from others always helps us improve our skills. Those Readings also gave me more knowledge about the content I learned in the class".

Social interactions improved, and friendships were created among students in this course. A student pointed out, "*Teamwork was not only about how to complete a task together but also learned from each other. I knew people around me could also be good teachers to me. By being active in team collaboration, we can get friendship and knowledge from people.*"

The second research question assessed students' responses to satisfaction in working in groups. We asked students in a CL course to rate their satisfaction with the group work in this course, as shown in Table 1 below. The total sample was 39 students in an EFL university course. The questionnaire sought to determine their satisfaction level (1=lowest to 5=highest) regarding CL in promoting social interaction and communication in the classroom.



Variables	Lowest Satisfaction	Somewhat Satisfaction	Moderate Satisfaction	Satisfied	Highest Satisfaction	Mean	Std. Dev
Enjoyed writing as a workgroup	0	0	4 (10.3%)	10 (25.6%)	25 (64.1%)	4.54	0.682
Time allotted for groupwork in class	0	0	3 (7.7%)	13 (33.3%)	23 (59%)	4.51	0.644
Enjoyed the group online forum	0	1 (2.6%)	4 (10.3%)	13 (33.3%)	21 (53.8%)	4.38	0.782
Valued the group activity in terms of learning outcomes		1 (2.6%)	5 (12.8%)	10 (25.6%)	23 (59%)	4.41	0.818
Would work in this type of group activity again	1 (2.6%)	0	4 (10.3%)	13 (33.3%)	21 (53.8%)	4.36	0.873
Group members assisted completing homework - in class	0	2 (5.1%)	4 (10.3%)	11 (28.2%)	22 (56.4%)	4.36	0.873
Group members assisted in completing homework - outside the class	0	3 (7.7%)	7 (17.9%)	10 (25.6%)	19 (48.7%)	4.15	0.988
Cooperation among group members	0	1 (2.6%)	4 (10.3%)	13 (33.3%)	21 (53.8%)	4.38	0.782
group communicate better	0	1 (2.6%)	3 (7.7%)	12 (30.8%)	23 (59%)	4.46	0.756
group members help improve your final grade in this class	0	1 (2.6%)	5 (12.8%)	12 (30.8%)	21 (53.8%)	4.36	0.811

**Table 1.** CL Satisfaction Level among Chinese EFL Students

In table 1, most students were highly satisfied with the ten survey statements. More importantly, 64% of the students were highly satisfied with their writing activity in work groups. Similarly, 59% of students were delighted with their group communication. Finally, 53.8% of students were glad about their team cooperation. The mean score shows a similar result for high satisfaction with CL for all ten statements was above 4. Thus, students were more pleased to engage in CL in this course. Also, to determine students' overall level of satisfaction with CL in this course, we used a composite scale to establish the combined mean of the ten statements since they had similar response categories. The overall students' satisfaction with CL is shown in table 2.

Table 2. Overall Satisfaction	<i>i</i> with Cooperative Learning
-------------------------------	------------------------------------

	Ν	Minimum	Maximum	Mean	Std. Deviation				
Scale Mean	39	2.30	5.00	4.3923	.69259				
Valid N (listwise)	39								

As seen in Table 2, the overall mean satisfaction level among Chinese EFL students was 4.29. Implying higher satisfaction with CL activities in this course, as illustrated in Figure 1 below.







# **Discussion And Suggestions**

The current study demonstrates active engagement and collaboration in completing tasks in CL settings. The results showed students were very satisfied with the group activity and valued working in a group but needed more time to complete the group activities. Students also agreed that group members helped them achieve the required work in and outside class. Strong bonds of friendship were formed among those groups who frequently met outside the course, and those students reported keeping in touch with each other after the course ended. Communication and cooperation among group members improved as they got to know each other better, and they began to enjoy this CL experience. Literature on CL emphasizes more purposeful involvement by the teacher in CL settings (Kagan & Kagan, 2009). In addition, instructors should consider the learning context to guide them in determining whether they can allow students to choose their groups or assign students to groups (Johnson & Johnson, 1991; Millis, 2014; Stenlev, 2003). After the group's members form a bond, it is up to them to assign formal roles to group members. Still, instructors must keep track to avoid situations where someone dominates the discussion or is not contributing.

It is also important for instructors to keep track of group activities by circulating the classroom, asking/answering questions, and gently encouraging group members' involvement, especially when we observe that a member is not functioning. Alignment of course objectives, course materials, and assessments is vital in CL settings. Hence, for CL to be effective, course material must align with course outcomes, and class activities and lectures must orient toward meeting the lesson objectives. Students should be given opportunities to practice the new concepts well before application. Considering large enrollments in some college courses, instructors should consider the impact of CL on their in- and out-of-class time since these methods require lots of commitment and instructional time.

Moreover, limited time constraints, standardized curriculum, group dynamics, and scheduling issues were other issues of CL settings.

Nonetheless, CL could benefit instructors because they assist students in groups rather than as individuals making this teaching method time productive. Also, encouraging peer/peer tutoring can alleviate the burden of meeting with instructors and enable instructors to focus more on students struggling to understand more abstract and complex concepts. Using google forms for group quizzes may benefit instructors since the assignments are immediately graded, and students' scores are returned directly, lessening the burden of grading the quizzes and activities. Group performance in each activity may provide instructor feedback on what students understood and needed to be reviewed.

# Conclusion

This study showed students increased satisfaction working in group settings. Although CL requires a lot of planning time and intentional teaching, students benefit more from learning in a cooperative setting. Hence, it is important to culminate CL methods with active learning strategies, including a mix of lectures and presentations; using short videos followed by a significant group activity could promote students' engagement and learning motivation. Through CL, students form social bonds of friendship, causing them to enjoy the class more. In addition, they gain from peer tutoring, develop a sense of satisfaction to succeed in the course, and achieve their long-term learning goals.



#### References

- Casal, S. (2008). Cooperative Learning in CLIL Contexts: Ways to Improve Students' Competences in the Foreign Language Classroom. IEEE Conference: Cooperative Learning in Multicultural Societies: Critical Reflections. Turin, Italy.
- Celik, S; Aytik, K; Bayramc, E. (2012). Implementing cooperative learning in the language classroom: opinions of Turkish teachers of English. Procedia *Social and Behavioral Sciences*, 70, 1852 1859. doi: 10.1016/j.sbspro.2013.01.263

Coelho, E. (1992). Jigsaw: Integrating Language and Content. In: Kessler, C.(ed)Cooperative language learning. A Teacher's resource book. Englewood Cliffs. NJ: Prentice Hall.

- Creswell, J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches (2nd ed.): Thousand Oaks, CA: Sage.
- Cumming, G. (1983), "The introductory statistics course: Mixed student groups preferred to stream," *Teaching of Psychology*, 10, 34-37.
- Fraenkel, J. R., & Wallen, N. E. (2008). How to design and evaluate research in education (7th ed.). New York, NY: McGraw Hill.
- Fink, Anne. (2000). The Role of the Researcher in the Qualitative Research Process. A Potential Barrier to Archiving Qualitative Data. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research. 1.
- Gallagher, C. (1999). Lev Semyonovich Vygotsky. Psychology History. Available at <u>www.muskingum.edu/-</u> psych/psycweb/history/vygotsky.htm
- Garfield, J. (1993). "Teaching statistics using small-group cooperative learning," *Journal of Statistics Education*, *1*(1).
- Johnson, D. W., & Johnson, R. T. (1991). Learning Together and Alone: Cooperative, Competitive, and Individualistic (3rd Edition). Englewood Cliffs, NJ: Prentice Hall.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (2014). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal on Excellence in College Teaching*, 25(3&4), 85-118.
- Kagan, S. & Kagan, M. (2009). *Kagan Cooperative Learning*. San Clemente, CA: Kagan Publishing. <u>www.KaganOnline.com</u>.
- Keeler, C. M. & Steinhorst, K. R. (1995) Using small groups to promote active learning in the introductory statistics course: A report from the field, *Journal of Statistics Education*, 3:2, DOI: 10.1080/10691898.1995.11910485
- Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia-Social and Behavioral Sciences*, 31, 486–490. doi:10.1016/j.sbspro.2011.12.091
- Laal, M., & Laal, M. (2012). Collaborative learning: What is it? *Procedia-Social and Behavioral Sciences*, 31, 491–495. doi:10.1016/j.sbspro.2011.12.092
- Leech, N. L., & Onwuegbuzie, A. J. (2007). An array of qualitative analysis tools: A call for data analysis triangulation. *School Psychology Quarterly*, 22(4), 557-584. doi: 10.1037/1045-3830.22.4.557
- Lindow, J. A., Wilkinson, L. C., and Peterson, P. L. (1985), "Antecedents and Consequences of Verbal Disagreements During Small-Group Learning," Journal of Educational Psychology, 77(6), 658-667.
- Millis, B. J. (2014). Using cooperative structures to promote deep learning. *Journal on Excellence in College Teaching*, 25(3&4), 139-148.
- Olshansky, E., Lakes, K. D., Vaughan, J., Gravem, D., Rich, J. K., David, M., Nguyen, H., & Cooper, D. (2012). Enhancing the construct and content validity of rating scales for clinical research: Using qualitative methods to develop a rating scale to assess parental perceptions of their role in promoting infant exercise. *Int J Educ Psychol Assess, 1*;10(1):36-50. PMID: 24163780; PMCID: PMC3806144.
- Olsen, R.E., Kagan, S. (1992). About Cooperative Learning. In: Kessler, C.(ed.) Cooperative Language Learning. A Teacher's Resource Book. Englewood Cliffs. NJ: Prentice Hal
- Romney, C. (1996). The Benefits of Cooperative Learning. New currents in Teaching and Technology. The University of Calgary, 3(6).
- Palmer, G. (2008). Cooperative Learning. Emerging Perspectives on Learning, Teaching, and Technology. Department of Educational Psychology and Instructional Technology. The University of Georgia.
- Stelev, J. (2003). Cooperative Learning in foreign language teaching. Sprogforum, 25.
- Stepanovienė, A. (2013). Cooperative Learning in the Context of Foreign Language Teaching and Learning. Mokslinių straipsnių rankings ISSN 2335–2035 (online) VISUOMENĖS SAUGUMAS IR VIEŠOJI VARKA PUBLIC SECURITY AND PUBLIC ORDER (9) Scientific articles. Retrieved from https://repository.mruni.eu/bitstream/handle/007/14909/Stepanovien%20.pdf?sequence=1
- Webb, N. M. (1991). "Task-Related Verbal Interaction and Mathematics Learning in Small Groups," Journal for Research in Mathematics Education, 22(5), 366-389.
- Zhang, Y. (2010). Cooperative language learning and foreign language learning and teaching. *Journal of Language Teaching and Research*, 1(1), 81-83, doi:10.4304/jltr.1.