

Chapter #11

A QUALITATIVE STUDY ON THE PERCEPTION OF UNDERGRADUATE STUDENT'S COOPERATIVE LEARNING EXPERIENCE IN THE CASE OF ROLEPLAY

Youngsoon Kim, Gi Hwa Kim, & Youngsub Oh
Inha University, Korea

ABSTRACT

The aim of this study is to investigate the perception of cooperative learning experience through the roleplay among undergraduate students participating in a liberal arts course related to multicultural education of 'P' university in Korea. In this study, we adapted qualitative research method, including participatory observation and focus group interview. We collected reports, questionnaires, journals, and roleplay scripts. We analyzed the implications of experiences of students in terms of interdependence and individual responsibility as core elements of cooperative learning. Results are as follows: First, interdependence was experienced by students in dealing with conflicts in the cooperative learning process. It reflected their own will to pursue and practice a strategy for harmony and coexistence among members. Moreover, interdependence meant positive trust among members, formation of human relationship, and expression of interest and praise for members. Second, recognizing that one's role in a team influences on other members and team achievement, students seriously took individual responsibility. Individual accountability meant performance of assigned role, compliance of promise, and care for members. Individual accountability is rooted on and realized by interdependence.

Keywords: roleplay, cooperative learning, learning experience, interdependence, individual accountability.

1. INTRODUCTION

As globalization and advanced technology have changed social and cultural environment, changes in the purpose, content, and curriculum of education are required. Currently, the world is faced with a challenge in the era of the fourth industrial revolution, which stands for big data, artificial intelligence, and so on. The fourth industrial revolution has raised both hope and concern that replacing a significant portion of the labor force with an automated system of artificial intelligence will restructure the existing industrial structure. As a result, higher education has also started to change. It is urgently necessary for university educators to find the teaching-learning model that fosters the talents with creativity and morality, which automated machine cannot replace with.

Cooperative learning has been studied by numerous experimental studies over the past century in a variety of learning environments, subjects, and research areas. Cooperative learning is recognized as an effective strategy with validity and generality, rarely seen in education (Johnson & Johnson, 2002; Kagan, 1994). Therefore, it is expected that the cooperative learning model will be used as an appropriate teaching-learning method for the fourth industrial age.

This study deals with a class of 'I' university in Korea which incorporates cooperative learning into liberal art education, especially multicultural education. This class is designed for students to learn cooperation by preparing for a roleplay with the theme of putting oneself in other's shoe. In other words, students prepared a roleplay to become immigrants by themselves. There are 4 types of immigrants in Korea like foreign workers, immigrant married women, international students, and North Korean defectors. Students presented the concrete situations in which immigrants really have lived and the feelings and difficulties which they have experienced in Korea. Thus, students felt empathy for immigrants.

This study examined students' experiences in terms of interdependence and individual responsibility as the key elements of cooperative learning. Therefore, the research question is as follows: "How do undergraduate students perceive interdependence and individual accountability in the role-play-based cooperative learning process?"

2. THEORETICAL BACKGROUND

Cooperative learning is "the instructional use of small groups so that students work together to maximize their own and each other's learning" (Johnson & Johnson, 2018). Although there are some differences in the elements of cooperative learning according to scholars, they are considered as the five elements: positive interdependence, face-to-face promotive interaction, individual accountability, appropriate use of social skills, and group processing (Johnson & Johnson, 2002).

First, positive interdependence means a relationship that helps each other because each member of the group has to achieve group goal. Second, individual accountability is the responsibility of the individual, when each member masters the assigned task and he or she is evaluated according to individual performance. Third, face-to-face promotive interaction means that group members encourage and promote the efforts of other members to achieve group goals. Fourth, social skills mean in-group-cooperative effort to be successful. Fifth, group processing means the process of discussion and evaluation on how each member worked and cooperated to achieve common goal. Table 1 summarizes the elements of cooperative learning presented by scholars (Kim & Choi, 2018).

Table 1.
Elements of Cooperative Learning.

Scholar	Elements of Cooperative Learning
Johnson & Johnson (1989), Johnson, Holubec, & Johnson (1992)	Positive interdependence, Individual responsibility, Face-to-face interaction, Social skills, Group processing
Slavin (1991)	Positive interdependence, Individual responsibility
Cohen (1994)	Open concept tasks that emphasize thinking skills, Group tasks which require participation of other members, Multiple tasks related to main topics, Roles assigned to each group member
Rottier & Ogan (1991)	Social skills, Interpersonal interactions, Individual accountability, Group cohesion, Collective responsibility, Teacher supervision, Group evaluation
Ormrod (1995)	Interdependence, Group goals, Small group size, Individual accountability, Teacher supervision, Group evaluation
Sharan (1990)	Positive interaction, Face-to-face interaction, Individual accountability, Small group and interpersonal skills, Group evaluation

Cooperative learning has been evaluated as more positive than individual learning or competitive learning. The competitive society has been changing into a society which pursues cooperation and communication. Social change requires changes in education. Therefore, school has been looking for the process of socialization training through cooperative interaction.

Among these elements of cooperative learning, interdependence and individual accountability are the key elements in which scholars have commonly presented (Slavin, 1991; Rottier & Ogan, 1991; Ormrod, 1995; Sharan, 1990; Kim & Choi, 2018). Therefore, this study focuses on cooperative learning experience in terms of interdependence and individual responsibility.

Previous studies on cooperative learning for undergraduate students were more than 305 cases since the 1960s (Johnson, Johnson, & Smith, 2007; 1998). The first study was conducted in 1924, and 68% of studies have been conducted since the 1970s. The meta-analysis of college studies can be summarized as follows: First, cooperative learning is more effective in improving the academic achievement of adults over the age of 18 than competitive or individual learning. Second, cooperative learning enhances the quality of relationships among students and the perception of social support. Interestingly, it affects even human relationships among a variety of racial, cultural groups, and social classes. Third, cooperative learning contributes to the psychological health of college students. Cooperation positively affects self-esteem more than competition or individual learning. Psychological health promoted by cooperative experience can have a positive impact on university life at various levels of self-concept, self-efficacy, and adaptation to college life (Tinto, 1993). Fourth, cooperative learning affects the behavior and attitude of college students. Cooperative learning promotes college students' positive attitudes and behavior patterns toward learning, subjects, and colleges. Fifth, cooperative learning helps promote the citizenship of students. Each outcome by cooperative learning is influenced in reciprocal and virtuous cycle.

Korean studies on cooperative learning began in the middle of 1980s. Since the 1990s, research has expanded to a variety of research participants, ranging from infants to graduate students (Kim & Choi, 2018). Cooperative learning of undergraduate students in Korea has been analyzed in various aspects as follows: First, cooperative learning had a positive effect on subject definition, achievement goal orientation, academic motivation, problem-solving ability, learning motivation, learning attitude and learning satisfaction in terms of academic achievement (Kim, 2003; Park, 2010, Park & Ko, 2016; Jung, 2014; Lee, 2017). Cooperative learning positively affected peer relationships in terms of human relations (Kim, 2003). Cooperative learning promoted self-efficacy, life satisfaction, and emotional relief in terms of psychological adaptation (Kim, 2003; Park & Ko, 2016; Ahn & Kim, 2015; Choi, 2010).

However, although there is a consensus among researchers around the world about the positive effect of cooperative learning on student achievement, there yet remains controversial as to specific conditions under which such effects occur (Slavin, 1989). Thus, it is necessary to find how cooperative learning works under various conditions.

3. RESEARCH METHOD

In order to develop teaching-learning methods suitable for the 4th industrial revolution and cultivate the talents needed for multicultural society, 'I' University in Korea has provided a core liberal arts course for undergraduate students, Multicultural Society and Coexistence Humanities (MSCH), since 2017. This course is based on flipped and blended

learning format. In other words, students study the theory of multicultural society for 1.5 hours in an online class. And then, they experience cooperative learning for the remaining 1.5 hours in an offline class. 38 undergraduate students enrolled in this course at the autumn semester of 2017. Those students were organized into 8 teams with diverse backgrounds to cultivate a multicultural spirit. In other words, a team consisted of 5-6 students with diverse majors, birth places, ages, etc. They democratically selected a team leader. Team activity was to prepare for two role-plays as follows: the first one was dramatized about exchange, cooperation, competition, and conflict as the four types of social interaction in everyday life. The second one was to become foreign workers, international students, and marriage immigrants in Korea. The members of each group had experienced cooperative learning in the whole process of writing scripts, rehearsing and demonstrating roleplays.

This study used qualitative research method. The researchers participated in and observed the whole process of cooperative learning. Undergraduate students participated in the questionnaires and journals about their own experiences of cooperative learning. Particularly, the FGI (Focus Group Interview) was conducted on the 8 team leaders who led those groups. Table 2 summarizes the demographical characteristics of the FGI interviewees.

Table 2.
Research Participants.

Student	Gender	Age	Major
#1	M	24	Electronical Engineering
#2	M	20	Space Information
#3	M	24	Electronical Engineering
#4	M	23	Industrial Engineering
#5	F	24	Consumer Studies
#6	M	26	Business Administration
#7	M	25	Business Administration
#8	M	25	Mathematics Education

In the Table 2, research participants were undergraduate students from a variety of majors. Their ages were in the 20s. They voluntarily were leading their own team. FGI was conducted at the end of November 2017, after the first roleplay ended and before the second roleplay was demonstrated. Those leaders participated in the interview before the FGI was conducted. And the purpose and outline of the interview were explained and then interviews were conducted. This study confirmed their anonymity so that they could genuinely speak even sensitive experiences such as negative conflicts. The interview's main question is about interdependence and individual responsibility. Detailed questions are as the follows:

- What was your positive experience with your team?
- What is important to achieve successful team work?
- Who did the best role in the team and what do you learn from the person's behavior or traits?
- What are the behaviors and characteristics of team members who disturbed team activities?

- Was there a big or small conflict? If so, how was it resolved?
- What did you do when your opinions were not accepted?
- Are you a proper person in a cooperative class?
- What would you like to improve yourself?
- What if you had a team member who was marginalized?
- How many points do you give to your team's interdependence score?
- What is the most demanding element for cooperative classes? (responsibility, positive interaction, communication ability, sympathy for others, etc)
- Do you think you have fulfilled your responsibilities in performing your role? (In what ways do you think so?)
- What do you think responsibility is?
- In what situation did you feel the burden of responsibility?
- What is missing or unsatisfied in your role?

First of all, based on the responses of students as research participants to the above interview questions, it is necessary to distinguish cooperative learning's two representative elements such as interdependence and individual accountability. And then this study will analyze what the perception of each element is.

Particularly, Researchers transcribed the verbatim record from the Focus Group Interview on the interviewed students, and thus got a documentation which accounted for A4 80 pages. As researchers read the verbatim record several times, they categorized themes with similar meanings. Through the coding and categorization, this study can find how their experiences and perceptions are overlapped. Especially, this study summarized the two representative elements of cooperative learning as interdependence and individual accountability.

4. RESEARCH RESULTS

Undergraduate students' experience of cooperative learning through roleplay were perceived as interdependence, individual accountability, and creativity. Especially, interdependence meant positive trust among members, formation of human relationship, and expression of interest and praise for members. And individual accountability meant performance of assigned role, compliance of promise, and care for members.

First, interdependence was explored in terms of aspect and meaning of cooperative learning. As cooperative learning involves intimate interaction with unfamiliar and diverse students, it can lead to large and small conflicts in the early stages of group work. Particularly in this class, psychological conflicts were experienced, when individuals did not conduct their assigned roles properly or failed to fulfill their promises. However, team leaders were doing more cautiously to find harmonious relations rather than expressing personal psychological conflicts. Considering cooperative-learning-based class, they were aware that conflicts will have a negative impact on achieving common goals. In addition, avoiding conflict and striving for a positive relationship can be interpreted as reflecting the willingness to overcome conflicts and pursue their own strategies for harmony and coexistence.

“Some students were responsible for what they have to do until the next meeting. But the others were not responsible for their roles. They did not actively join in conversation. Because of those people, we seemed to make our team mood in a soft and smooth way. We made giving our opinions not too burdensome” (Student # 8)

“First of all, it is basically necessary to respect others’ available time. I think, responsibility is not to disturb others. But responsibility is to do well one’s own duty. However, unfortunately, there were not as many as such cases. For example, we have already made an appointment, but someone suddenly broke it because of his private schedule like club activities. However, we became foolish.” (Student # 6)

Not all members were active in group activities. Particularly at the beginning of group activities, they were passive in their character traits, or they were difficult to communicate and harmonize because of different sex or school-entry year. At this time, team leaders understood the students who were marginalized in the group activities and encouraged their participation through careful consideration. For example, a leader deliberately facilitated participation, just as he pretended not to know what he knew and asked easy questions. This was not only a conscious effort to interact positively with others, but also a special concern for those marginalized in the team. As a practical action, that effort and concern had an important meaning in cooperative learning.

"There was a woman in my team. She was a freshman and younger than the others. She was not good at adapting to my team. Thus, I intended to become a fool, as I used to do so sometimes in a similar situation. I pretended not to know what I knew. But rather, I asked something to her who did not speak. If you do in this way, you will be able to make friends easily. Now, we came to a comfortable stage, in which we played with jokes, gave lots of opinions and laughed a lot." (Student # 7)

Interview from students 8, 6, 7 shows that positive trust among members plays an important role in achieving team goal and providing a place to form human relationship.

“I am not sure whether it is appropriate with your question. But I am commuting from Gwang-myeong city to school. Fortunately, a team member’s house was very close to my house. He was also commuting by car. His major was also similar with mine. So, we became friends so that we can have a meal together and commute together.” (Student # 3)

Additionally, interview from student 5 shows that mutual compliment was important in interdependence. Student 5 tried to facilitate interdependence among team members. It is considered as active and concrete behavior for caring a passive member.

“I had a freshman female member in my team. She did not talk much at the discussion time because she is passive. So, I often praised her appearance like ‘Your hair style is changed. You look great today.’ I thought it would help my team’s rapport.” (Student # 5)

Second, individual accountability was explored in terms of aspect and meaning of cooperative learning. Students shared a common opinion that responsibility was the most important personal ability to be involved in the cooperative learning process. As most of offline classes are centered on group activities, students in a team play a role in achieving a common goal with other students. The students were sensitively aware that if a member did not fulfill his or her role, the damage would be given to the other members. Thus, they worried that others or the whole team would be negatively appraised by them. They were more active in finding their own roles to overcome their own weakness.

“I thought that I was not good at making Power Point Slides or dramatizing my role for my team. So, I have to contribute to my team by engaging with other parts and rehearsing my part hard.” (Student # 2)

Students stated that higher level of responsibility is required in the cooperative learning process. The difference between individual learning and cooperative learning is the degree of individual responsibility. In the case of individual learning, they are much freer, although they do not perform tasks or when they are absent. Student 3 expressed responsibility in cooperative learning as ‘consideration’, which means that it helps others to take a more central role. This can be interpreted as the thoughtful consideration of other people rather than the self in the background of the sincere role performance in the cooperative learning.

“I personally think that consideration is an investment for having a good score. Consideration is a responsibility in terms of team. Although I don’t evaluate myself as a good student, I have never been absent in my team activity, because this is a team activity. If it is an individual learning, I may not do my duty. But, this was a cooperative class. I had a sense of consideration not to cause harm to my team members. Consideration is a responsibility” (Student # 3)

In the performance of cooperative learning tasks, students perceived that roles should be distributed fairly. They thought that if someone plays a larger role or someone plays a lesser role, it does not fit with the fairness. It is because their score is evaluated by the score of the whole team in the cooperative class. It is logical that the role performance should be done fairly because they receive the same grades. However, it has more significance than equal performance and fair evaluation. Students were aware that when someone lacks a role, a lot of complaints can arise, and thus it can lead to conflict. Therefore, responsibility that is the most important in cooperative learning suggests that it should be based on positive interactions.

“When someone did not come to the last team meeting, she was given more weight of role in the role-play. If someone did in this way, and in front of other members, the student may be more conscious of the team evaluation and made more efforts for team. It was a better way.” (Student # 4).

According to students 2, 3, 4, individual accountability meant performance of assigned role, compliance of promise, and care for members. Additionally, students cultivated creativity by means of cooperative learning.

“Roleplay seems hard and tiresome, when we start something. But, when we really met and shared ideas together, it was very funny. New ideas and direction were very interesting. My previous experience of team project was boring in my major. I cannot have a chance to experience roleplay. But ordinary people can come here, share ideas, and do roleplay. In this way, I got a strong impression that I really participated in doing something like this. It was a very good to me.” (Student # 4)

In the case of student 4, roleplay helped increase his degree of participation as well as his creativity. In the sense that promoting the creativity of student is an essence of education, this roleplay positively contributed to participants’ creativity production.

5. CONCLUSION

Although previous studies on cooperative learning in higher education confirmed a significant consensus on its positive effect, the working mechanism yet remains questionable. In addition, researches on cooperative learning in colleges are much lesser than those in elementary and secondary schools (Slavin, 1989). Furthermore, many universities' intentions are still paid more to fostering individual genius than to creating learning environment in which all students' achievement will be enhanced (Johnson, Johnson, & Smith, 1998). Thus, it is necessary to carry out more researches on cooperative learning at university with various conditions and situations. In this regard, this study seeks to qualitatively find the perception of two core elements of cooperative learning through the narratives of participants, especially of team leaders.

The liberal art course as the research filed, Multicultural Society and Coexistence Humanities (MSCH), positively contributed to the formation of interdependence and individual accountability for undergraduate students. It means the confirmation of the results of previous studies (Johnson & Johnson, 1989; Slavin, 1991; Ormrod, 1995; Sharan, 1990; Rottier & Ogan, 1991). However, this study is different from previous studies as following aspects:

First, this study takes note of group leader's significance for interdependence. In the process of cooperative learning, group leaders initially experienced conflicts, but they constantly attempted to form a positive relationship. In other words, interdependence was experienced by them in dealing with conflicts properly in the cooperative learning process. It reflected group leader's own extraordinary will to pursue and practice a strategy for harmony and coexistence among members. Furthermore, interdependence meant positive trust among members, formation of human relationship, and expression of interest and praise for members. And recognizing that one's role in a team influences on other members and team achievement, students seriously took individual responsibility.

Second, this study finds how individual accountability can be specifically realized and perceived by university students in the process of cooperative learning. Individual accountability meant performance of assigned role, compliance of promise, and care for members. Noticeably, thoughtful consideration for other members means that cooperative learning can positively influence on personality formation among students. Furthermore, it was shown that individual accountability cultivated through cooperative-learning-based roleplay was considerably related to the promotion of creativity of participants. In other words, this study implies that cooperative learning can be utilized as a teaching-learning model for character and creativity education.

Thus, it suggests that individual accountability is rooted on and realized by interdependence. However, such outcomes as interdependence and individual responsibility may not be pursued or gained without intentional and painstaking means of cooperative learning.

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AUTHORS' INFORMATION

Full name: Youngsoon Kim

Institutional affiliation: Department of Social Studies Education, Inha University

Institutional address: 100 Inha-ro, Michuhol-gu, Incheon 22212, Korea

Short biographical sketch: Youngsoon Kim received Ph.D. in cultural studies from Berlin Free University. He is a professor in the Department of Social Studies Education in Inha University. As a research head, he leads the Convergence Institute of Asian Multicultural Studies as well as national research project teams. His research interests are in qualitative research, multicultural education, local culture, and ethnography.

A Qualitative Study on the Perception of Undergraduate Student's Cooperative Learning
Experience in the Case of Roleplay

Full name: Gi Hwa Kim

Institutional affiliation: Graduate School of Education, Inha University

Institutional address: 100 Inha-ro, Michuhol-gu, Incheon 22212, Korea

Short biographical sketch: Gihwa Kim is a full-time lecturer in Graduate School of Education, Inha University, Korea. She received Ph.D. in child welfare studies. Her research interests include multicultural education, childcare, welfare facility, single-father family, ethnography, qualitative researches, and so on.

Full name: Youngsub Oh

Institutional affiliation: Department of Multicultural Education, Inha University

Institutional address: 100 Inha-ro, Michuhol-gu, Incheon 22212, Korea

Short biographical sketch: Youngsub Oh received Ph.D. in multicultural education. He is interested in cooperative learning for multicultural education, and multicultural counseling/psychotherapy for immigrants in Korea.