

## **ACTION RESEARCH ON IMPLEMENTATION OF PEER ASSESSMENT AS AN EFFECTIVE LEARNING STRATEGY: EVIDENCE FROM WIUT**

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### **ABSTRACT**

This paper examines the effect of peer assessment in higher education by implementing mixed-method action research study. The paper describes the way the method was introduced and provides students' reactions to its implementation. The study involved students from four groups studying Business Administration at Westminster International University in Tashkent (WIUT). The objective of the study was to utilize one of the elements of student-centered learning approach, in which the students were suggested to take the role of an assessor of their peer's work, and to analyze how the teacher would be able to use peer feedback as a potential learning source in explaining the topic. The evaluation focused on (i) students perception of this type of assessment, (ii) possible drawbacks that could arise while implementation peer assessment. The methodological approach taken in this study is a mixed methodology based on the idea of triangulation that could ensure the validity of the action research. In particular, three different data collection instruments such as personal observations, survey and structured interview were applied in order to answer the research question. Overall, the participants of the research showed positive perception and attitude towards the use of peer assessment as a learning tool in the classroom and considered it as one more alternative means for knowledge sharing. Yet, the study also demonstrated certain problems which could arise while implementing peer assessment techniques. Particularly, students were concerned that it could have a negative impact on students' personal relationship within a group. One more negative point of this type of assessment was the collusion between the group members, which means they could discuss each member's mark and decide to give good marks to everybody within the group.

**Keywords:** Action research, peer assessment; peer evaluation; peer review; peer feedback.

### **INTRODUCTION**

Usually university tutorials are attended by 23-25 students. Consequently, most university teachers always have to give some group work in order to involve all the students into learning process.

I am quite aware of the fact that group work is widely accepted as an effective teaching and learning tool. However, each time when I am organizing group work for my students I come across with the same problem. When I give students any group work, usually the same active students make presentations. In such kind of situation it is difficult for me to assess the performance of each group member and a certain student's contribution to the fulfillment of the whole task. In such cases I might either underestimate or overestimate students' abilities. Therefore, in my opinion any tutor needs some kind of instrument like a 'camera' that can provide him with the information about the process that is happening within each group while performing group work tasks. After reviewing the literature about group work, I finally found

that instrument that can be truly called a 'camera' enabling me to consider each students work within a group.

The questions of the present action research are '*What are the benefits of peer assessment of a group work for me and my students?*' '*What the shortcomings of this assessment?*'. The following points were identified as objectives of my action research:

1. To observe students` performance within group work;
2. to conduct a peer evaluation among students;
3. to conduct structured interviews among students on their attitudes concerning peer evaluation;
4. to analyze the results;
5. to evaluate students` performance by the help of peer assessment and optimize assessment process during my tutorials.

After formulating my research questions I did some extra Literature Review. From it I understood that peer assessment can be used formatively or summatively, with the latter being the most reported in the literature. Peer assessment might allow me to provide students with individual scores for group work activities.

It is clear that there are many definitions to peer assessment and that some practitioners may use different terminology. In this study the term 'peer assessment' is used to describe the process undertaken by students to assess the performance/contribution of themselves and their peer group, in relation to a group task.

## **LITERATURE REVIEW**

Investigating various assessment methods is a continuing concern among university teachers.

Assessment of students includes developing assessment tasks, determining assessment criteria and assessment tasks, measuring students' performance on those assessment tasks and providing feedback to students. For that reason, it is considered to be an integral component of the teaching and learning process.

More recent attention has focused on the provision of assessment as a moral activity. Assessment formed the central focus of a study by Knight claims (2002, p. 14) that 'sometimes assessment systems advantage some learners and disadvantage others.' This is echoed by Brown (1999, p. 35) who wrote, 'Assessment acts as a mechanism to control students that is far more pervasive and insidious than most staff would be prepared to acknowledge.' Any teacher cannot avoid ideological aspects of assessment. Therefore, they should be recognized by all teachers while designing assessment.

Most scholars agree that assessment shapes much of the learning that students do (Brown et al., 1999, van Zundert et al., 2010; Black and Wiliam, 1998a; Topping 1998), so if we want to change the way our students learn and the content of what they learn, the most effective way is to change the way we assess them.

In traditional way of thinking, usually teachers assess students. However, the situation has gradually changed due to the increasing numbers of non-traditional learners. Race (2001. p.17) identifies that 'when it comes to measuring individual's relative contribution to group work, the only people who really know what the relative contributions are, are the students themselves'.

In particular, Thompson (2005) in his paper where he briefly outlines examples of paper-based self and peer assessment systems, noted that in most cases University teachers are not able to accurately monitor the contributions of each group members in group work tasks for large classes. For that reason, it is essential to introduce accurate way of adjusting the assessment of group tasks that will reflect individuals' contributions and add fairness to the whole assessment process.

For that reason, nowadays in their teaching practice most scholars also use different types of assessment- self, peer assessment. They justify their choice by the argument that self-assessment and peer assessment can lead to greater ownership of learning and to greater motivation by learners.

The present paper concentrates on peer assessment as an alternative form of evaluating students' performance. Previous studies have reported that peer assessment is becoming widely exploited in higher education. Data from several sources have identified positive formative effects of peer assessment (e.g., van Zundert et al., 2010; Black and Wiliam, 1998a; Topping 1998). Particularly, in his study of peer assessment with tertiary students, Topping (1998) claimed that the outcome of peer assessment are similar or even better than the effects of teacher assessment. According to Double et.al (2019) this type of assessment will allow teachers to focus on assisting students with greater difficulties or for more complex tasks. His results are consistent with those of other studies and suggest that peer assessment improves academic performance compared with no assessment and teacher assessment, however this type of assessment was not significantly different from self-assessment in its effect.

In general, reviewed literature proposes two beneficial sides of peer assessment. Initially, peer assessment will give a chance to students to critically engage with the assessed material, by the way they will be able to compare their own performance with their peers, and as a consequence they will identify gaps in their own knowledge (Topping 1998). Another positive side of this type of assessment as that it will lead to improving the communication of feedback; this happens due to the fact that peers may talk in understandable language (Liu et al., 2016).

Additionally, according to Sadler (2006), peer-assessment and self-assessment would provide the following four advantages:

- *Logistical*-they will save teacher time due to the fact that grading could happen simultaneously.
- *Pedagogical*-judging others could be an additional opportunity for students to enhance their knowledge about a topic.
- *Metacognitive*-giving a chance to students to grade their peers could expand their knowledge beyond the subject-matter content. By grading others they will become aware of their own progress, strengths and weaknesses.
- *Affective*-these types of assessment could make classrooms more productive due to the fact that students could feel a greater sense of shared ownership for the learning process.

Peer assessment formed the central focus of a study by Kennedy (2006) in which the author, except for studying this method of assessment, also addresses the question about whether the effort expended on administering peer assessment leads to considerably better assessment. He distinguished two aspects of group work to be assessed - (1) the product, or (2) the process. Overall, there is no difficulty for tertiary teachers to assess the products of group work (Race, 1995). In this case a mark is usually determined by comparing the product with assessment

criteria or marking scheme. Yet, assessing the ‘process’ is rather more complicated, since the educator will have to think first about the aspects of process that he intend to assess.

Although, the results of most studies indicate that peer assessment can be effective across a wide range of subject areas, education levels, and assessment types, most of them conclude that while peer grading was beneficial for tertiary students, it could be not beneficial for primary or secondary school students Double et.al (2019).

In his research Kennedy (2006) also provided comments on the responses of students to a peer assessment requirement. According to findings, some students are reluctant to mark their peers down, although they knew that a certain student contributed less than others. Similar findings were reported by White et al. (2004) who also reported about students who are not comfortable to judge their peers. Others could be keen to discriminate, based on study of Kennedy (2006), where he claimed that in his case study class there were also students who were quite prepared to mark down those who had not contributed properly to the process.

Recent evidence suggests that peer assessment could pose certain problems (Kennedy, 2006; Dochy et al., 1999). In particular, there could be wide inconsistency in students’ judgments of each other. Furthermore, peer assessment could result in serious personal conflicts among group members and this fact, as a result, could reduce real cooperation and teamwork. In this context, although Dochy et al. (1999) claimed that peer assessment can have positive implications on learning but may be undermined by social factors such as friendships and collusion among assessors. In addition to this, collection and processing peer assessment data for the purpose of determining contribution factors could be quite time consuming. Finally, what is interesting, according to academics, peer assessment could still sustain discrimination between student grades. This happens due to the fact that students feel under pressure to award ‘equal’ marks to their peers in exchange for friendship or so that they think that they could receive reciprocal consideration while being assessed by their peers.

### **Methodology**

In order to ensure the validity of my action research I decided to triangulate my research instruments and techniques so that they could provide different views of the case. In particular, I used both qualitative and quantitative research approaches that comprise 3 different data collection instruments:

1. Personal observations;
2. Survey;
3. Structured interviews.

The sample size for my action research involved my 100 students from 4 different groups (WIUT students).

The research was divided into three main stages. In the first stage I merely observed my students for 5 tutorials, trying to find the answer to one general question: ‘How active is each student during group works?’ By the end of my observations, I came across with the usual problem. I was able to assess the participation of not all the students within each group. Only the most active ones were under my focus.

For the second stage I prepared a special form for my own observation comments. Now my question was not as general as in the first stage. The observation form included three more specific questions (Appendix 1). In order to find the answer for my questions for each group

member, I had to approach each group several times, listen to their discussions. While conducting such kind of observation I faced several problems:

1. The students seemed to be more reserved, while being observed in such a way (since I was taking some notes). Most of them felt like sitting at an exam;
2. When I approached several groups, the students started asking me questions, and as a result from time to time they interrupted me from the process of observation;
3. As it was mentioned above I usually have at average 20-25 students. It means that I was supposed to fill observation forms for that number of students. It was quite time-consuming process for me.

Eventually, after 3 tutorials with such kind of observations, I did not get a whole picture of the process that was happening within each group.

The third stage of the action research, coming from the Literature Review, involved survey among students. During the second part of the ninth tutorials, the students were divided into three groups and provided with the tasks for group work (a sample is given in Appendixes 2). Students were instructed that when the presentation of group work was over, they would be asked to fill in special peer assessment forms, in which they would have to evaluate their peers' performance. After discussing the results and choosing the best presentation, I distributed Peer Work Group Evaluation Forms (Appendixes 3) among students and told them that they did not have to not assess their own work, but they had to evaluate their peers' work within the group. Since each group consisted of 4-5 students, each student was supposed to fill in 3-4 Peer evaluation forms. Also, students were instructed that the assessment was to be carried out alone and without discussion. By such kind of warning I wanted to avoid systematic error in my research, when students sitting together might discuss and agree on each other's marks. After that I gave them some time for consideration, and ensured that they did not talk with each other. The students completed all the forms in 5 minutes.

Next week I invited 4 students from each group (overall, 20 students) for a structured interview in order to get information about students' opinion on such type of assessment. My interview focused mainly on 7 questions (Appendixes 4).

### **Analyses of findings**

During the survey all the students filled in forms. Not a single question was left. Each group member got peer evaluation from 3-4 students (it means I distributed about 500 peer evaluation forms). Overall, the analyses of the answers for the questions 2, 3 and 4: revealed that 77 students (out of 100) got the result of 'above average', 11 students' work was considered to be 'average' and 12 students were found performing 'poorly' within the group.

For the question: 'Would you want to work with this person again?', I got 23 peer evaluation forms with negative answers, others were positive.

I want to note that each form was signed by the evaluator and the name of the person who was evaluated was given, as well. It means that I exactly know by name the students who were good and who were quite passive during the group work.

The analyses of the students' answers for the structured interview questions revealed that overall, all the students reported a positive attitude towards peer assessment. Almost all of them consider the process of peer evaluation quite fair, valuable, enjoyable and helpful in developing transferable skills. They reported that the instructions and assessment criteria were quite clear for them. 10 of my students expressed concerns relating to their capability to assess



peers and to the responsibility associated with assessing peers. Almost all the students noted the following learning value attached to this type of assessment:

1. If students are informed that by the completion of the group work they will have peer evaluation, most of them might seriously approach the task for group work. In this case each group member will know that his performance is being assessed by his peer. Moreover, each student will be quite aware that the teacher will get all the results.
2. Also peer evaluation of group work allows students to get acquainted with some assessment criteria and the process itself. This type of assessment ensures Transparency- one of the principles of assessment.
3. Peer assessment also provides the opportunity for students to learn from their peers.
4. It improves communication, participation and group skills.

The most interesting finding for me was that most students want to have peer assessment each time after completing any group work.

When asked about the drawbacks of this form of assessment all the students elaborated that personal likes and dislike of some students might influence on the assessment process. In particular, some students might give high marks to their friends, and vice versa, they could underestimate the performance of the people whom they dislike. Consequently, that might have a negative impact on students' personal relationship within a group. One more negative point of this type of assessment, according to my students' point of view, might be collusion between the group members. They may discuss each member's mark and decide to give good marks to everybody within the group.

## CONCLUSIONS

Overall, the findings of the study revealed that in spite of some drawbacks of peer assessment, students can really benefit from this type of assessment. What is more, the process is beneficial for teachers as well, since it can give them an insight into each group's work. Also it might serve as an extra evaluating criterion.

It became clear from the study that involving students into assessment process allows tutor to gain an insight in the group dynamics and measure things that may not have been possible without student assistance. This type of assessment might reduce marking and workload for instructors.

This finding is in agreement with van Zundert et al.(2010), Black and Wiliam (1998a), Topping (1998) findings which showed that peer assessment has a positive impact on students' performance.

Also, the results of the study are consistent with those of other papers (Kennedy, 2006; Dochy et al., 1999) and suggest that peer assessment would pose certain disadvantages. In particular, such social factors as friendships and collusion among assessors could undermine this type of evaluation.

The present action research became an opportunity for me to focus on one of my problems in my teaching, analyze it and find the way out of it.

The next issue that I would like to explore in my further action research is 'How to deal with demotivated students'. I think that my future research should be conducted in collaboration

with either parents or university administration, since there might be different demotivating factors, starting from ‘unhealthy atmosphere’ in the family, ending with demotivating assessment system within educational institutions.

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**Appendix 1.**

1. **How active was this student during the group work?**
2. **How much work was done by this group member?**
3. **What is the quality of this student's completed work?**

**Appendix 2.****Consumer behaviour.****Plan for Tutorial 10: Consumer Decision Making****Aim:**

- To familiarize students with the approaches, stages of consumer decision making process:
- To show the factors that influence on consumer decision-making process.

**Learning Outcomes:**

By the end of the tutorial students will:

1. To identify three major types of decision-making approaches.
2. To divide any consumer decision-making process into five stages.
3. To identify factors that influence on consumer decision-making.
4. To differentiate Individual and group decision-making processes.

**Activity 1. Anticipatory Set/Focus**

**Ask students the following questions:**

1. **Do you know what it is called when you think about what to do?** Most students respond with words like “decision making,” “choosing,” “deciding.” Write these words on the whiteboard.
2. **What are the things you think about when you aren't sure about something?** Students usually respond with “choices,” “options,” “things that I could do.” Write these under the heading “Decision Making”. Tell the students that in today's lesson, they will learn about Consumer Decision Making.

**Activity 2. Individual decision making**

The premise of the exercise is that students are told that they have recognized the need for a piece of candy. Students are given options of candies. This includes chocolate candies and confectionaries and candies of different sizes. Students are given directions and questions, they are told to walk along the room and make their choice.

**Directions and Questions**

**You have recognized a need for a piece of candy. You may only choose one. Please browse your options**

**And make a decision.**

1. Which candy did you choose?
2. What type of search did you employ? What information did you gather?
3. What was your consideration set?
4. Were any of the items in your inept set? Why?
5. What evaluative criteria did you use when making your decision? Label them as hedonic or utilitarian choice.



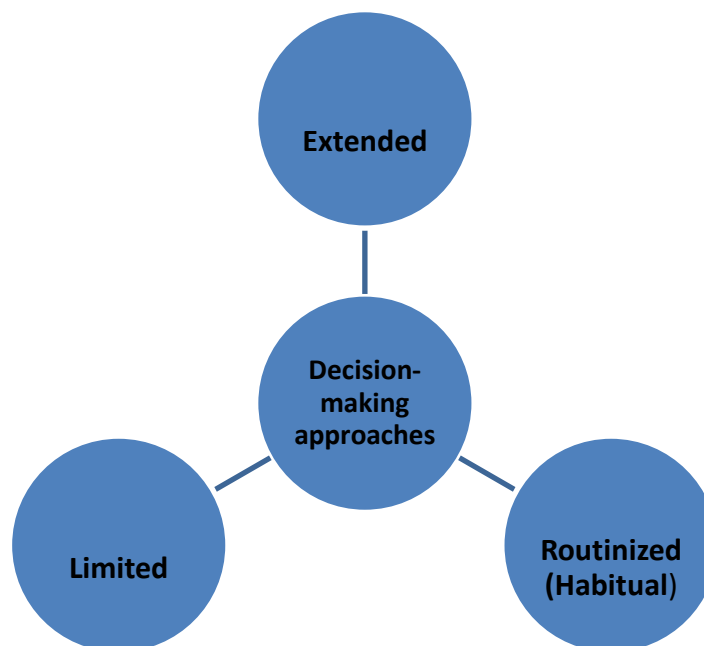
The next important step in the discussion is to explain the consideration set. Students have already answered that question on the hand out and many of them will assume that the consideration set is all of the objects available to them.

Now conclude and tell the students that all their Decision-making approaches can be classified into three categories:

- **Extended decision making**
- **Limited decision making**
- **Routinized (Habitual) decision making**

Differentiation of instructions:

*For learners who need additional help and instruction, draw the following graphic representation of Decision-making approaches and give the definitions for each one. For learners who work above grade level, ask them to give their ideas and examples about each type of decision making.*



- **Extended decision making:** It is when the consumer discovers a new product category or wants to buy a product he does not know well and / or is particularly expensive and / or which present a significant risk regarding his economical or psychological point of view. His lack of “experience” in the matter leads to his lack of decision criteria to make his choice. He has no preference for a brand or a specific product.
- **Limited decision making:** The consumer has a clear vision of its expectations and decision criteria. He already had an experience with the product and knows it. However, he is still undecided about the brand or a particular model to choose and which one will best meet his needs. The level of consumer involvement is moderate and information seeking is more limited. He will compare available products and especially want to determine which brand is best for him. The purchasing process will be shorter.

- **Routinized (Habitual) decision making:** This is about the everyday purchases with a low level of involvement from the consumer. These are common products – typically Fast-Moving Consumer Goods (FMCG) or Consumer Packaged Goods (CPG) – that the consumer knows well. He knows what brand to choose and which product suits him. He does not need specific information or a specific research time to make his choice. The purchase decision is simple and is quickly taken.

### **Activity 3. Factors that influence on consumers` decision-making.**

Ask students the following question:

Can you count some factors that influenced on your choice of a certain type of candy?  
Students will count a great number of factors.

Propose Students to watch several videos about some of those factors. Discuss.

### **Activity 4. Stages of consumer decision-making**

**Students will watch the video about the stages of consumer decision-making.**

**After watching ask the students the following questions:**

1. How many stages of consumer decision-making now you know?
2. Whether you passed all those stages while choosing a candy.
3. Do you usually pass all the stages of decision-making process while purchasing any product?
4. Can you choose one product and describe the stages of decision-making process while purchasing it?

### **Activity 5. Role play. Group decision-making**

For this activity, students are divided into 3 small groups. Within the group they are given a task for which they need to prepare a role play and presentation.

**SCENARIO 1.** Assume that your family is double income (both you and your wife work). Moreover, you are the family, where three generations live together: grandfather, grandmother, father, mother, daughter and son. For almost a year you have been collecting money for the Group Package Tour (GPT) for the whole family. And now you have several options. Choose one holiday destination and justify your choice.

1. '5 Days GPT to Tokyo and Disney-land'
2. '7 Days GPT to spa resort in Garmisch-Partenkirchen'
3. '5 Days Educational Tour to Singapore'
4. '7 Days GPT to Karlovy Vary health resort'
5. '6 Days GPT to Thailand'.

**SCENARIO 2:** Assume that you have a job. You have been working very hard for a long time because you are saving up to buy a car. Your best friend approaches you and asks if you would like to go away with his/her family over winter vacation. You want to go, however your parents tell you that you would have to pay for your own airfare and expenditures. This would put a significant dent in your car savings. Make a choice and justify it.

**SCENARIO 3.** Now, assume that your group is going to visit an orphanage. Twenty children of about 4-5 years old will be waiting for you. Your group needs to purchase some presents for them. You want all the kids to get the same thing. You have collected 200 000 sums. As a group, decide what will you present to children?

Whether that will be:

Toys,  
Books,  
Clothes,  
Charity dinner.  
Justify your choice.

Discuss the results, choose the best presentation.

### Appendix 3.

#### Closing

Distribute **Peer Work Group Evaluation Forms** among students and give them some time for consideration

Directions: In the space below, honestly evaluate the work of other students in your group by answering yes or no and by using a scale from 1 to 3, 1 being poor, 2 being average, 3 being above average.

Evaluator's Name: \_\_\_\_\_ Date: \_\_\_\_\_

Group Member 1: \_\_\_\_\_

- |  |     |     |
|--|-----|-----|
| 1. Did this group member complete his/her assigned tasks for the group?      | Yes | No  |
| 2. How would you rate the quality of this person's work?                     | 1   | 2 3 |
| 3. How would you rate the timeliness of the completion of the work?          | 1   | 2 3 |
| 4. How would you rate the accuracy of the work?                              | 1   | 2 3 |
| 5. Overall, how would you rank this group member's performance in the group? | 1   | 2 3 |
| 6. Would you want to work with this person again?                            | Yes | No  |

### Appendix 4.

1. Do you think that peer evaluation of group work is an appropriate type of assessment?
2. Whether the assessment criteria/process was clear for you?
3. Would you like to have peer assessment each time after completing any group work?
4. What are the benefits for you of having peer assessment of group work?
5. What do you think whether students can assess peers work fairly?
6. What kind of drawbacks can peer assessment have?
7. Do you see/consider any learning value attached to this type of assessment?