Abstract - The presented thesis, elaborated in the Information Systems and Business Systems Masters, taught by Instituto Superior Técnico (IST) and Open University (UA), aims to present the study regarding the real perception of the implications of peer review practices in the learning development, with emphasis on the level of understanding of students' perception before and after peer review realization. Peer review is clearly an asset for education, but practice has been restricted in higher education, and research in this area is limited. This study deepened the perceptions of college students before and after performing peer review on three higher education subjects taught at IST (AOSI and SISE from MISE and OGFI from MEIC). Prior to participating in the peer review, students had good expectations of the process. Students reported levels of good satisfaction and perception related to peer review and favourable perception in improving their learning and critical and pedagogical sense. After the practice, it was found that the favourable perception remained. In addition, based on the data collected from the research and the students' perception, the benefits and disadvantages of peer review practice are also presented.

Keywords: Peer assessment, peer review, peer assessment on higher education, peer assessment among students

I. INTRODUCTION

With the demands of rapidly evolving technology and the massive acceptance of the Internet, it is desirable to extend its use for education and teaching. However, with the adoption of technology associated with teaching, it will not be solved or solved all the known problems at the same level. There are even several debates on the role that distance learning should understand in today's education [1][5][6].

On the other hand, the phenomenon of MOOCs (mass open online courses) may help educational decision makers to gain a better understanding of the potential and trends in the use of Internet-enabled technology and communications for greater openness in higher education to these methodologies and the implications that may arise for their institutions, whether or not adopting this concept [16]. MOOC phenomena are described, placing them in the broader context of education, distance learning and the changes that are currently taking place in higher education at a time of globalization of education and with smaller budgets [16]. In this reality, teachers need to adapt and align with the fundamental issues of teaching, learning and assessment in non-traditional spaces. These questions include concepts such as the validity and reliability of online assessment in relation to serving intended goals, as well as understanding how formative assessment works within distance learning [8]. Thus, the strategic opening of distance learning in higher education is a current reality and will be more so in the future [10]. With all the frenzy that exists on this theme, competition, globalization and the need for cost reduction, one of the new challenges that will come with the massification of this new methodology is the evaluation of students' work with open answers, which hinder the teacher's ability to evaluate each work on a large scale [9].

II. RELATED LITERATURE REVIEW

Discussing the articles helps to identify areas where studies have focused on peer review in recent years and where the main problems in peer review processes reside. Kollar and Fischer [12] note that peer assessment in education is still in an embryonic phase. Although there is some time invested in this area, always referring to the need to establish links to practices related to
collaborative learning. Strijbos and Sluijsmans [14], who argue that opportunities and advances in similar fields have not been seized, also share this view.

Although the articles used performed the research in both academic and professional settings, my analysis focused on contexts related to higher education. In any case, the variables of interest for each study and the scenarios in which it was conducted led to a multiplicity of peer review strategies, most of which are interesting for the analysis performed and to deepen the knowledge on the subject.

There are studies that clearly highlight the benefits of using peer review but there are other authors who identify some student behaviours that may undermine the successful implementation of this type of assessment.

Some students identify peer review as a good learning experience [13][15], while other students are less optimistic about using peer review, with key concerns being quality, confidence, fairness, safety, knowledge and critical ability to perform the assessment [7], and even formed the view that assessment responsibility should be restricted to teachers[2][3]. It is perceived by the study that the anonymity of the process is advantageous for its execution, as it will have the potential to minimize unwanted behaviour, such as favouritism or prejudice.

The lack of common standards for peer review stands out among the problems to be highlighted in practice, as their absence makes this evaluation process difficult or even impossible to achieve successfully. However, in the researched articles the authors were not unanimous in the precise method of evaluation and credibility to be use in the evaluation, nor in how peer review experiences should be conducted. Most studies mix experiences and try to measure various variables using point methods.

Another issue is that many peer review practices have failed to capitalize on advances in related disciplines. Although some studies have pointed out how peer review can be included in comprehensive learning environments such as Problem Based Learning (PBL) and Collaborative Learning, the fact is that the vast majority of peer review activities are autonomous practices applied to learning. traditional teaching. Technology is being used to create advantages in applying the evaluation process in almost all social systems and disciplines to help solve problems that have been found to be intractable or challenging. Unfortunately, peer review has yet to evolve to make the most of technological advances. Most peer assessment practices are conducted in one direction without interaction. The validity of this approach is called into question when one of the main objectives is to measure how practice can improve learning.

Measuring practice effectively is to implement programs that implement peer review over sufficient long periods. Requirements for introducing such programs into higher education institutions may become limiting and problematic. This is probably the most prohibitive reason that has limited practitioners to implementing peer review for shorter periods and in generally smaller classes. Despite this restriction, a large number of peer review studies have been conducted in recent years. The disconcerting fact, however, is that most of these studies are disconnected and only a few actually have any basis on previous conclusions. It seems that most studies have insignificant variations in the variables studied and generally come to similar conclusions.

Other peer review factors that were identified by the authors as requiring further investigation but received relatively little attention include the impact of gender, race, and similar process factors such as anonymity playing a role in decreasing or eliminating effects. Unintentional factors such as dealing with educational dishonesty such as plagiarism and / or fraudulent behavior.

For the teacher, this kind of formative assessment may also serve the purpose of identifying students who may need additional help. The potential role of formative assessment as an early intervention tool is not investigated in the articles. I understand that this role can hardly be studied in specific experiments and that its research requires changing the essence of the experiments with iterative processes. Automation (technology utilization) coupled with peer review practice has been successful in reducing the workload of students and teachers, as well as eliminating other involuntary problems caused by manual assessment, such as prejudice or the favouritism.

III. Research Methodology

Research Questions:

- Could the peer review process represent a degree of risk to the grades reliability? Although the risk may be mitigated if students can submit their assessments independently of the group and / or anonymously between them, can the relationship of peer pressure to high marks or friendships influence the assessment?
- Students tend to see themselves and their peers as too inexperienced to make accurate and fair
assessments of their work. This is especially true when students receive grades based on peer feedback [11]. Do Masters students feel unprepared to perform the assessment and / or judge their peers?

- Do students have enough time to complete the assessment?
- Do grades tend to converge on student assessment?
- Are students familiar with the assessment criteria? For students, will it be difficult to evaluate systematically each student according to their performance?

**Context**

The research method used was “case study”. This case study aims to answer the thesis questions stated. In this case, the researcher cannot exercise control over the events and the study focuses on investigating a current phenomenon in its own context [4].

The sample selection was based on the choice of students who attended SISE, AOSI and OGFI on the second semester of 2016/17 school year. As a student, I can easily observe and consult the opinions and comments of students, drawing lessons from how the peer review experiences unfolded throughout the semester.

Three types of methods and techniques were used for data collection, observation, questionnaire survey and interview survey. This triangulation allowed developing a quantitative and qualitative approach. Quantitative or qualitative methods reveal different aspects of empirical reality and consequently different methods of reality observation should be used [4].

**Observation** - The SISE and AOSI subjects are part of the MISE Master’s course taught by the Instituto Superior and Open University as part of an asymmetric distance-learning dynamic, relying mostly on a moodle platform for exchanging information.

The OGFI subject is part of the MEIC Masters course taught by the Instituto Superior Técnico, which is taught in typical classroom environment.

As students exchange opinions and knowledge through the moodle collaborative platform as part of the distance learning, moodle was subject to the researcher observation, in order to extract valuable information about the process under analysis, complementing the information extracted through the others techniques, completing the triangulation. In order to have a complete observation of the three subjects based on different teaching models, an interview was also conducted with the teachers and assistants who contributed to the management and implementation of peer review in this subject.

In observation, it is also essential to construct observation guides, which contain the indicators to be observed, not neglecting the importance of the data organization and the distinction of what was observed from the interpretations or value judgments.

The observation was non-participant type as any of the observers did not interact with the observation object, thus reducing the interference of the observer.

**Survey** - The survey is characterized by the fact that researchers and respondents do not interact in person. The questionnaire was done, simulating a phase before the interview and after the end of the school semester and consequently of the subjects part of the observation. For reasons of unsaturation, as the target, students will go through survey and interview processes, this survey should be as succinct as possible and with as many closed questions as possible.

The survey identifies the student community, as well as their previous experience with the peer review technique and enhance their experience of using the technique during the semester in the three subjects. n this questionnaire, is also intended, to understand the framing of the students in the social and cultural environment in which they move, as well as to try to ascertain the opinion of the students regarding a possible future scenario of this practice, namely if they consider that these practices may help them to develop certain skills and new attitudes and, if not, what are the main obstacles to the integration of this methodology.

Note that the data obtained through this survey is also relevant to the fulfilment of other study-specific objectives. The questionnaire was made anonymously and the results will be kept anonymous.

**Interview** - The technique of interview data collection is characterized by the fact that the researcher and respondents interact directly, in this case through a skype or hangout collaboration tool. The fact that the interaction is direct makes it necessary to manage, for example the influence that the interviewer can induce on the interviewee.

The purpose of this survey is to complement or add new data, which was not obtained from the survey and observation processes. For this reason, the interview objectives are strongly associated with the questionnaire objectives.
The interview was short, with about 10 minutes of intervention and incisive so that the students who participate in the study do not divert attention and can collaborate assertively.

IV. RESULTS

Profile - The survey was published online on May 16, 2017. It was operational for two weeks until 31 May 31, 2017.

Table 1: Survey student’s profile

<table>
<thead>
<tr>
<th></th>
<th>Male, 29</th>
<th>Female, 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0-9, 11</td>
<td>0-9, 11</td>
</tr>
<tr>
<td>Master Subject</td>
<td>OGI, 10</td>
<td>SISE, 16</td>
</tr>
<tr>
<td>Peer Review was tried</td>
<td>1 or 2, 15</td>
<td>3, 8</td>
</tr>
<tr>
<td>Add previous contact with Peer Review</td>
<td>yes, 17</td>
<td>no, 18</td>
</tr>
</tbody>
</table>

A total of 35 responses to the survey were received. The sample is characterized by 29 (82.85%) male respondents and 6 (17.15%) female respondents. From the age of respondents, 31.43% (11) are under 30 years old, 34.28% (12) are between 30 and 39 years old, 20% (7) are between 40 and 49 years old and 14.28% (5) is over 50 years old. The most represented subject in the sample was SISE with 41.71% (16), followed by OGI with 28.57 (10) and last AOSI with 25.71% (9). Note that almost 50% of the students who participated in the survey had previous experience using the peer review methodology.

Students motivation - From the point of view of quantitative and global analysis to the answers framed in the students motivation it is verified that the students have a very confident base in relation to their knowledge for the evaluation. There is an improvement of this perception after the peer evaluation. Similarly, students have an initial perception that their responsibility to evaluate their peers’ work is high, although from the average point of view this responsibility has decreased after peer review.

Comparing the results between MISE and MEIC disciplines questions, it is verified that from the statistical point of view the results are not different between the students of the course. Interestingly, students feel more confident with their knowledge after the assessment, and there is an added responsibility when asked to rate their peers.

Students confirmed that they received information prior to the peer review process and how to make the most out of this exercise.

It is verified that the average will be in agreement with the fact that the peer evaluation is more motivating than the evaluation made by the teacher, but looking at the statistical values regarding the standard deviation and variance, it is clear that it is not consensual.

Table 2: independent t-test and mean results for answers to “Peer evaluation was more motivating than teacher evaluation”

<table>
<thead>
<tr>
<th></th>
<th>MEIC</th>
<th>MISE</th>
<th>Independent t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2,4000</td>
<td>2,4400</td>
<td>df: 33 t: -0.0964</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1,2649</td>
<td>1,0440</td>
<td>t crit: 1,6924</td>
</tr>
<tr>
<td></td>
<td>Sig. (2 tailed)</td>
<td>0.9238</td>
<td></td>
</tr>
</tbody>
</table>

Analysing interview answers, it is clear that there are still factors that can be determinants for motivation, such as sharing evaluation criteria, explanation and clarification of the peer evaluation process, the result of previous experiences.

It can be stated that after analysing the answers to the interview questions regarding student motivation and in line with survey results, it can be generally stated that students are initially motivated to participate in peer assessment and
This motivation increases after it is done, although it is not entirely clear that students are more motivated by peer assessment than traditional teacher assessment.

**Peer review as a formative activity** - From the point of view of quantitative analysis relevant to this topic, it is found that students have a good perception of the contribution that peer review has as a training activity throughout the academic curriculum. Students thus agree that they can learn and better understand the subject matter of study, and even need to study more to be able to peer review.

Statistical treatment using the t-test methodology demonstrates that there is no difference to assert that the results are different before and after the peer evaluation was performed in the 3 subjects evaluated.

It is confirmed in the analysis of results that there is no marked difference of opinion between the students who attended the subjects of the two higher courses. However, the perception will always be more favourable from the statistical point of view to the MISE course, meaning that MISE students have a globally more consistent perception that peer evaluation plays a role in the development of knowledge of the students than the average of MEIC students as it shows to be lower with a considerable deviation.

**Table 3:** independent t-test and mean results for answers to “Peer review helped me develop my knowledge”

<table>
<thead>
<tr>
<th></th>
<th>MEIC</th>
<th>MISE</th>
<th>Independent t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2,5</td>
<td>3,16</td>
<td>df = 33</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1,0801</td>
<td>0,7461</td>
<td>t = 2,0744</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>t crit = 2,0345</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sig. (2 tailed) = 0,0459</td>
</tr>
</tbody>
</table>

The perception related to the subject matter being viewed in a more critical way analysed prior to the execution of the peer evaluation also has a different statistical analysis regarding the comparison between the subjects of the two courses, and the MEIC course always presents a less favourable perception at the start of the index mentioned. Note that after peer evaluation, perception tends to be more favourable to MEIC students and similar to MISE students.

It cannot be said that the overall students had the need for research beyond the subject, considering not only the average but also the values obtained for the standard deviation and variance. On the other hand, it can be stated that students of the SISE discipline had to investigate beyond the subject in order to be able to perform peer evaluation. There is no statistical difference in the responses between the MEIC and MISE courses, however analysing the AOSI and SISE disciplines of the MISE course there is a difference that adjusts the outcome when comparing the courses. Thus, and specifically with regard to AOSI and OGFI, although there is a favourable average.

**Table 4:** independent t-test and mean results for answers to “I needed to investigate further the subject to make the assessment”

<table>
<thead>
<tr>
<th></th>
<th>MEIC</th>
<th>MISE</th>
<th>Independent t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2,7</td>
<td>2,88</td>
<td>df = 33</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0,9487</td>
<td>0,9274</td>
<td>t = 0,5155</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>t crit = 2,0345</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sig. (2 tailed) = 0,609646</td>
</tr>
</tbody>
</table>

Considering both tables below statistically analyse the answers to question “I used my colleagues’ comments in peer review to improve my work”, it is seen the arithmetic mean is favourable, the values for the Standard Deviation and Variance confirm that the answers are globally dispersed. This means that not all students used assessment comments to improve their work, which in some ways makes sense as there was no retroactivity allowing students to improve their work, leaving it up to them to re-evaluate their work after the received comments.

Note anyway, that the arithmetic mean of the analysis answers to this question is favourable, and it can be stated that most students used the
received comments to improve their work and knowledge.

Table 5: Mean standard deviation and variance results for answers to “I used my colleagues peer review comments to improve my work”

<table>
<thead>
<tr>
<th></th>
<th>AOSI (MISE)</th>
<th></th>
<th>SISE (MISE)</th>
<th></th>
<th>OGFI (MEIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Variance</td>
<td>Mean</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td></td>
<td>2.5556</td>
<td>1.1304</td>
<td>1.2778</td>
<td>2.7500</td>
<td>0.9309</td>
</tr>
</tbody>
</table>

Table 6: t-test independent and mean results for answers to “I used my colleagues peer review comments to improve my work”

<table>
<thead>
<tr>
<th></th>
<th>MEIC</th>
<th></th>
<th>MISE</th>
<th></th>
<th>Independent t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>0.8498</td>
<td>2.68</td>
<td>0.9883</td>
<td>33</td>
</tr>
</tbody>
</table>

Regarding the analysis of the interview responses, the students interviewed effectively stated that the practice of peer review is an asset for academic development, namely in terms of sharing different perspectives and developing critical sense.

Graph 1: What are the benefits of using peer review for students?

They fear, however, that some pairs may not have well-defined criteria, or the subject matter may not have been fully assimilated, which may be counterproductive in using peer review. They also feel that they are replacing teachers in this task.

Analysing the percentage results of the sample in relation to the advantages of using peer review, it is immediately apparent that there is a high agreement of opinion that “Greater knowledge” is indeed the most pointed benefit of peer review for students. The percentage value of the group of “Most critical sense” is also expressed in these results, and may be considered as the second most relevant benefit pointed out by the participants.

Evaluation process – Analysing the answers concerning the evaluation process, it can be concluded that subjectivity and requirement in peer review is not a problem for the students targeted in this study, either before or after the peer review. From a statistical point of view, the values obtained between subjects and courses are similar.

It is also concluded that it is effectively important for the peer review evaluation process and according to the study target students who responded to the survey, the establishment of a criterion for the best evaluation.

Students confirm the difficulty in evaluating the assignments and they agree that the grades are fair and that using an anonymous nature helps in the evaluation comments. From the results point of view, there are no statistical differences between the results obtained for the MEIC and MISE course.
on the answers analysed for this specific subject. Still, from the analysis made it can be stated that not all students confirm that the peer review evaluation method is a fair method of evaluation. The relevant results obtained through the interviews reveal that overall the students do not feel harmed with the grades obtained, except occasionally, in which they feel that some of their answers were unfairly scored. With the reuse of this assessment method, students become more uninhibited and ratings and comments become more assertive.

**Graph2:** What are the benefits of using peer review for students?

![Graph showing benefits of peer review](image)

Also, students (more precisely from OGFI) felt that there was a lack of information which caused some problems in the assessment made, that is, they agree that certain basic information should be disseminated in order to help the evaluation process.

Faced with the results regarding the disadvantages of using peer review, it is immediately apparent that there is a high agreement of opinion of “Incorrect assessment / lack of knowledge to perform the assessment” is in fact the disadvantage most noted by students.

**Students behaviour** – It appears that the respondents’ perception of the time required for the practice of peer evaluation is initially in agreement with the need for a long time to perform the practice. Even after the practice, the surveyed students reiterate that a lot of time is actually needed. It should be noted that in the case of OGFI the average fell after the practice of peer review, however overall, statistically analysing the discrepancies found in the averages are not different before and after the practice of peer review.

In order to understand whether the students consider peer review to be a good practice and the possibility of extending their practice to other subjects and after analysis, it is found that on average students agree on the extent of peer review to be extended to other subjects, however, there is a high dispersion in student responses as can be seen in variance on Table 7, the null hypothesis theorem confirms that from a statistical point of view the values obtained between the MEIC and MISE courses are the same.

**Table 7: t-test independent and mean results for answers to “Peer review should be extended to other disciplines.”**

<table>
<thead>
<tr>
<th></th>
<th>MEIC</th>
<th>MISE</th>
<th>Independent t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2,500</td>
<td>2,600</td>
<td>df</td>
</tr>
<tr>
<td>Std. dev.</td>
<td>1,080</td>
<td>1,2247</td>
<td>33</td>
</tr>
</tbody>
</table>

Concluding the analysis of the answers to question in Table 7, the responses are not conclusive, as from the observed dispersion, cannot be exhaustive in relation to the objective of stating that the students intend the peer review practice to be extended to other subjects.

It was also found that most students effectively agree to be involved in the role of evaluator, a key point to the peer review process.

Analysing the percentage results of the sample related to graph2 and the disadvantages of using peer review, it is clear that the percentage value of the “Time Consumption” group is also expressed in these results, and may be considered as the second
disadvantage most pointed out by the participants of the questionnaires.

The interviews feedback complement the results obtained by the online survey, the students who participated in the interview have a favourable attitude regarding the role that peer evaluation plays in their formation, even though they have the notion that it is a time-consuming practice. They also believe that they can benefit from extending the measure to other disciplines. Note that students feel comfortable acting as peer reviewers.

V. CONCLUSIONS

In this thesis, Peer Review in Master Courses - Case Study, peer review students' perceptions were studied, namely in two MISE subjects and in a third MEIC subject for comparative purposes. The Case Study methodology was used to investigate the proposed thesis. To complete the study of the problems initially indicated, the students targeted by the AOSI (MISE), SISE (MISE) and OGFI (MEIC) subjects were investigated by means of online questionnaire observation and Skype interviews. In the comparative aspect, between the students of the three subjects and despite all the differences inherent in the diversity of the teaching methodology and the form of the adoption of peer review, no mismatch in the observed results was identified. The problems proposed in this thesis and its answers are presented below:

Main Contributions:
1) The process may present a degree of risk with respect to the reliability of grades, as peer pressure to apply high grades or friendships may influence the assessment, although the risk may be mitigated if students can submit their assessments independently of the group and/or anonymously between them.

The target students who participated have a non-uniform perception regarding the fairness of the assessment method. In general, they confirm that they do not feel harmed by the grades obtained, except that they feel that some of their responses have received unfair grades. There are also comments that confirm that with the reuse of this assessment method, students become uninhibited and ratings and comments become more assertive. The teachers and counsellors intervened whenever necessary.

2) Students feel unprepared to perform the assessment and/or judge their peers. Students tend to see themselves and their peers as too inexperienced to make accurate and fair assessments of their work. This is especially true when students receive grades based on peer feedback [11].

Students do not like to evaluate as they are leaving their comfort zone. If students do not have criteria or examples, they have great difficulty presenting constructive assessments. However, they get much more feedback, which is better than in some cases just getting the grade.

It is also concluded that students are initially motivated to participate in the peer evaluation and that this motivation increases after the peer evaluation.

Initially there was some lack of understanding of the concept, perhaps due to the lack of clarity of the process; however, as peer evaluations followed the students became more confident. Interestingly, students feel more confident with their knowledge after the assessment, and there is an added responsibility when asked to rate their peers.

3) Students may not have enough time to complete the assessment.

It was observed that students initially generated some distrust in the use of peer review, which faded as the semester progressed. The students' perception of the time required to practice peer evaluation is initially in agreement with the need for a long time to perform the practice, even after the peer review. Thus it is concluded that the perception before and after practice is that students spend a lot of time to practice peer review.

Students also considered that they had enough time to evaluate the proposed works within the stipulated deadlines. There were, however, some exceptions, and there were students who did not submit their assessments or did not deliver on time.

4) Students tend to give the same grade to all evaluated assignments.

5) Students may not be familiar with the assessment criteria. It is difficult to evaluate each student systematically according to their performance.

As confirmed in point 1, the target students who participated have a non-uniform perception regarding the fairness of the assessment method. Generally confirm that they do not feel harmed with the grades obtained. Students confirm the difficulty in evaluating the assignments, check that the grades are fair and that using an anonymous nature helps in the evaluation comments.

There is also the perception that with the reuse of this assessment, method students become
uninhibited and the ratings and comments become more assertive.

There is the perception of students who felt that there was a lack of information, which led to some problems in the assessment made, i.e., agree that certain basic information should be disseminated in order to help the assessment process. There is also no agreement on the subjectivity of peer evaluations, as well as the demands and assertiveness of their peers.

6) From the statistical point of view and despite all the differences between the MEIC and MISE courses, the results obtained can be considered similar, with no noticeable differences, as otherwise presented and scalped in the appropriate chapters of this study.

It was also part of this study, to hear the benefits and disadvantages in the opinion of the target students. The benefits and disadvantages noted are in line with the results found by analysing the survey responses and observation. For example, in relation to greater and better learning pointed out as a benefit and favourable perception, how the role that peer assessment plays in their accurate training in student responses, or as a pointed disadvantage, the students’ lack of preparation for this assessment is in line with listening to the surveys and points out that students are not confident about its use.

**Main limitations:**

In carrying out this research there were limitations that could count as lessons learned and that may help future work in this area;

1) The research presented included a single questionnaire listening to the students’ perception before and after the peer review. However, it would be more reliable to conduct more than one questionnaire soon after the research’s target phenomena have been carried out, so that better information on participants’ perceptions can be gathered.

2) In order to stimulate participation and increase the study sample, it would be helpful to have more exposure and presentation of the project, perhaps at the time of observation to potential participants.

**Future Work to develop in this area:**

It would be important to develop studies in this area, to understand to what extent the results contained in this dissertation are conditioned by the conjuncture or if they are more generic. It would also be interesting to see if the grades that are awarded using the peer review are pedagogically fair and effectively classify the students by judging their merit. It would also be relevant to understand from a pedagogical point of view whether the practice achieves its objectives, from the perspective of teachers and counsellors and from the perspective of students. There are some issues that are not consensual and should be investigated in a qualitative way, namely question 3.10 of the online questionnaire.

It will also be important to establish units of measurement for comparative effects of the complexity of the work to be done by the students versus the time for their evaluation.

**References**


