

A Study of the Use and Usability of an LMS (RCLearn): A Student Perspective

Higher Education Teaching Project

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Abstract/ executive summary

The problem identified for this research is that private education provider's students are not using an LMS effectively, not completing their activities and not engaging fully with the system. The problem was identified by analysing the students' LMS usage reports of the academic year 2019. Furthermore, lecturers whose students were not completing activities on an LMS also pointed out the problem. The initial impressions suggested that there were two underlying problems, which were the poor usability of an LMS and that students did not see the value of engaging on an LMS. However, for this study, the researcher only focused on the usability of an LMS. The study followed a qualitative approach and because of lockdown, the data was collected making use of Microsoft Forms of which the link was shared with the study participants. The study consisted of 87 participants who voluntarily took part in the study. The findings of the study revealed that LMS is important for enhancing teaching and learning. Furthermore, for the most part, majority of the students were satisfied with the private education provider's LMS, indicating that LMS is useful in teaching and learning. However, only a few students experienced technical issues and they also pointed out that LMS used requires more improvements.

1. Introduction

Learning Management System (LMS) has been proven to be one of the best tools to enhance teaching and learning, as it has the potential to help students to be successful in their studies (Dahlstrom, Brooks & Bichsel, 2014). Despite the success stories of LMS as indicated by the literature, private education provider's students are not effectively using an LMS. The results of the study could help identify any usability problems with the current LMS used. Therefore, the findings of the study could help find ways to encourage students to effectively engage on the LMS, and perhaps be successful in their studies or perhaps recommendation could be made to help improve the current LMS used by the private education provider. In this study, the current private education provider's students were requested to complete a questionnaire in order to evaluate the usability of the LMS used. The questionnaire served to obtain students' subjective opinions about the LMS used as well as their personal experiences, including their level of satisfaction with the LMS they use in their different modules. The questionnaire used consists of both structured and unstructured questions.

2. Literature Review

2.1 Learning Management Systems

Over the years researchers have shown many findings with regards to the impact LMS have on teaching and learning (Adzharuddin & Ling, 2013). Below are just some of the studies on LMSs:

Kulshrestha and Kant (2013) argue that LMSs are the central space for students and lecturer to interact outside of the classroom, as well as attend to course-related challenges faced by students. In my opinion, LMSs are playing a major role during this period of Covid-19 pandemic, because lessons continue online and students are not missing out on their education.

Hassan and Shukri (2017) conducted a study whereby they made an investigation on the effects of using an LMS to enhance the teaching of English as a foreign language, the study consisted of 90 participants. The results of the study indicated that students were satisfied because their positive responses to questionnaires were more than their negative responses

(Hassan & Shukri, 2017). Moreover, Hassan and Shukri (2017) recommended that future research can look into examining the motivational behaviour of both lecturers and students, and also finding out the factors that will affect Blackboard environments in English as a foreign language.

Firat (2016) conducted a study to investigate the effects of students' LMS learning behaviours on their academic achievements. The results of the study indicated that students used LMS as support to face-to-face education. Almost all the students pointed out that LMS improved their academic results. Additionally, Firat (2016) recommended that more studies on the effect of LMSs on students' engagement, support, motivation, and drop-out rates could be explored.

Lewis, MacEntee, DeLaCruz, Englander, Jeffrey, Takach, Wilson and Woodall (2005) conducted a study in which they compared nine different LMSs, they emphasized their features, tools which allow them to promote active learning and student engagement. Their study concluded that for LMSs to be successful they should meet the learning needs of the end-user (student or teachers). Moreover, they pointed out that they should be equipped with essential e-learning tools such as assessments, communication, collaboration tools.

Dahlstrom, Brooks, and Bichsel (2014) carried out a study in which they explored the faculty and students' standpoints on LMSs as well as their current status and their future in teaching and learning in higher education. The findings of their study indicated that faculties and students perceive LMSs as augmentation tools that support teaching and learning, however, only a few used LMSs advanced features or used them to their full potential. Furthermore, there is a need to make LMSs compatible with students' mobile devices, and also students and faculties would prefer them to have enhanced features, operational functions, as well as be customizable.

Chaw and Tang (2017) piloted a study in which they investigated students' expectations, needs or issues they may have with the university's LMS. The findings of the study indicated that students found the LMS to be useful and vital to a certain extent, however, they suggested that the design of the LMS should be more attractive. Chaw and Tang (2017) concluded that lecturers should explore other features to better engage the students as well as to motivate them. Additionally, they suggested that a study may be needed to evaluate the

students' satisfaction with the LMS so that developers may design LMSs that better meet the students' needs and expectations.

Green, Inan, and Denton (2012) piloted a study to determine the elements that influenced students' satisfaction with their new LMS and to determine which of the elements are the most vital, to improve LMS induction courses for new students. The findings of the study showed that usability is the key to achieving students' satisfaction, as well as technical help support. Green, *et al.* (2012) conclude that for BL to be successful it is vital for LMSs to be user-friendly, and also students should have easy access to technical support, or be oriented effectively on how to use the LMS.

Tibyampansha, Ibrahim, Kapanda, Tarimo, Minja, Kulanga, Muiruri, Mteta, Kessy and Bartlett (2017) carried out a study in which they implemented an LMS to enhance student engagement. The results of the study indicated that students were satisfied with the LMS used, as it proved to be very helpful in enhancing medical and other health professions learning in an environment where learning resources were very limited.

Ngandu (2015) did a study whereby he identified the factors that impede lecturers to either adopt the use of an LMS in teaching and learning or to reject utilizing it. The findings of the study showed that because senior management took the decision of selecting which LMS to use, this placed the ownership in their hand, hence the resistance from the lecturers. Furthermore, Ngandu (2015) recommended that future research could explore utilizing effective strategies for training lecturers on how to use LMS effectively and efficiently in teaching and learning.

The previous studies discussed above have contributed greatly to the researchers understanding of the advantages and disadvantages of LMSs as well as the flipped classroom approach in teaching and learning. Although LMSs may have certain disadvantages, previous studies revealed that their advantages are way more than their disadvantages (Okaz, 2015). In line with some of the studies mentioned above such as the studies of Chaw and Tang (2017), Green, Inan, and Denton (2012), Sulaiman (2018), and Firat (2016), this study will seek to get a clear understanding of how the students feel about the use of LMS in their studies and whether they find it easy to use. The studies above indicated that LMSs allow for Blended Learning (BL) to occur, and they are capable of significantly improving students' academic

achievement (Gecer & Dag, 2012; Sulaiman, 2018). However, for LMSs to improve students' academic achievements they should be user-friendly (Chaw & Tang, 2017; Green, *et al.*, 2012; Lewis, *et al.*, 2005). The researcher is in agreement with Chaw and Tang (2017) in pointing out that other features of the LMS should be explored for them to be effective in achieving excellent academic results. In line with the study of Balci and Soran (2009), most private education provider's students would prefer not to utilize an LMS if given an option. Possible reasons could be that some students do not have the necessary devices or resources (e.g. Laptops or tablets) required to access an LMS to complete activities. For example, during the lockdown, some students complained about not possessing laptops or tablets as well as data costs being too high. Therefore, it is important to carry out this research to evaluate the usability of an LMS as well as how students feel about the use of an LMS in their studies.

3. Problem Statement

Previous research indicates that Learning Management Systems (LMSs) have many frustrations and disappointments associated with them, this is mainly because of the many features available within the system (Alturki, Aldraiweesh & Kinshuck, 2016). Chaw and Tang (2017) suggest that students don't need all the features that most of the LMSs have therefore it is important to find out from the students' point of view which features are most vital and useful for them. The problem identified is that private education provider's students are not using an LMS effectively, not completing their activities and not engaging fully with the system. The problem was identified by analysing the students' LMS usage reports of the academic year 2019. Furthermore, lecturers whose students were not completing activities on an LMS also pointed out the problem. The initial impressions suggest that there are two underlying problems, which are the poor usability of an LMS and that students do not see the value of engaging on an LMS. However, for this study the researcher will only focus on the usability of an LMS.

The research problem above led the researcher to formulate the following research questions for this study.

3.1 Research questions

The main research question formulated for this study is:

1. Is the usability of an LMS appropriate for private education provider's students?

Objectives

- Evaluate the usability of an LMS from the students' perspective.
- Evaluate the students' satisfaction with an LMS.

4. Research Approach and Methodology

For the purpose of this research qualitative data will be collected using questionnaires developed by the researcher. The questionnaires will be utilised to gather data about the participants' personal experiences, including their level of satisfaction with an LMS they used in their different modules. These questionnaires will consist of both structured and

unstructured questions. The qualitative approach is chosen because it has the potential to obtain detailed students' opinions, experiences and feelings with an LMS (Rahman, 2017). This approach is excellent because this research seeks to understand the usability of an LMS from the students' perspective, for that reason evaluating students' opinions, experiences and feelings will enable the researcher to discover any difficulties students encounter with regards to the LMS they use.

4.1 Participants

In the context of this research, purposive sampling was the most appropriate a suitable sampling technique for selecting participants needed for this study because the researcher already knows the profile of the potential participants of the research study.

4.2 Techniques used to collect data

The data was collected by means of Microsoft Forms, the link for the questionnaire was shared with the students via WhatsApp. This approach was used because the country is currently under lockdown, therefore, students could not be issued with printed questionnaires to complete.

5. Analysis of Data and Findings

In this study, participants consisted of a group of private education provider's students. There was a total of 87 participants who willingly took part in this study. Therefore, the researcher considered this number to be sufficiently substantial and conclusive as far as the conclusions reached. The study participant group was made of students from various cultural backgrounds as seen in *Figure 1* under Appendix E.

Participants were asked to indicate if they own computers. The vast majority of them (57%) indicated that they indeed own a computer, except for 37 participants (43%) who indicated that they do not own a computer. See participants results in *Figure 2* under Appendix E.

Participants' access to an LMS varied from daily, which is 40% to Weekly which is 44%. 7% of the participants indicated that they only access an LMS monthly and only 4% of the

participants indicated that they never access an LMS. See participants results in *Figure 3* under Appendix E.

The 38 participants who do not own computers indicated that they access an LMS via their smartphones or sometimes via a borrowed device such as a desktop computer or a laptop. However, some participants indicated that sometimes they encounter connectivity issues or their cell phones are not compatible with the LMS. Some of the responses that the participants provided are as follows, See *Figure 2* under Appendix E.

<i>"Through someone else's phone"</i>
<i>"I use my cell phone"</i>
<i>"I use My smartphone or PC that belongs to my brother"</i>
<i>"Through phone, or borrowed laptop"</i>
<i>"I use my phone, but it sometimes gives me problems"</i>
<i>"Through my phone when I have data."</i>
<i>"I borrow laptop from my friend"</i>
<i>"Cell phone or internet café"</i>
<i>"I used to go to the library because I'm struggling with network"</i>

Question 3 (*If your answer is Yes to Question 2, please indicate how often do you use it to access LMS.*) and Question 4 (*If your answer is No to Question 2, please state how you access LMS.*) might have confused some of the participants because the sum of the responses of the two questions should be 87, which is the total number of participants in this study. However, instead, the sum of the two questions is 93. It would, therefore, appear that 6 of the participants answered both questions whereas they were supposed to answer one of the two questions.

When asked if the new technology would have an impact in students' daily life activities 80% of the participants indicated that it would, and 20% pointed out that new technology would not impact their daily life activities in any way. See participants results in *Figure 5* under Appendix E.

The majority of the participants (70%) indicated that they feel LMS is useful in teaching and learning. 23% of the participants indicated that they do not like the use of LMS in teaching and learning. While 3% of the participants didn't see the importance of LMS in teaching and learning. Furthermore, 75% of the participants indicated that it is important to learn using an LMS, except for 25% who indicated that it is not so important for them. These results are similar to those of Dahlstrom, *et al.* (2014) because they discovered that 74% of the participants indicated that LMS is a very useful tool to enhance teaching and learning. See participants results in *Figure 6 and 7* under Appendix E.

Upon further investigations, 84% of the participants believe that knowing how to use an LMS will increase their chances of being successful in any module they do. This is true as Mtebe (2015) argues that there is a positive relationship between students' success and high LMS usage. Furthermore, studies also reveal that students are more satisfied when they can engage with the content online in addition to face-to-face contact with the lecturer (Mtebe, 2015). However, despite these observations, only 31% of the participants said they access an LMS daily, 47% said they access it weekly, and 13% admitting to only accessing it monthly. See participants results in *Figure 8* under Appendix E.

The participants indicated that they use computers for various reasons such as typing documents, playing music, sending emails, browsing the internet, etc. See participants results in *Figure 9* under Appendix E.

Participants' LMS skill level varies, as it ranges from advanced 16%, intermediate 53%, novice 7% and beginner 24%. See participants results in *Figure 10* under Appendix E.

Table 1 below summarizes participants' responses related to their satisfaction level with an LMS they use at the private education provider. Table 1 below interprets the data depicted in *Figure 11 and 12* above. Referring to the data displayed in Table 1, N represents the total number of respondents. The proportions of participants' responses are represented as follows: strongly disagree (SD), disagree (D), not sure (NS), agree (A), strongly agree (SA). The sum of A and SA was used for the purposes of analysing and comparing participants' personal opinions regarding each of the satisfaction statement shown in Table 1.

Table 1. participants' personal Satisfaction with an LMS, effectiveness of an LMS, and efficiency of an LMS

Statement	Participants	SD	D	NS	A	SA	Sum of A and SA
The course content was easy to understand.	87	2.3%	16.1%	35.6%	44.8%	1.1%	45.9%
The content of LMS met my learning expectations.	87	5.7%	26.4%	34.5%	32.2%	1.1%	33.3%
I have benefited a lot from using LMS in my studies.	87	5.7%	19.5%	35.6%	32.2%	6.9%	39.1%
LMS can be used to support lecturers.	87	0%	5.7%	36.8%	48.3%	9.2%	57.5%
LMS encouraged me to take responsibility for my own learning.	87	3.4%	13.8%	4.6%	50.6%	27.6%	78.2%
I experienced technical problems while using LMS.	87	4.6%	16.1%	11.5%	36.8%	31%	67.8%
I found LMS navigational tools confusing.	87	4.6%	37.9%	25.3%	26.4%	5.7%	32.15%
I enjoyed working with LMS and I felt very confident using it.	87	10.3%	23%	35.6%	25.3%	5.7%	31%

LMS has all the functions and capabilities I expect it to have.	87	3.4%	14.9%	42.5%	34.5%	4.6%	39.1%
LMS interface was very user friendly and easy to use.	87	3.4%	13.8%	27.6%	43.7%	11.5%	55.2%
I recommend that all Institutions of education should also use LMS in teaching and learning.	87	9.2%	10.3%	28.7%	34.5%	17.2%	51.7%
Using LMS I was able to complete my tasks within a reasonable amount of time.	87	10.3%	31%	19.5%	28.7%	10.3%	39%
LMS can enable students to learn any other course more quickly.	87	4.6%	16.1%	36.8%	37.9%	4.6%	42.5%
Most students would learn how to use LMS very quickly.	87	4.6%	13.8%	31%	44.8%	5.7%	50.5%

Looking at the data in Table 1, it can be observed that as per the participants' personal views, the following made them extremely satisfied with the LMS:

- *"LMS interface was very user friendly and easy to use."*
- *"I recommend that all Institutions of education should also use LMS in teaching and learning."*
- *"LMS can enable students to learn any other course more quickly."*

- *“Most students would learn how to use LMS very quickly.”*
- *“The course content was easy to understand.”*
- *“I have benefited a lot from using LMS in my studies.”*
- *“LMS can be used to support lecturers.”*
- *“LMS encouraged me to take responsibility for my own learning.”*

In Summary: the results listed above suggested that participants were very satisfied with the LMS they use at the private education provider. This implies that the LMS is indeed the vital tool to support students in their studies.

67.8% of the participants indicated that they experienced technical problems while using or trying to access LMS during lockdown. Below are some of the students' comments:

<i>“The Telkom data issue had me buying data over and over again until I gave up and decided that I'll only do assignments and ice activities.”</i>
<i>“Data problems and network”</i>
<i>“LMS would just not operate properly and one would wait a very long time to access it once more”</i>
<i>“Connection problem and not having Pc”</i>
<i>“Safe assign taking time to show plagiarism percentage”</i>
<i>“It needs lots of data that I can't afford”</i>
<i>“Slow navigation”</i>
<i>“The face time option was problematic, so I don't see the lecturer and it cuts off sound at times”</i>
<i>“Submitting tests or assignments took way longer than usual, other times there are network problems and data is expensive.”</i>
<i>“I struggled with logging in on blackboard”</i>

Adzharuddin and Ling (2013) conclude that issues students experience with LMS are all part of learning. Institutions of higher education need to provide students with intense training on how to use LMSs, as well as have a team on call at all times to offer support with students' queries (Adzharuddin & Ling, 2013).

In light of some of the issues participants encountered on the LMS, 57% of the them indicated that the functionality of LMS requires some improvements. See participants results in *Figure 13* under Appendix E.

6. Ethical Considerations

The study participants were required to fill out consent forms (see Appendix D). The researcher obtained an ethical clearance letter (see Appendix A) from the Independent Institute of Education Rosebank College and a permission letter to conduct research at the IIE Rosebank College was provided by the principal (see Appendix B). Participants were under no circumstances forced to take part in the study, as the researcher specified that it is the LMS that is being evaluated and not the participants' ability to use an LMS. For that reason, study participants were encouraged to take part in the study voluntarily. Participants' details are kept confidential and they were informed about what is taking place and what they can expect in the study at all times.

7. Limitations of the study

This study only focused on IIE Rosebank College Bloemfontein students. Therefore, the researcher cannot conclude that the findings of the study will be the same at other institutions of higher education. Moreover, the researcher is not certain if the students will answer the questions based on how the researcher expects them to answer them. Some students may not be truthful or honest in answering the questionnaires. This can therefore result in the findings being inconclusive.

8. Anticipated contributions of the study

This study confirms what the previous studies have already confirmed which is that the use of LMS enhances the students experience in teaching and learning. Furthermore, this research has provided clarity in terms of the following question; is the usability of an LMS appropriate for private education provider's students? From the students' responses to the questionnaires majority of the students indicated that LMS used at the private education provider is usable and they were satisfied with its functionality. However, a few students indicated that the LMS functionality requires some improvements.

9. Discussion

The question about the students' home language was asked because the researcher wanted to find out if the home language has any impact on students' willingness to engage with the LMS used at the private education provider. What the researcher discovered was that 6 participants whose home language is Southern Sotho when asked to indicated how they feel about the use of LMS in teaching and learning. They pointed out that they don't like LMS at all. The above feeling was the same for participants whose home language is Northern Sotho. Furthermore, 7 students whose home language is English surprisingly also pointed out that they don't like LMS at all in teaching and learning. Moreover, the results revealed that 20 students from across all cultural backgrounds pointed out that they don't like the use of LMS at all in teaching and learning. Only 1 student whose home language is Southern Sotho indicated that they are just okay with the use of LMS in teaching and learning, however, they cope much better with contact learning. 3 students from 3 different cultural backgrounds (Southern Sotho, Afrikaans and English) indicated that they don't really see the importance of using LMS in teaching and learning. What is promising to the researcher is that 61 students from across all cultural backgrounds indicated that they believe the use of LMS in teaching and learning is useful. One student whose home language is Southern Sotho indicated that they find LMS to be useful for self-study because they get to engage with the module content independently. However, the student pointed out that some modules need contact learning. Moreover, 19 students from various cultural backgrounds such as Afrikaans, English, Southern Sotho, Tswana and Zulu pointed out that they don't find LMS navigational tools confusing. Furthermore, the same students indicated that the functionality of LMS was good. 3 students whose home language is Xhosa, Tswana and English indicated that the LMS navigational tools are not confusing. The same students also pointed out that LMS is a failed project. From the above analysis, it is therefore apparent that the majority of students from across various cultural backgrounds find the use of LMS in teaching and learning useful, they also appreciate its functionality.

23 students who indicated that they don't own a computer indicated that they feel the use of LMS in teaching and learning is useful. 11 of the students who don't own a computer indicated that they don't like the use of LMS in teaching and learning and 2 of the students indicated

that they don't really see its importance. 39 students that indicated that they own a computer indicated that they feel LMS is useful in teaching and learning. 9 students who own computers indicated that they don't like it at all, 1 student indicated that they cope well with contact learning and 1 student pointed out that they don't really see its importance. From the above analysis, the researcher discovered that students' perspective of LMS usefulness is affected by whether they own a computer or not. 21 Students who own computers use them to access LMS on a daily basis. Furthermore, 16 students indicated that they think the use of LMS in teaching and learning is useful. 4 of the students who own a computer indicated that they access LMS on a monthly basis. 1 student who owns a computer said they don't access LMS very often. It is therefore evident that students that own a computer access LMS more often than those students without computers. 17 of the students who don't own desktop/laptop computers access LMS using their smartphones. They indicated that they feel the use of LMS in teaching and learning is useful. On the contrary 13 of the students who don't own desktop/laptop computers access, LMS using their smartphones indicated that they do not like the use of LMS in teaching and learning.

In terms of the skill level with regards to LMS 9 students whose skill level is advanced felt that LMS is useful in teaching and learning. Furthermore, 7 students whose skill level is beginner also pointed out that the use of LMS in teaching and learning is useful. 7 of the students at the intermediate level said they do not like the use of LMS in teaching and learning. Furthermore, 10 students at beginner level also pointed out that they do not like the use of LMS in teaching and learning. Only 2 Students who are more at the advanced skill level pointed out that they don't like the use of LMS in teaching and learning. From the students' responses regarding their LMS skill level. It is apparent that students who are more at the advanced level see the importance of LMS in teaching and learning.

30 students that indicated that they think LMS is useful in teaching and learning also feel that LMS was good in terms of its functionality. Moreover, 23 students who indicated that they don't like the use of LMS in teaching and learning, also pointed out that the current LMS needs more improvements some students furthermore, indicated that LMS is a failed project in their opinion. The majority of students see the importance of LMS in teaching and learning.

42 students either indicated that they are not sure, disagree or strongly disagree when asked if they would recommend that all Institutions of education should also use LMS in teaching

and learning. Nonetheless, the use of LMS in teaching and learning is supported by the majority of the students, because 45 students who participated in the study indicated that they would recommend that all Institutions of education should also use LMS in teaching and learning. Furthermore, 28 of the students who indicated that they would recommend that all institutions of education should use LMS in teaching and learning also agree that LMS has the potential to enable students to learn any other course more quickly. Only 3 of the students who indicated that they would recommend that all institutions of education should use LMS in teaching and learning disagree that LMS can enable students to learn any other course more quickly, and 14 of the students in the same category are not sure if indeed LMS can enable students to learn any other course more quickly. The above analysis indicates that the majority of the students who participated in this study have a positive attitude towards the potential of an LMS to enhance teaching and learning. These findings were also evident in the study conducted by Hassan and Shukri (2017) as well as Dahlstrom, *et al.* (2014).

36 of the students whose overall opinion about LMS is good and very good also indicated that they think LMS is useful in teaching and learning. Only 1 student whose overall opinion about LMS is bad also indicated that they think LMS is useful in teaching and learning. Furthermore, 25 of the students whose overall opinion about LMS is not bad also indicated that they think LMS is useful in teaching and learning. Only 4 of the students pointed out that their overall opinion about LMS is bad, the same students furthermore indicated that they don't like the use of LMS in teaching and learning. The findings of this study are very similar to the findings of the study conducted by Hassan and Shukri (2017) who discovered that students were satisfied because their positive responses to questionnaires were more than their negative responses.

21 of the students indicated that the functionality of LMS is good and the same students also pointed out that they have benefited a lot from using LMS in their studies. 8 of the students who are not sure whether they benefited from using LMS in their studies indicated that the functionality of LMS is good. Only 1 student disagreed to have benefited from using LMS in their studies. However, their overall opinion about the functionality of LMS is that it is good. 14 of the students who disagreed to have benefited from using LMS in their studies also pointed out that the functionality of LMS needs more improvements. Furthermore, 13 of the students who agreed to have benefited from using LMS in their studies also indicated that the

LMS functionality needs more improvements. What is interesting is that only 7 students indicated that LMS is a failed project, these are the same students that also pointed out that they did not benefit a lot from using LMS in their studies. 4 of these students do not own a computer and 3 three of the students own a computer. Furthermore, 2 of the students access LMS daily with only 1 student who accesses LMS on a monthly basis. The majority of students are satisfied with the functionality of LMS and they benefit greatly from using it in their studies.

10. Conclusion and Recommendations

Based on the above findings it can be concluded that an LMS indeed can support and enhance teaching and learning. Private education providers' students had a very high satisfaction level with regards to the LMS used. As a result, the findings of the current study are in line with the previous research findings by Hassan and Shukri (2017), Firat (2016), Dahlstrom, *et al.* (2014), Chaw and Tang (2017), Green, *et al.* (2012), Sulaiman (2018), which indicated that LMSs have the potential of increasing learner's satisfaction and motivation in different subjects. It is therefore proposed that the private education provider should continue using the LMS in teaching and learning. However, it should consider addressing a few concerns which are related to the usability, accessibility and also focus on ensuring that students get sufficient training on how to use the LMS thoroughly, as it was revealed from the findings of this study that students' skill level of LMS has an impact of how they view the significance of LMS in teaching and learning. Furthermore, future research could look into why the students at the private education provider still do not perform well in their studies despite the majority of them being satisfied with the current LMS.

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Appendix C: Questionnaire

← Back Computer Mobile

LMS Questionnaire

The purpose of this questionnaire is to elicit your personal opinions about the Learning Management System (LMS) that you use in your different modules. Please answer all the questions.

A Learning Management System (LMS) is a software-based platform that facilitates the management, delivery, and measurement of an organization's corporate e-learning programs, for example "RCLearn" in the case of Rosebank College (Powell, 2019).

* Required

1. Please indicate your home language. *

☐ Afrikaans
☐ English
☐ Ndebele
☐ Northern Sotho
☐ Southern Sotho
☐ Swati
☐ Tsonga
☐ Tswana

← Back Computer Mobile

6. Please indicate how you feel about the use of Learning Management System (LMS) in teaching and learning. *

☐ I don't like it at all
☐ I think it is useful
☐ I don't really see its importance
☐ Other

7. Do you think it is important for you to learn using LMS? *

☐ Yes
☐ No

8. Do you think knowing how to use LMS will help increase your chances of being successful in the module? *

☐ Yes
☐ No

9. Please indicate how often do you access LMS. *

☐ Daily
☐ Weekly

← Back Computer Mobile

2. Do you own a computer? *

☐ Yes
☐ No

3. If your answer is Yes to Question 2, please indicate how often do you use it to access LMS.

☐ Daily
☐ Weekly
☐ Monthly
☐ Never
☐ Other

4. If your answer is No to Question 2, please state how you access LMS.

Enter your answer

5. Do you think knowing about new technology will have an impact in your daily life activities? *

☐ Yes
☐ No

← Back Computer Mobile

10. For what purpose do you use a computer? *

☐ Typing documents
☐ Playing games
☐ Playing music
☐ Sending emails
☐ Browsing the Internet
☐ Other

11. Please indicate your skill level with regards to LMS. *

☐ Advanced
☐ Intermediate
☐ Novice
☐ Beginner

12. What are your expectations from the current study (A study of the use and usability of an LMS (RCLearn): a student perspective.)? *

Enter your answer

13. For the questions below please indicate if you "Strongly Disagree", "Disagree", "Not Sure", "Agree" or "Strongly Agree" with the given statements. *

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
13.1 The course content was easy to understand.	☐	☐	☐	☐	☐
13.2 The content of LMS met my learning expectations.	☐	☐	☐	☐	☐
13.3 I have benefited a lot from using LMS in my studies.	☐	☐	☐	☐	☐
13.4 LMS can be used to support lecturers.	☐	☐	☐	☐	☐
13.5 LMS encouraged me to take responsibility for my own learning.	☐	☐	☐	☐	☐
13.6 I experienced technical problems while using LMS.	☐	☐	☐	☐	☐

14. If your answer to question 13.6 is Agree or Strongly Agree please describe the kind of problems you experienced.

Enter your answer

15. For the questions below please indicate if you "Strongly Disagree", "Disagree", "Not Sure", "Agree" or "Strongly Agree" with the given statements. *

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
15.1 I found LMS navigational tools confusing.	☐	☐	☐	☐	☐
15.2 I enjoyed working with LMS and I felt very confident using it.	☐	☐	☐	☐	☐
15.3 LMS has all the functions and capabilities I expect it to have.	☐	☐	☐	☐	☐
15.4 LMS interface was very user friendly and easy to use.	☐	☐	☐	☐	☐
15.5 I recommend that all Institutions of education should also use LMS in teaching and learning.	☐	☐	☐	☐	☐
15.6 Using LMS I was able to complete my tasks within a reasonable amount of time.	☐	☐	☐	☐	☐
15.7 LMS can enable students to learn any other course more quickly.	☐	☐	☐	☐	☐

← Back
Computer
Mobile

16. Your overall opinion about the LMS: *

☐ Very good
☐ Good
☐ Not bad
☐ Bad

17. What is your overall opinion about the functionality of LMS? *

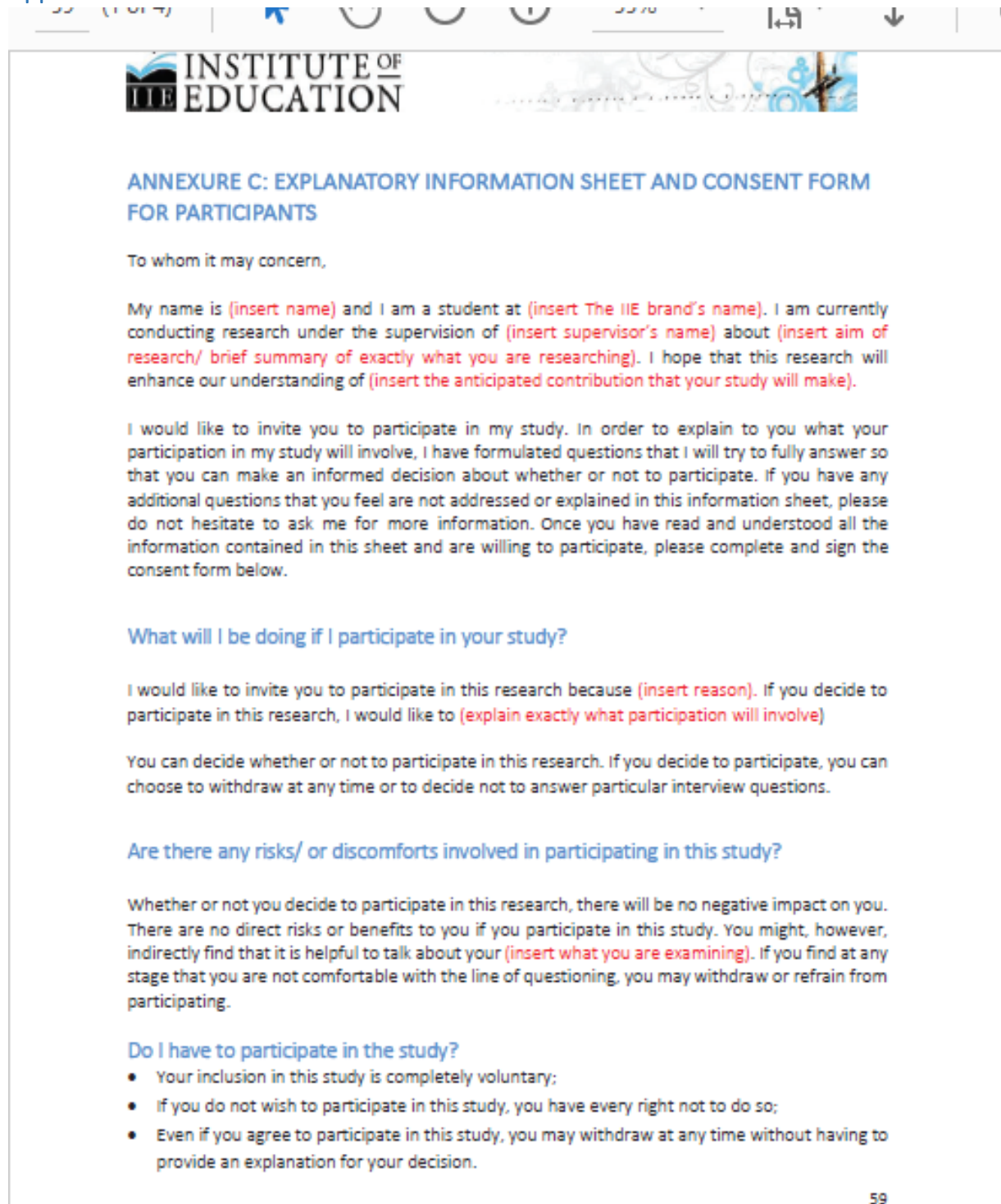
☐ I think LMS was good.
☐ I think it needs more improvements.
☐ I think it is a failed project.

18. Do you have any general comments or suggestions:

Enter your answer

Submit

Appendix D: Consent Form



**INSTITUTE OF
EDUCATION**

**ANNEXURE C: EXPLANATORY INFORMATION SHEET AND CONSENT FORM
FOR PARTICIPANTS**

To whom it may concern,

My name is (insert name) and I am a student at (insert The IIE brand's name). I am currently conducting research under the supervision of (insert supervisor's name) about (insert aim of research/ brief summary of exactly what you are researching). I hope that this research will enhance our understanding of (insert the anticipated contribution that your study will make).

I would like to invite you to participate in my study. In order to explain to you what your participation in my study will involve, I have formulated questions that I will try to fully answer so that you can make an informed decision about whether or not to participate. If you have any additional questions that you feel are not addressed or explained in this information sheet, please do not hesitate to ask me for more information. Once you have read and understood all the information contained in this sheet and are willing to participate, please complete and sign the consent form below.

What will I be doing if I participate in your study?

I would like to invite you to participate in this research because (insert reason). If you decide to participate in this research, I would like to (explain exactly what participation will involve)

You can decide whether or not to participate in this research. If you decide to participate, you can choose to withdraw at any time or to decide not to answer particular interview questions.

Are there any risks/ or discomforts involved in participating in this study?

Whether or not you decide to participate in this research, there will be no negative impact on you. There are no direct risks or benefits to you if you participate in this study. You might, however, indirectly find that it is helpful to talk about your (insert what you are examining). If you find at any stage that you are not comfortable with the line of questioning, you may withdraw or refrain from participating.

Do I have to participate in the study?

- Your inclusion in this study is completely voluntary;
- If you do not wish to participate in this study, you have every right not to do so;
- Even if you agree to participate in this study, you may withdraw at any time without having to provide an explanation for your decision.

59



Will my identity be protected?

I promise to protect your identity. I will not use your name in any research summaries to come out of this research and I will also make sure that any other details are disguised so that nobody will be able to identify you. I would like to ask your permission to record the interviews, but only my supervisor, I and possibly a professional transcriber (who will sign a confidentiality agreement) will have access to these recordings. Nobody else, including anybody at (insert The IIE brand's name), will have access to your interview information. I would like to use quotes when I discuss the findings of the research but I will not use any recognisable information in these quotes that can be linked to you.

What will happen to the information that participants provide?

Once I have finished all interviews, I will write summaries to be included in my research report, which is a requirement to complete my (insert name of The IIE qualification). You may ask me to send you a summary of the research if you are interested in the final outcome of the study.

What happens if I have more questions about the study?

Please feel free to contact me or my supervisor should you have any questions or concerns about this research, or if there is anything you need to know before you decide whether or not to participate.

You should not agree to participate unless you are completely comfortable with the procedures followed.

My contact details are as follows:

(insert name)
(insert telephone number)
(insert e-mail address)

The contact details of my supervisor are as follows:

(insert name of supervisor)
(insert telephone number of supervisor)
(insert e-mail address of supervisor)



Consent form for participants

I, _____, agree to participate in the research conducted by (your name) about (insert aim of research/ brief summary of exactly what you are researching)

This research has been explained to me and I understand what participation in this research will involve. I understand that:

1. I agree to be interviewed for this research.
2. My confidentiality will be ensured. My name and personal details will be kept private.
3. My participation in this research is voluntary and I have the right to withdraw from the research at any time. There will be no repercussions should I choose to withdraw from the research.
4. I may choose not to answer any of the questions that are asked during the research interview.
5. I may be quoted directly when the research is published, but my identity will be protected.

Signature

Date



Consent form for audio-recording/ video recording

I, _____, agree to allow (your name) to audio record my interviews as part of the research about (insert aim of research/ brief summary of exactly what you are researching)

-

This research has been explained to me and I understand what participation in this research will involve. I understand that:

1. My confidentiality will be ensured. My name and personal details will be kept private.
2. The recordings will be stored in a password protected file on the researcher's computer.
3. Only the researcher, the researcher's supervisor and possibly a transcriber (who will sign a confidentiality agreement) will have access to these recordings.

Signature

Date

Appendix E: Graphical Data from the Questionnaires

1. Please indicate your home language.

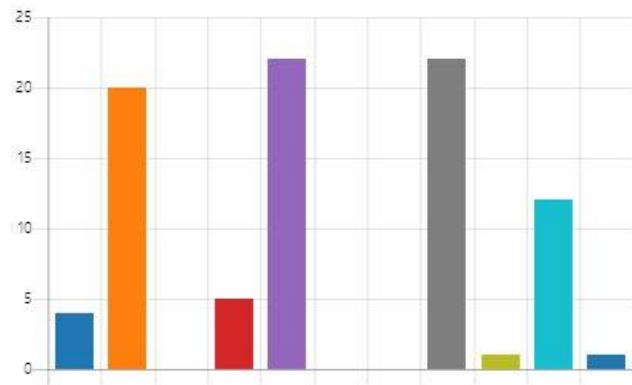
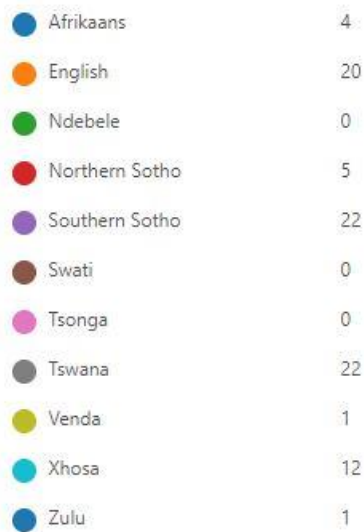


Figure 1

2. Do you own a computer?

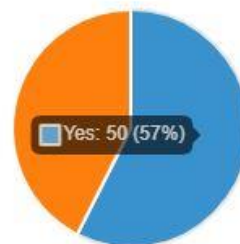


Figure 2

3. If your answer is Yes to Question 2, please indicate how often do you use it to access LMS.

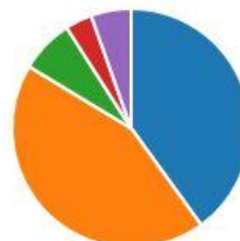


Figure 3

4. If your answer is No to Question 2, please state how you access LMS.

[More Details](#)



Figure 4

5. Do you think knowing about new technology will have an impact in your daily life activities?

[More Details](#)

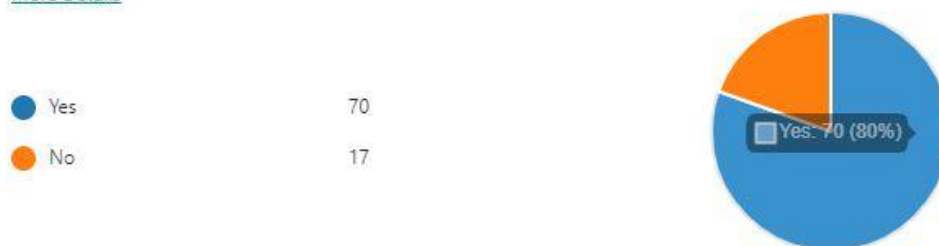


Figure 5

6. Please indicate how you feel about the use of Learning Management System (LMS) in teaching and learning.

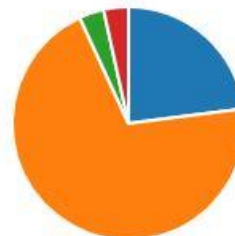
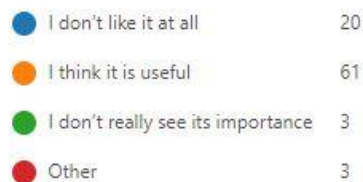


Figure 6

7. Do you think it is important for you to learn using LMS?



Figure 7

8. Do you think knowing how to use LMS will help increase your chances of being successful in the module?



9. Please indicate how often do you access LMS.



Figure 8

10. For what purpose do you use a computer?

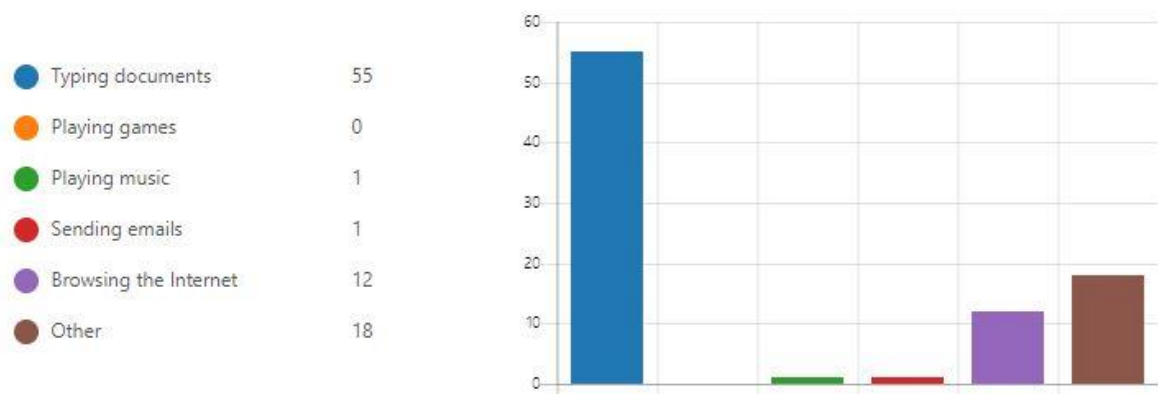


Figure 9

11. Please indicate your skill level with regards to LMS.



Figure 10

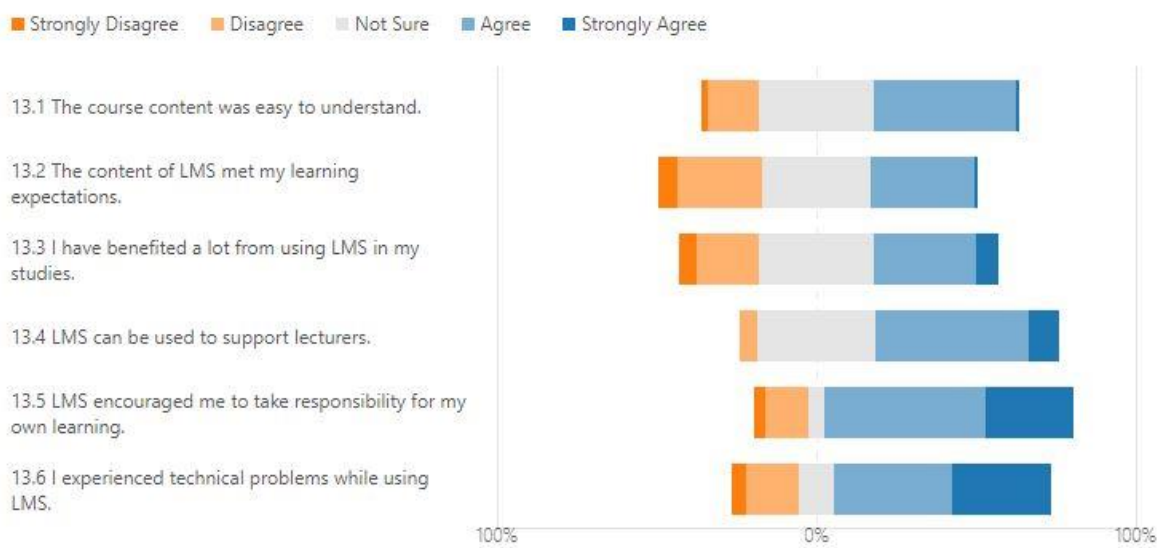


Figure 11

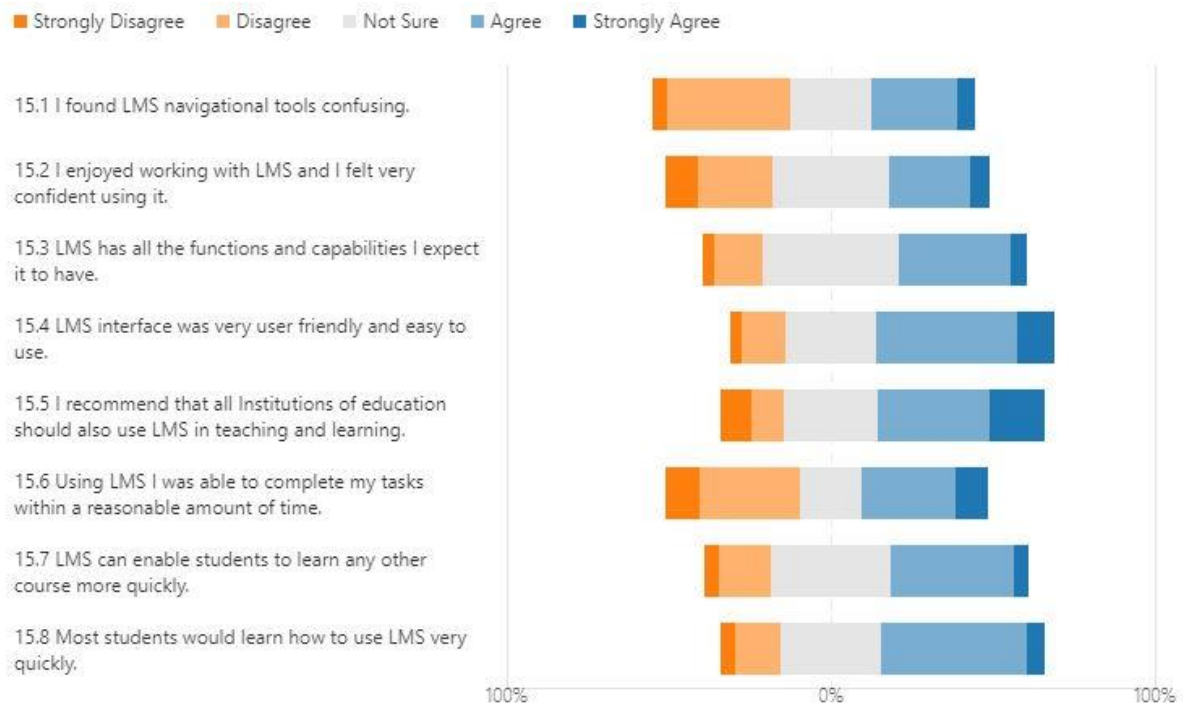


Figure 12

17. What is your overall opinion about the functionality of LMS?

[More Details](#)

I think LMS was good.	30
I think it needs more improve...	50
I think it is a failed project.	7

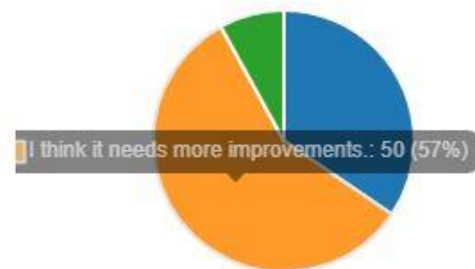


Figure 13