

ICTs Implementation in Teaching Linguistics and Students' Test Achievement. Case of Biskra University

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Abstract

From our own experience in teaching the Linguistics course to 1st year classes of the English Branch (EB) at Mohamed Khider University of Biskra (MKUB), we have noticed the students' poor achievement when tested in Linguistics. Such poor achievement urges us to rethink our methods in teaching such a demanding course as Linguistics. The present paper is about implementing ICTs in teaching Linguistics and its impact on EFL students' test achievement. We hypothesize if we teach Linguistics using judiciously ICTs, the students' test results will significantly improve. We have tested our hypothesis by teaching linguistics to a group of 25 students (1st year classes) in the language laboratory relying on the Data Show device. Our main objective is to discover the students' attitudes towards learning linguistics in a new setting (Language Laboratory) using new teaching aid (Data Show). To collect data for this study, we have conducted a feedback interview with the 25 students who have undergone the experience of studying linguistics in the language laboratory via the Data Show. The results disclose that the implementation of ICTs used in teaching linguistics has shown its positive impact on the students' test achievement.

Keywords: ICTs, EFL Students, Linguistics' Teaching, Test Achievement.

1. Introduction

It is worth noting that language learning requires the implementation of new teaching methods due to the changes of the globalization era. Both teachers and learners have to engage seriously in the application of such new techniques, hence, to achieve satisfactory results. According to Yusuf (2005), *“The field of education has been affected by ICTs, which have undoubtedly affected teaching, learning, and research”*, in the same breath, Al-Ansari (2006) advocated that *“A great deal of research has proven the benefits to the quality of education”*. (Cited in Ul-Amin, n.d., p.2). In other words, no one could deny the positive effects of ICTs in the field of education. Besides, Dudeney & Hockly (2007, p.7) pointed out that *“Although the use of ICT by language teachers is still not widespread, the use of technology in the classroom is becoming increasingly important, and it will become a normal part of ELT practice in the coming years”*. Differently stated, if the use of ICT tools is optional nowadays, it will be compulsory in the next years.

Furthermore, the authors of ‘ICT in School Education: Primary and Secondary’ (2010, p.3) opined that:

There is no conclusive research to prove that student achievement is higher when using ICTs in the education space, either in the developed or developing countries, there is a general consensus among practitioners and academics that integration of ICTs in education has a positive impact on the learning environment.

In the same breath, they advocated that *“ICTs act as and provide students and teachers with new tools that enable improved learning and teaching”*. That is to say that even if experience of using ICT tools in the language classroom has shown its positive impact on the teaching learning process in general; however, when it comes to the students’ achievement in tests, it is not positive to the extent that using ICT tools leads to students’ high test scores.

The present paper aims to spot light on the deficiencies of first year students of the English Branch (EB) at Mohamed Khider University of Biskra-Algeria (MKUB) in their Linguistics course. We believe in the effectiveness and efficiency of integrating ICTs in the language classroom. On the one hand, we have attempted to teach Linguistics in the Language Laboratory (LL) using the Data Show to a group of 22 students. On the other hand, we have taught the same lectures to two other groups of 54 students in the classroom, and then the 76 students have taken the same test to see the impact of teaching Linguistics in the LL on the students’ test results.

2. Methodology

The study of the present paper concerns three groups of 86 students (1st year level) of the EB at MKUB. The researcher has taught the same lectures (i.e., same content) of the Linguistics course to one group (22 students) in the LL and to two groups (64 students) in the classroom. The lectures concern the second semester of the academic year 2011/2012 (i.e., February to May 2012). At the end of the course, all the 86 students have taken the same test, and then we have compared the test’ results (*viz.*, grades), therefore, to see the effect of teaching Linguistics in the LL on the students’ test results. After that, we have conducted a feedback interview with the group taught in the LL. Ten questions were asked as they appear in later sections.

3. ICTs and Language Learning

As far as language learning is concerned, decision makers in the field of education advocate that integrating ICT in the language classroom is of a great help for both pillars of the teaching learning process. According to the author(s) of *ICT in Education* (2014, p.1), *ICT or "Educational technology is utilized by learners and educators in many settings, such as home, school, higher education, and business and professions"*. Besides, Gray et al. (2007, p.407) state that *"Current government policy in the UK places teachers of all subject areas under pressure to embed ICT into their pedagogic practice to improve teaching and learning"*. In the same vein, Samuel and Bakar (2006, p.1) opined that *"The utilization and integration of ICT tools can indeed assist students in acquiring English Language competency as well as enhance the quality of their learning experience"*. Differently stated, embedding ICT in the language classroom has its immense effect on the quality of teaching.

In the era of globalization, the integration of ICT tools in the language classrooms is a pre-requisite to improve the quality of teaching as well as learning. Teachers in the first place have to rethink their teaching methods and techniques. Unfortunately, some teachers and learners still resist the new changes coming with the latest reforms in higher education (i.e., LMD system). De Szendeffy (2005, p.1) stated that *"...there are still some who, due to their limited interest or user headaches (or even beliefs about technology), have not been able to foresee the immense potential of computers in their classes"*. In other words, some teachers neglect the benefits of using ICT tools in their classes simply because of their limited interest or even limited knowledge to use such new tools appropriately.

In the case of the EB of MKUB, many teachers keep using their old methods and techniques and refuse to integrate ICT tools in their classes. Some teachers reported that the implementation of ICTs requires adequate training. Besides, some other teachers claimed that the insufficient number of language laboratories stands behind their resistance to the new changes. Teachers argued that ICTs tools are effective if they are available in good conditions, with sufficient number and adequate training.

4. Benefits of Integrating ICTs in Language Classrooms

There is no doubt that the implementation of ICTs in the language classroom has its positive impact on the teaching learning process. It helps teachers to raise their students' motivation with the audio visual aids. It enables teachers to present their courses in varied ways using colors, music, etc. Furthermore, it encourages shy students to engage in learning as it gives them the opportunity to practice the language freely. Padurean and Margan (2009, p.100) stated four different advantages of ICTs in foreign language teaching including: *capacity to control presentation, novelty and creativity, feedback, and adaptability*. Besides, Houcine (2011, p.2) summarized the benefits of ICTs for language learners in the following four points:

- ICT increases learners' motivation and thus enhances personal commitment and engagement;
- ICT improves independent learning;
- Learners' collaboration and communication are more important;
- Learners' attainment and outcomes are improved.

Furthermore, Isisag (2012, p.2) opined that “*Lectures become more interesting and less ordinary which boosts learners’ engagement*”. In other words, researchers from different countries in different contexts agreed that using ICT in the language classroom has proven its effectiveness in the improvement teaching and learning.

As far as the present study is concerned, the LL environment was so encouraging in that it has motivated almost all the students. It has been noticed that even those students who were used to be passive have shown their interest in the course (i.e., raising their hands to participate, share ideas with their peers and asking questions). Moreover, it has been observed that the students’ level of concentration was higher because of the way the content was presented in the slides of the PowerPoint presentation of the lectures.

5. The Analysis of the Students’ Feedback Interview

The current analysis seeks to verify the hypothesis, which is couched as follows: If we implement ICTs (namely, Data show) in teaching linguistics to first year classes, there will be an improvement in their Linguistics’ tests scores. It should be acknowledged from the onset that an interview is deemed to be the first best choice and the linchpin in the testing of the aforementioned hypothesis. In the same breath, the interview in question is mainly concerned with the implementation of ICTs (*viz.*, data show “DS”, henceforth) within a well-defined setting (*viz.*, language Laboratory “LL”, from now on) in teaching linguistics for 1st year classes.

We have purposely sampled one specific group of the 1st year classes. The criterion of the selection has been a less crowded class that would be taught a tutorial in *Linguistics* through the medium of DS in the LL. This deliberate choice of the group is premised by the fact that the implementation of new techniques and methods in teaching linguistics may enhance students’ achievements in this course as far as the degree of motivation, comprehension, and test scores are concerned.

5.1. Description of the Interview Conditions

The feedback interview took place after teaching the second semester linguistics’ lectures via data show. It is consisted of 10 questions targeting different elements such as the setting, the students’ attitudes towards the use of ICTs, the teacher’s explanation, and the test scores. Indeed, the selected group comprises 22 students, but who accepted to be interviewed were only 8. The other 14 students who didn’t accept justified their refusal with the lack of time since they were busy revising for the exams.

5.2. Findings of the Study

The present section is devoted to the interpretation and analysis of the findings of the study. The results are demonstrated in pie charts as follows:

Question 1: The setting in which you attended the Linguistics tutorials was

- a. motivating
- b. demotivating
- c. neutral

Please, justify:

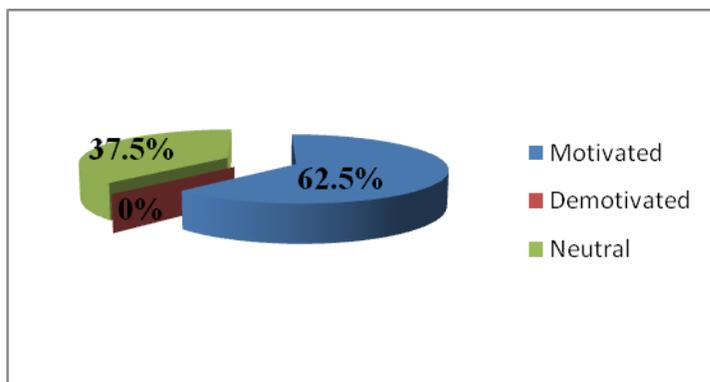


Figure 1. Language laboratory and learners' motivation

The first question seeks the students' attitude towards the setting in which they attend the ling tutorials. A quick glance at the pie chart above reveals that 62.5% of the interviewed students answered that the new setting (namely, the Language Laboratory) is motivating, while 37.5% have a neutral attitude towards the setting. On the one hand, the solid majority of the respondents estimated at 62.5% justified its answer stating that it is different from the classroom. Besides, it is a new environment in the teacher knows how to send the information as it accommodates their needs. On the other hand, the 37.5% justified their neutral position viewing that the environment is important sure, but the most important thing is the students' number "less is better" while others feel the same just as in the classroom.

Question 2: Would you consider the setting in question

- comfortable and relaxing
- nervousness inducing
- neutral

Please, justify.

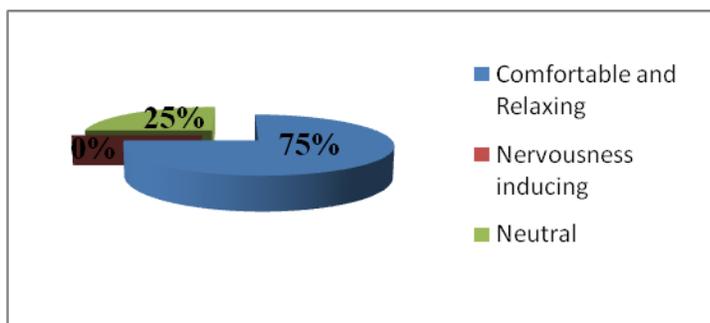


Figure 2. Language laboratory and learners' comfort

Comment

The second question is a follow-up to the first question which undertakes to test the students' attitudes towards the setting. 75% of the students viewed that the setting is comfortable and relaxing because *silence and calmness are the dominant features of the new environment unlike the classroom in which they are used to get disturbed by those students standing outside*

mumbling and waffling (Emphasis added). Whereas 25% of the interviewed students opined that the setting in question is neutral neither comfortable nor relaxing nor nervousness inducing without stating the reasons behind such attitude.

Question 3: The use of the Language Laboratory in teaching linguistics was

- exciting and enjoyable
- frustrating and intimidating
- neutral

Please, say why?

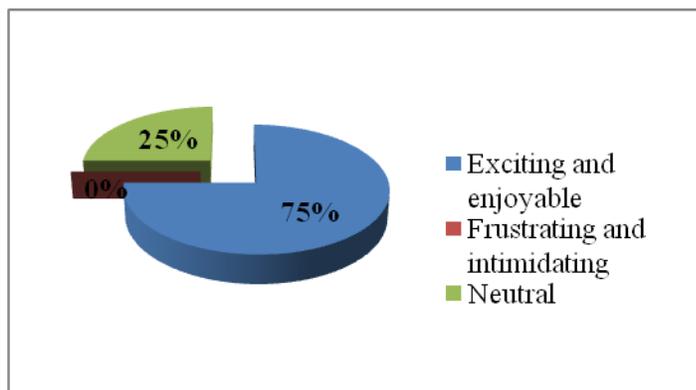


Figure 3. Language laboratory and learners' excitement

Still a third question deals with the students' attitudes towards the use of the LL in teaching linguistics. Again, 75% of the sample in question viewed that teaching linguistics in the LL is exciting and enjoyable claiming that it enhances their degree of concentration, enables them to be independent from the handouts, improves their degree of understanding, increases Teacher-Student interaction, and raises their interest in the course as compared with the other modules. Stating that "... *it becomes really a unique session in contrast with the other modules*" , while the other 25% with the neutral attitude stated that sometimes it helps them summarize the most interesting ideas, and other times they fell lost between the explanation of the teacher and the slides via the data show.

Question 4: The use of ICTs in presenting complex concepts in Linguistics was

- helpful in understanding the input
- inhibiting
- neutral

Please, explain.

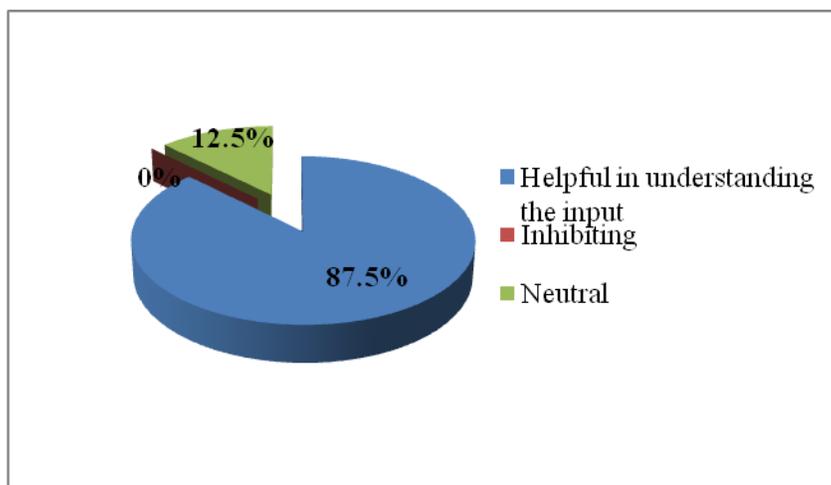


Figure 4 ICTs' implementation and Linguistics teaching

In order to obtain the students' points of view about the use of ICTs in presenting complex concepts in linguistics, we included the fourth question. Chart 4 indicates that the vast majority of the targeted population (87.5%) agreed that the use of ICTs (namely data show) is helpful in understanding the input (i.e., the complex concepts in linguistics) providing the following arguments:

- ✓ It leads the student to put all his/her concentration in the main concepts of the lecture.
- ✓ It helps the student to take the course easily even if it is difficult because the visual presentation makes it easy to understand the lesson.
- ✓ It helps discussing with the teacher.
- ✓ It is very helpful for summarizing the lectures, moving pictures and colors is a good manner to avoid boredom.
- ✓ It is clear and includes the summary.
- ✓ It helps understanding the lesson more than without the use of ICTs because students listen to the teacher and follow the presentation at the same time.

From the above mentioned reasons, we have noticed the strong agreement of the students about the positive impact of the use of ICTs on the students' understanding of the complex concepts in linguistics. Moreover, it can be seen from chart 4 that a minority of students (12.5%) who take a neutral position and did not provide any argument.

Question 5: Do you think you got much profit in learning in?

- a. Language Laboratory
- b. Classrooms
- c. Large classrooms

Please, justify.

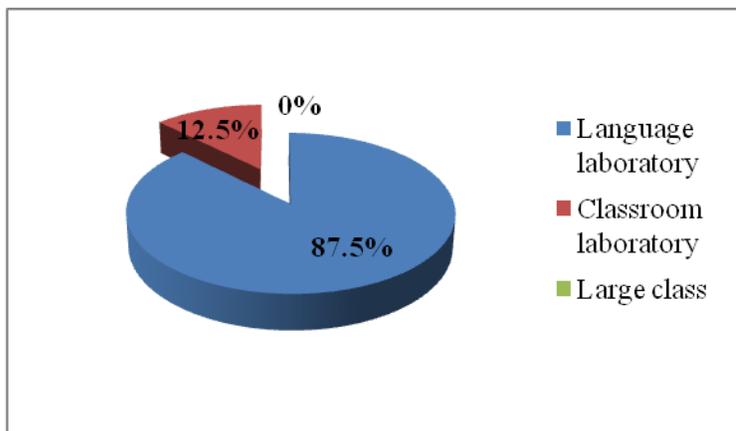


Figure 5. Setting types and Linguistics teaching

Moving to another aspect related to the new setting (LL), we raised a question seeking where the students get much profit in learning. The answer provided by 87.5% of the interviewed students demonstrated that the LL gains the dominance over the classroom and the large classroom while only 12.5% of the participants stated that they get much profit in classrooms. The first students' team (87.5%) justified their answer stating that the environment is calm "no noise", and undoubtedly more comfortable when compared with the large classrooms that are so noisy because of the large number of students (i.e., it exceeds 60 students). Besides, it is an opportunity to practice technology in class. The second students' team (12.5%) gave priority to the classrooms and the secondary position to the LL, and the last position is for the large classroom where concentration and understanding can be hardly achieved.

Question 6: The use of ICTs in teaching linguistics

- Met your expectations and needs
- Confirmed your negative attitudes
- You did not feel any difference

Please, justify.

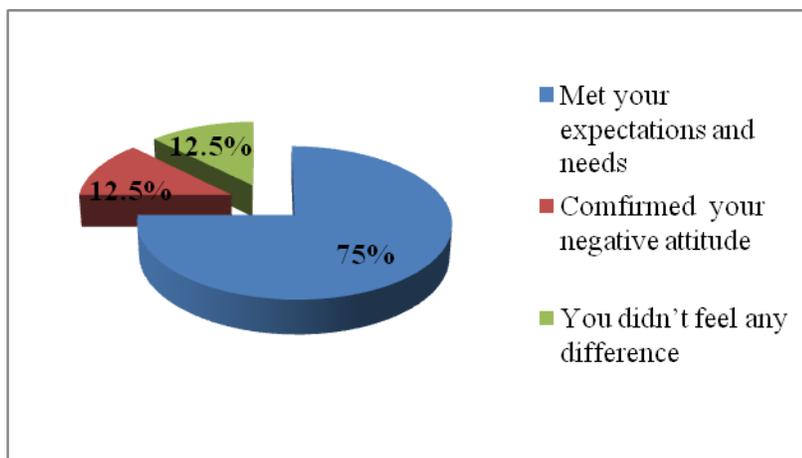


Figure 6. ICTs and learners' needs

Another question about the use of ICTs in teaching linguistics is included. 75% of the students opined that the use of ICTs in teaching linguistics meets their needs and expectations. 12.5% of the students argued that it confirms their negative attitudes, and still 12.5% others stated that they did not feel any difference. The 75% of the students justified their answer stating the following:

- ✓ It is more attracting, enjoyable, and interesting because they do not feel that the lesson is boring.
- ✓ It meets only 50% of the expectations and needs because they need more examples and exercises.
- ✓ We are living the period of technology, so using such devices would effectively help us reach the goal of the session, (understanding the content).

In addition to the questions about teaching linguistics in the LL and the use of ICTs, we included other question items about the teacher's explanation and the students' behavior.

Question 7: You felt that your teacher explained better in

- a. Language Laboratory
- b. The classroom
- c. The large classroom

Please, explain.

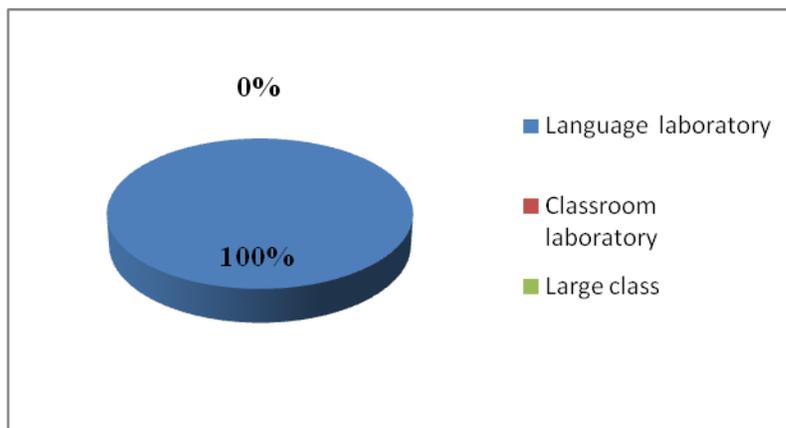


Figure 7. Language laboratory and teachers' performance

The seventh question is about the students' attitude towards the teacher's explanation. 100% of the students state that they feel that their teacher explains better in the LL rather than either in the classroom or in the large classroom. Their strong agreement was justified as follows:

- ✓ The teacher is more comfortable with the use of ICTs.
- ✓ The teacher will not feel bored with the students.
- ✓ The teacher gains control over the main points of the lecture thanks to the use of ICTs, unlike the classroom where the teacher makes more efforts to transmit the message, in the LL is totally the opposite "*S/he uses few words to mean much*".
- ✓ The teacher's voice is clearer thanks to the silent environment, less number of students, and the teacher's position "*everyone can see the teacher (high place)*".

Besides, they also agreed that the teacher explains wherever s/he is but the new setting “LL” and the use of ICTs facilitates the task and render it better.

Question 8: You feel that you achieve better after

- Laboratory sessions
- Classroom sessions
- Both equally

Please, justify.

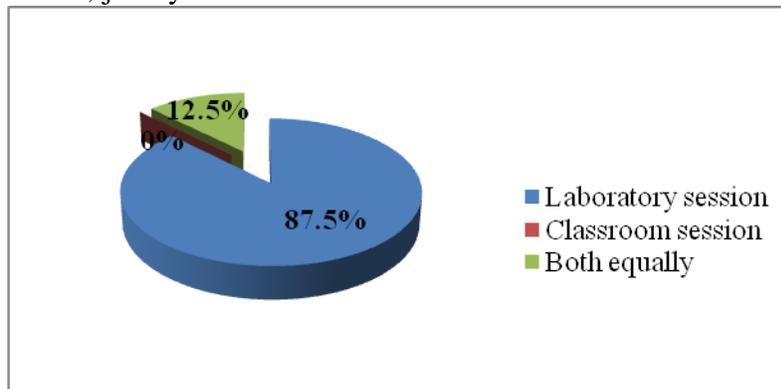


Figure .9 Language laboratory and learners’ performance

In the same context but moving to the second pillar of the Teaching Learning process “the student”, we raised the eighth question. The latter seeks the students’ attitudes towards their achievement as far as the teaching setting is concerned. 87.5% of the students strongly agreed that they achieve better after language laboratory sessions and 12.5% of them viewed that their achievement is the same after both the laboratory sessions and the classroom sessions. The 87.5% of the students provided the following arguments supporting their answer.

- ✓ They admit that the laboratory sessions are more comfortable and understandable than classroom sessions.
- ✓ They feel more motivated and active when compared to the classroom sessions.
- ✓ They benefit a lot from the colors used in the slides to memorize the lectures’ main ideas.
- ✓ They prefer if the lecture will be divided into two parts: the first part in the classroom for the theory, and the second part in the laboratory for the practice (more details and illustrations).

Question9: You feel that your teacher scored the tests

- Fairer after the laboratory sessions
- Fairer after classroom sessions
- No real difference

Please, justify.

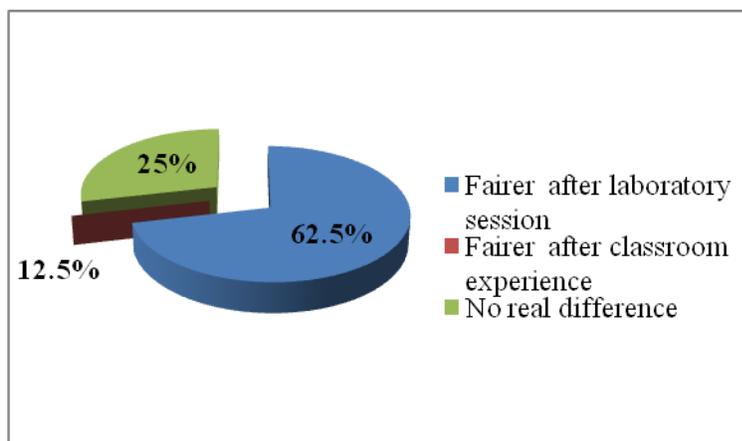


Figure 9. Language laboratory and test scores

Since the core of our investigation is testing and tests, we judged it essential to address the two last questions. Question 9 is about the students’ position towards their teachers’ tests scoring, 62.5% of the interviewed students advocated that their teacher scores the tests fairer after the LL sessions without stating clear reasons behind such an answer. 25% of them viewed that there is no real difference between the teachers’ scoring of tests either after laboratory sessions or classroom sessions. 12.5% think that scoring is linked to the test paper in the first place. *“I think scoring is according to the test paper (Answer paper) unless they will remember the active and good students and treat them differently”*.

Question 10: Your test type and format mirrors classroom practices better

- a. After laboratory sessions
- b. Classroom sessions
- c. Both equally

Please, explain.

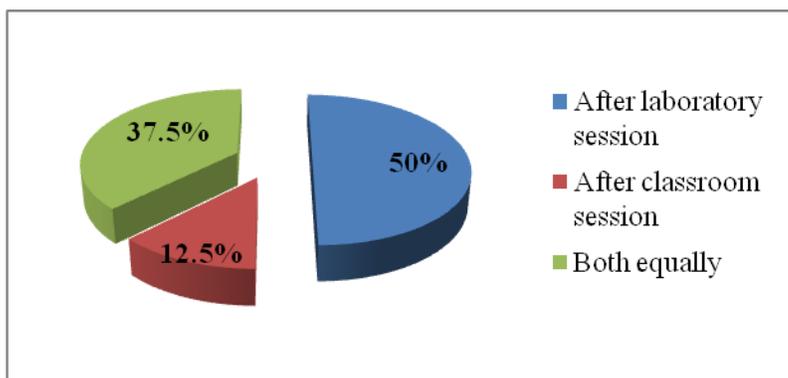


Figure 10. Test types and classroom practices

Last but not least, question 10 looks for whether or not the test type and format mirrors classroom practices. Once again 50% of the informants agreed that the test type and format mirrors classroom practices better after laboratory sessions because having linguistics’ lectures in the LL is motivating. Moreover, it increases their degree of comprehension and concentration

and one of the students stated: *"I like the module more, I understand more"*. 37.5% of the students viewed that the test type and format mirrors classroom practices better after laboratory sessions while only 12.5% of the students who are for the idea that the test type and format mirrors classroom practices better equally after both laboratory and classroom sessions without stating the arguments. The noticeable thing from the provided answers through this, interview is that there is a positive attitude towards teaching ling via "data show" in the LL. In other words, teaching linguistics in a new setting with the implementation of ICTs has its positive impact on the students' attitudes in the first place, even though the impact on their achievement is significant to some extent.

6. Conclusion

The interest in ICTs has increased with the era of globalization. Researchers in different fields especially in education have paid a special attention to the effects of implementing ICTs on improving the quality of teaching. Indeed, integrating ICT in the language classroom is a necessity to renew the teaching methods and increase learners' motivation. Decision makers in higher education should think seriously about supplying universities with the adequate materials that help teachers cope with the new changes and achieve better results. Moreover, the class size should be reduced so that all the students could have the opportunity to learn in the LL. From our own experience, teaching a large group of 45 students in the LL is quite impossible because the students' number exceeds the capacity of the LL (i.e., 22 booths). Briefly, we conclude that integrating ICT is beneficial unless it is available in good conditions (viz., sufficient in quantity and preceded by adequate training).

7. Recommendations

From the findings of this study, we would like to suggest the following recommendations:

- Decision makers in higher education should provide universities and institutions with sufficient equipments.
- Teachers have to change their negative attitudes towards technology to benefit from its advantages.
- Teachers should have effective training programs before integrating ICT tools in their classes.
- Learners should have positive attitudes towards ICT tools and welcome their integration in their classrooms.
- Learners should get rid of their fear to use computers and other tools which may help improving their level.

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