The perception of higher education students at a Mozambican institution about the potential of Distance Education in emergency contexts

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Abstract *The article addresses the perception of higher education students at a Mozambican institution about the potential of Distance Education in emergency contexts. In this sense, the investigation centered around the following issue: what were the perceptions of higher education students about the potential of Distance Learning in the context of the emergency? The objectives were: general, to understand the perception of higher education students about the potential provided by Distance Learning in the face of the emergency and, specific: to identify the potential and challenges faced by higher education students in the use of digital tools imposed by the emergency; describe the potential of using digital tools in higher education during the pandemic period; analyze the importance of using digital tools as a distance learning instrument for students in the face of the imposition of the emergency. The qualitative, phenomenological-interpretive paradigm was used and the method was case study. A semi-structured interview was used. The results showed that distance learning favors freedom of study, which means that the ability to study remotely allows the student to choose the time and place where they want to dedicate themselves to studies, without imposition from the teacher, and also allows the even select the content you want to study. Despite the advantages presented by students in relation to the use of digital platforms, there were some obstacles in the teaching and learning process. Among the aspects highlighted by the student, which overshadowed learning during online classes, was the poor interaction between teachers and students.*

Key words: Distance, Quelimane, higher education

I. Introduction

Distance Education, in the context of the emergency, appears to have great potential as it allowed educational institutions, and in particular some higher education institutions, to continue their teaching activities using digital educational platforms as well as helping to understand their gaps. technological. Thus, with the purpose of understanding the perception of higher education students about the potential that Distance Learning had, in the context of the emergency, for higher education students in Quelimane, a survey was carried out in which 251 students participated.

The research's starting problem was: what were the perceptions of higher education students about the potential of Distance Learning in the context of the emergency? Faced with this problem, the following objectives were outlined: general, to understand the perception of higher education students about the potential provided by Distance Learning in the face of the emergency and, specific: to identify the potential and challenges faced by higher education students in the use of digital tools imposed by the emergency; describe the potential of using digital tools in higher education during the pandemic period; analyze the importance of using digital tools as a distance learning instrument for students in the face of the imposition of the emergency. In methodological terms, the research is qualitative, as it sought to understand the perceptions that higher education

students have about the potential that Distance Education had, in the teaching and learning process, during the confinement period, where educational institutions were closed as a way to prevent the spread of the virus.

In order to achieve the proposed objectives, a case study was used, and a higher education institution based in the city of Quelimane was selected, which at the time of confinement managed to continue teaching activities through digital platforms. The instrument used for data collection was Google Form. The option for this tool was due to the impositions of the emergency, since, during this period, it was not possible to have face-to-face contact with the students being studied. The selection of participants was based on accessibility, that is, from the contacts in the database, messages were sent with the link to the questions above those who responded. This work resulted in the number of responses from those who were available to participate in the study. The Google form was sent to students, via WhatsApp, through the course coordinators. Given that the questions were open-ended, there was a need to use content analysis to facilitate data analysis and interpretation. To facilitate the analysis and interpretation of the results, two categories were created: teaching potential, using distance tools during the state of emergency, and teaching challenges, using distance tools during the state of emergency. Likewise, the following subcategories were created: freedom of study, autonomy in learning, facilitation of social distancing and contact with other people, ease of continuation of study, difficulties in accessing the internet, lack of preparation of students and teachers, lack of mastery platforms from students and teachers, distance learning requires more organization and planning from the student. It should be noted that the subcategories were extracted from the specific objectives and answers given by the students.

Analysis and interpretation of results

1.   Potentials of teaching using distance tools during the State of Emergency

During the period in which the State of Emergency in Mozambique imposed by the emergency took place, educational institutions remained closed, with no possibility of face-to-face contact between students and teachers. To this end, institutions were forced to reinvent teaching methodologies to guarantee the continuity of teaching activities. Distance Learning was the methodology found by some of them through digital platforms. In this line of thought, García-Peñalvo and Corell (2020) argue that the experience lived during the period of confinement forces universities to redefine their teaching methodologies, moving from the face-to-face or hybrid model to the fully online model if they want to achieve their objectives educational. Thus, the research sought to understand, together with the students, the learning opportunities that the distance learning methodology adopted by universities created for students. In this context, students highlighted freedom of study, autonomy in learning, facilitation of social distancing and contact with other people, ease of continuing study. To better explain the potential demonstrated by the students, we will briefly develop each of them.

1.1. Freedom of study

For the students involved in the research, distance learning allowed them to gain study freedom. The group of participants highlighted that distance learning gives them the freedom to do what they like most, establishing a study schedule, which does not happen in face-to-face study where classes follow the pace and learning schedule established by teachers.

Thus, 25 students participating in the study gave their testimony, stating that one of the main reasons why people choose to take an online course is the freedom they have to study what they like most. Normally, in a classroom the student has an educational schedule to follow. This means that, even if he is not interested in some topics in a certain area, if he is enrolled in a face-to-face course, he will have to attend those classes and strictly follow the entire lesson plan for that course.

Another group of students, on the same subject, highlighted, on the one hand, that distance learning offers the possibility for those who cannot leave their workplace to continue their studies to enter a Higher Education Institution and, on the other, in this emergency period, through digital platforms it is possible to carry out exercises, do field work, have access to study manuals and other activities as mentioned by 15 students participating in the study, in our opinion, distance education does have potential as a model for teaching, especially for working students, since we can access the platform to do exercises, assignments, have access to manuals, notes, which would be equivalent to face-to-face education.

Distance study allows the student to choose the time and place where they want to dedicate themselves to studies, without imposition from the teacher, and also allows them to select the content they want to study, since, through the use of active methodologies, the teacher gets the student to be more active in the construction of knowledge, learning becomes effective and expressive and the student achieves autonomy in the learning process (Silva, et al., 2018). In the same vein, Distance Learning is a time to make opportunities and fields of

study more flexible for pedagogical subjects (Slomski, Araújo, Camargo & Weffort, 2016). In other words, Distance Learning includes active methodologies that allow learning subjects to build knowledge without necessarily being in the same place and at the same time.

1.2. Autonomy in learning

In addition to freedom of study, participants highlighted that Distance Learning gives students the autonomy to choose a convenient time to study learning content, especially when the student is a worker, because distance learning does not require the student to travel to university. On the other hand, it opens up space for more dedication to studies due to the autonomy given to the learner. These opportunities were highlighted by 25 students participating in the study in the following argument: in addition to being able to choose what to study, a great advantage of distance education for students is that they have the autonomy to study at whatever time they want. By not needing to travel to an educational institution, it is possible to choose the most suitable time for each person, that is, if you work in the morning, you can do your course in the evening or even during your lunch break. More time dedicated: when we take a face-to-face course, the classes are already pre-established with a certain workload, whereas with distance education it is possible to choose just one topic at a time and, therefore, dedicate yourself exclusively to one specific subject over a period of time. Then, the student can study each content they choose with more dedication. Therefore, Distance Learning requires a lot of autonomy from the student in the construction of knowledge. However, for the student to achieve autonomy in learning, it requires the reformulation of the teaching and learning processes, that is, the change of teaching methodologies by the teacher and learning methodologies for the student, and this involves introducing more debates about the contents using active methods (Silva, et al., 2018).

On the other hand, despite the student's autonomy, the methodologies adopted in Distance Education must allow for a comprehensive interaction for all interlocutors, as witnessed by (Neves, et al., 2018) when they state that in Distance Learning there must be apply a methodology that allows students and teachers to have a comprehensive interaction on the subjects to be covered on digital platforms. In the same line of thought, Samuel (2020) states that active methodologies "are also associated with the concepts: open, autonomous, shared and independent learning. In this context, it is an education that seeks to give the learner freedom in the construction of knowledge, without the direct intervention of the teacher who begins to assume new roles" (p. 50). However, the process of building student autonomy requires the incorporation of technology in the teaching and learning process, it also implies changing the roles of the teacher and the student, especially when this involves the adoption of active methodologies, given that the teacher it is required to acquire different skills that allow the management of the teaching and learning process and the student the active competence in the construction of knowledge (Nazario, Leme & Vizentim, 2018).

Despite this change in roles between teacher and student, the role does not disappear from the educational scenario because, "even with this student autonomy regarding technological learning and access to information sources, the teacher continues to have an essential role, especially if we take into account that in informational environments there is a predominance of culture and entertainment" (Santos, 2015, p. 40). Therefore, it is not enough to make the material available, because just making the content available to the student is not enough. It is necessary to promote their autonomy through contextual support (Godoi & Oliveira, 2016). On the other hand, the student and the teacher, who embark on Distance Education, must be predisposed to follow active methodologies, one of which is the greater involvement of the student in the teaching and learning process, specifically, when teaching is hybrid (Morán, 2015).

1.3. Facilitating social distancing and contact with other people

In critical moments imposed by the emergency, social distancing appears as one of the important aspects to prevent contamination and the spread of the disease among people. Thus, universities, by implementing distance learning, allowed students to respect social distancing, given that studies were carried out from home. This fact was highlighted by 30 students who participated in the study when they stated that distance learning reduces the distance and contact with other people in the room, studying wherever they are without needing to meet the teacher, avoiding interpersonal contact and in times of pandemics, it favors distancing due to emergencies and robust scientific research.

Teaching through distance education highlights some characteristics such as "those that mark the teaching and learning process, through this educational modality, such as: programmed and planned learning, technological mediation, virtual interactions, open learning in time and space, physical separation between the teacher and the students" (Samuel, 2020, p. 50). In the same line of thought, the Distance Learning Strategic Plan argues that Distance Learning is a "teaching model that is distinguished by the separation between student and teacher, the use of technology to mediate learning, two-way communication that allows interaction between students, teachers and tutors, possibility of face-to-face meetings for tutoring" (Ministros, 2013, p. 11).

From the same perspective, Santos (2015) highlights the concept of distance education that presents

two important elements that characterize this modality: the development of educational activities in different places and times. This implies the need for the physical presence of those involved in the learning process, as they allow for distance between students and teachers. Therefore, the physical separation of students from each other and the teacher allows the reduction of possible contacts in an environment with risks of contamination of epidemiological diseases.

2. Facility in continuing study

The other potential highlighted by a group of 15 students participating in the study was the possibility that the adoption of Distance Education allowed students to continue their studies even with the university doors closed due to the pandemic. On the other hand, distance learning allowed students to save a little on accommodation, travel (for working students) and other expenses, since many return to their areas of origin and family life and, even So, they continued to study. This aspect was highlighted through the information provided by interviewees according to which: the ease of continuing studies even if the college is closed because of the pandemic. It is economical in terms of cost reduction, accommodation and other assumptions that make life difficult for students. It allows the student to spend more time in their work sector so that both activities can be carried out smoothly.

Access to education in Mozambique has always been a major challenge as the demand for educational institutions is even greater, as witnessed by the Strategic Plan for Distance Education, which states that "the gap between demand and educational supply could be to question the extent to which it is possible and viable to make the right to Education effective in the short and medium term, using only face-to-face teaching-learning processes" (Council of Ministers, 2013, p. 14). Therefore, to allow those who do not have the means to access classical education institutions, there was a need to introduce Distance Education, as it was adopted in Mozambique because it was "recognized that its virtues could be used to meet the needs of dispersed masses. The effort that institutions and individual people have made to disseminate, use and expand Distance Education to expand training possibilities at different levels is notable" (Council of Ministers, 2013, p. 17).

2.1. Challenges of teaching using distance tools during the state of emergency

The students who participated in the study, despite having highlighted some potential that the study brought, using distance learning in the learning process, did not fail to highlight the great challenges that this method of teaching and learning constituted during the validity of the state emergency in which face-to-face classes were closed. Among the challenges mentioned are the difficulties that many faced in accessing the internet, lack of preparation of students and teachers, lack of mastery of the platforms on the part of students and teachers, distance learning requires more organization and planning from the student. Therefore,

The exponential development of technologies and, consequently, of distance education and e-learning, as well as the new audiences that have access to this level of education, pose challenges that generate insecurities, uncertainties and resistance in teachers and students who they intersect with expectations, enthusiasm and desire for innovation (Costa & Morgado, 2014, p. 4).

2.1. Difficulties in accessing the internet

In relation to internet access, the research sought to understand from students whether it was easy or not to be connected to digital platforms whenever there was an activity scheduled; The results obtained from students participating in the research showed that a good number of them had immense difficulties in accessing digital platforms to carry out academic activities, a fact that is evidenced by the following excerpt, where 15 students said that necessary conditions must be created as that not everyone has access to these platforms, as access to the internet is still a major challenge, and on the other hand, the lack of a computer and even a cell phone with good access, because it requires having this.

Likewise, they highlighted the high costs of the internet, which entailed large financial expenses, as evidenced by the words they said when stating that the internet involved high costs and therefore required a lot of financial expenditure on the part of the internet. However, those who were able to access digital platforms were faced with poor network quality and fluctuations in the communications network. This detail was advanced by 24 students who participated in the study.

Classes through digital platforms can only take place through internet connectivity. Therefore, access to the internet is the essential element for teaching activity, especially during periods of confinement imposed by the emergency.

However, to achieve this goal it was important to have an Android device or a personal computer, with enough megabytes to allow for more connectivity time. Regarding internet access, in a study carried out by Tumbo and Silva (2018) they found that, among the study participants, there were some difficulties in accessing the internet caused by the lack of financial resources to purchase internet packages, lack of infrastructure technologies that offer quality internet and the lack of mastery of technological tools. The reality is that many

students, due to financial difficulties, were in the same situation as the participants in the previously mentioned study.

To ensure that this group of students is not left out of the learning process, it is important that "educational institutions, in turn, must create mechanisms so that teachers and students have access to equipment, software and other telecommunications technologies to add to personal development and mainly professional of them" (Santos, 2015, p. 40). However, for students, connectivity was imperative to be able to access the digital platforms used by universities as a way of not losing the learning subjects that were being taught.

2.2. Lack of preparation of students and teachers

The Mozambican reality shows that distance learning is still a new modality and needs to be assimilated, so it is no surprise that there are students and teachers who have difficulty assimilating this new model of teaching and learning.

The results of the study proved that in addition to the difficulties in accessing the platforms, due to lack of internet or device that allows this, there was another difficulty inherent in the preparation of the actors in the process, as explained by a group of 32 students through the excerpt that says the following: the teachers do not take the time to answer our questions, only one and the other have shown interest in teaching through the new platform, there is no clarification on some subjects that the student does not understand or has doubts about this matter. However, it would have potential if teachers underwent training on how to teach remotely and how to help students if they have difficulties. For our reality, our society and the student world is not yet ready, there are difficulties in time management, student negligence in assimilating classes, there are teachers who are not prepared, but over time we can adapt.Therefore, it is assumed that the difficulties teachers face in resolving students' doubts are due to a lack of mastery of the distance learning model.

There is still a group of 19 students who do not recommend distance learning due to the arguments they put forward such as: I would not recommend this type of distance education, as it presents many barriers for students. Certain students spent the entire pandemic period giving their work, recommended by teachers, to people closest to them. Because there is a lack of control over the use of digital platforms. Mozambique still has a long way to go to invest in distance learning, it is not prepared for distance learning. For them, the problem is not only the lack of preparation of students regarding this teaching model, but it is also the seriousness and responsibility of students in preparing their work and carrying out teaching activities.

However, from the perspective of Bissolotti, Nogueira and Pereira (2014) "with due encouragement, students and teachers can take advantage of the information, materials and discussions that circulate on social networking sites to complement their participation in VLEs" (p. 6). In other words, if the actors in the teaching and learning process properly explore technological tools, they will complement the work carried out in the classroom.

In the same vein, a group of 31 students was more specific in relation to the lack of preparation of teachers, stating that: not only the students but the teachers are also not prepared for the teaching modality, the teachers do not explain well and are absent, some don't take it very seriously, they spend a week or two without teaching, interaction is not good, doubts are not clarified exactly, low availability of teachers and many teachers have no desire to teach and there is a lack of monitoring direct.

The information provided by students indicates that there is a lot of work to be done by institutions and teachers, individually, so that these problems can be overcome, as they are aspects that are not linked to the teaching modality, but rather to the teacher's ethical commitment.

Among the aspects highlighted by the student, which overshadowed learning during online classes, was the poor interaction between teachers and students. This aspect may have been a major demotivating factor in learning, as "a student who does not get the right answers to their questions in the virtual learning environment may feel unmotivated to learn because they do not receive due attention from teachers and tutors" (Costa & Morgado, 2014, p. 80).

Meanwhile, teachers can explore technological tools to further stimulate student learning and this necessarily involves exploring activities such as those highlighted by Bissolotti, Nogueira and Pereira (2014) when they state that the teacher playing his new role as mediator can:

encourage communication between participants, in addition to exchanging messages regarding the course content and its tasks; provide audio and video meetings between participants; encourage social exchanges between students, in moments of relaxation during video conference meetings; provoke the sharing of external materials (links, videos, images, audios, documents, websites, etc.) among group members; identify virtual environments where most of the group feels comfortable and take advantage of this. It could be an email group, Facebook, Google Groups or even exchanging messages on Twitter. With the exception that, eventually,

the group of students can create these spaces for exchanging messages, without the presence of the teacher intentionally (p. 6).

From the perspective of what was previously discussed, teachers of the students under study must seek to stimulate more through activities that force them to investigate further, otherwise there will be a feeling that teachers are not prepared for the new teaching approach. On the other hand, the feeling felt by students, who say that teachers are not prepared, may be caused by the fact that many teachers are used to using digital platforms as a mere repository of information and, for students, the constant distractions that technologies offer technological entertainment (games) (Bissolotti, Nogueira & Pereira, 2014).

However, it is the teacher's responsibility to give feedback to the student as a way to help them overcome the feeling of lack of perception of the subject under study, as explained by Bissolotti, Nogueira and Pereira (2014),

Constant feedback: Constant feedback on the activities carried out by the student is important to give a sense of progress in what they are doing and, mainly, to provide guidance on the next step. It is an essential characteristic in the learning process and which is sometimes not very well attended to, because when the student performs an exercise alone, they do not know how their progress is going or if they are on the right path (p. 8)

For students, it is not uncommon for them to feel insecure about what they are studying and the tasks they are carrying out, especially when it comes to studying remotely. Therefore, the presence of the teacher, through constant feedback, will stimulate the learning process.

2.3. Lack of knowledge in managing platforms by students and teachers

In addition to the lack of preparation of students and teachers regarding the distance learning modality, the results showed that students submitted to online classes, through different platforms, had difficulties in mastering the platforms.

In the study, 41 students said that: there are still many challenges in terms of mastering the platforms to use and teaching and learning methodologies. The new way of teaching did not cover all students, there were several days of missing classes trying to adapt to the platforms. But with more calm and time, having digital platforms as a teaching tool will be a great asset.

Therefore, mastering the platforms is extremely important so that the student as well as the teacher can follow the activities in this teaching process, as the opposite means exclusion from the teaching and learning process. However, in a study carried out by Tumbo e Silva (2018) on the use of educational digital platforms, it was shown that the study participants presented very low results in relation to their use, varying between 7% and 19% of use of educational platforms. -learning, video publishing service, website building, collaborative writing and file repository and sharing.

In a study carried out by Slomski, Araújo, Camargo and Weffort (2016) with teachers and students on the challenges of distance learning, it became clear that there is a need for actions of "digital inclusion of the group of teachers and students through training processes to in this way, ensuring "interaction, dialogue and the construction of knowledge" (p. 145).

Teachers, in the new technological era, are required to know how to perfectly use technological platforms in order to improve their teaching skills, and at the same time achieve educational objectives, and serve as support for students, if they face difficulties. Because, if this does not happen, it can cause demotivation, since "a student who has difficulties using technologies and using the course's teaching tools may feel unmotivated in the course if they do not find enough support to overcome their problems" (Costa & Morgado, 2014, p. 80).

Therefore, for teachers to master technological tools, educational institutions must invest in the training of their teachers, as reinforced by Santos (2015) when highlighting that "educational institutions, in turn, must create mechanisms so that teachers and students have access to equipment, software and other telecommunications technologies to add to their personal and especially professional development" (p. 43).

The same reflection is developed by Slomski, Araujo, Camargo and Weffort, (2016) when highlighting that "the importance of training and updating teachers regarding new technologies and their pedagogical use, not just as another technique, but as a strategy for promoting interaction and the exchange of experiences between students and teachers" (p. 140).

On the other hand, the application of active methods requires teacher training and the acquisition of investigative skills that will allow them to research new forms of teaching in adverse situations and driven by technological or cyclical changes (Silva, et al., 2018). Because, if this element that enhances teaching action does not occur, they will face enormous difficulties in carrying out their duties, taking into account the new demands driven by technology.

2.4.   Distance studying requires more organization and planning from the student and teacher
The last aspect expressed by the students who participated in the study is the issue of organization and planning for students to be able to carry out all teaching activities in the distance model. For these students, mastering the platforms is not enough, but organization and planning are also important. In the opinion of 30 students, distance learning requires more organization and planning from the student. The success of learning depends on the student's organization and planning in defining and following schedules and a well-designed study routine.

Therefore, the student's success in studying via distance learning depends largely on their ability to organize and plan, as studying cannot be done improvised, as the teacher is not present to demand the carrying out the activities. In other words, student success requires a lot of self-discipline, greater maturity and the ability to overcome the feeling of isolation, characteristic of distance education.

The teaching and learning process, whether classical or distance learning, requires a planning component, as it is important for the teacher, at whatever level they teach, to prepare themselves in the best way possible to make their classes more inviting and stimulating for learning, to This requires better planning and choosing the appropriate methods for the content you are going to teach (Silva, et al., 2018).

The new reality imposed by the emergency forced universities to reprogram and plan again. The various sectors of the university were called into question and, among them, action, teaching was the one that was most affected, as it required a new way of transmitting knowledge, since there was no space for planning and preparing new teaching methodologies. teaching.

II.   Conclusion
The research sought to understand, together with the students, the learning opportunities that the distance learning methodology adopted by universities created for students. Students highlighted freedom of study, autonomy in learning, facilitation of social distancing and contact with other people, ease of continuing study. For our interviewees, freedom of study means the ability to study remotely, allowing the student to choose the time and place where they want to dedicate themselves to studying, without imposition from the teacher, and also allows them to select the content they want to study. Furthermore, distance learning allows students to save a little on accommodation, travel (for working students) and other expenses, since many return to their areas of origin and family life and, even so, continued to study. Despite the advantages presented by students in relation to the use of digital platforms, there were some obstacles in the teaching and learning process. Among the aspects highlighted by the student, which overshadowed learning during online classes, was the poor interaction between teachers and students. This aspect may have been a major demotivating factor in learning, as a student who does not get the right answers to their questions in the virtual learning environment may feel unmotivated to learn because they do not receive due attention from teachers and tutors.

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