The Management of E-learning Courses in Mozambique

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ABSTRACT

The purpose of this research paper is to present how distance learning education (DLE) became a national goal of Mozambican government to ensure access to education for an increasing number of citizens and to improve services quality at all education levels and types. From case study methodology, the research presents as main results the fact that distance learning education is considered one alternative to meet different educational background needs in order of evident difficulties that Mozambique faces in relation to training at undergraduate level. The Instituto Superior de Ciências e Educação à Distância (ISCED) Institute contributes to development process of distance learning courses, whose courses are reflected in development of an environment to support teaching/learning process supported by new information and communication technologies, presupposing a careful planning, which points the need for a systemic approach in courses production, involving a multidisciplinary team with specialized skills and knowledge. We conclude that the systemic approach of design, production and implementation of distance programs are ensuring the realization of national government goal.

KEYWORDS

A Gestão dos Cursos EAD em Moçambique

RESUMO
O objetivo deste artigo é o de apresentar como a educação à distância (EAD) se tornou um objetivo nacional do governo moçambicano para assegurar o acesso à educação a um número cada vez maior de cidadãos e de melhorar a qualidade dos serviços prestados em todos os níveis e tipos de ensino. A partir da metodologia do estudo de caso, a pesquisa apresenta como principais resultados o fato de que a EAD é considerada uma das alternativas para atender às diferentes necessidades de formação superior face às evidentes dificuldades pelas quais Moçambique enfrenta no quesito formação em nível superior. O Instituto Superior de Ciências e Educação à Distância (ISCED) contribui para esse processo de elaboração de cursos a distância, cujos cursos se traduzem no desenvolvimento de um ambiente para suporte ao processo ensino/aprendizagem apoiado pelas novas tecnologias de informação e de comunicação, pressupondo um cuidadoso planejamento, que aponta para a necessidade de um enfoque sistêmico na produção de cursos, envolvendo uma equipe multidisciplinar, com habilidades e conhecimentos especializados. Conclui-se que o enfoque sistêmico de concepção, produção e implementação de programas à distância estão garantindo a realização do objetivo nacional do governo.

PALAVRAS-CHAVE

La Gestión de los Cursos a Distancia en Mozambique

RESUMEN
El objetivo de este artículo es presentar cómo la educación a distancia (EAD) se ha convertido en un objetivo nacional del gobierno de Mozambique para garantizar el acceso a la educación de un número cada vez mayor de ciudadanos y mejorar la calidad de los servicios prestados en todos los niveles y tipos de educación. Con base en la metodología del estudio de caso, la investigación presenta como resultados principales el hecho de que la educación a distancia se considera una de las alternativas para satisfacer las diferentes necesidades de la educación superior en vista de las evidentes dificultades que enfrenta Mozambique en el nivel de educación superior. El Instituto Superior de Ciencias e Educação à Distância (ISCED) contribuye a este proceso de desarrollo de cursos de educación a distancia, cuyos cursos se traducen en el desarrollo de un entorno para apoyar el proceso de enseñanza / aprendizaje respaldado por las nuevas tecnologías de la información y la comunicación, suponiendo La planificación cuidadosa señala la necesidad de un enfoque sistémico para el diseño del curso, que involucra a un equipo multidisciplinario con habilidades y conocimientos especializados. En conclusión, el enfoque sistémico para el diseño, producción e implementación de programas de educación a distancia está asegurando el logro del objetivo nacional del gobierno.

PALABRAS CLAVE
1 Introduction

The aim of this article is to present how distance learning education (DLE) has become a national policy of the Mozambican government to ensure access to education for an increasing number of citizens and to improve the quality of services provided at all levels and types of education.

The discussion on models of government and management of Higher Education Institutions (HEIs) has been the subject of several studies and research in the national and international scenario. This is a theme with various perspectives, conceptions and complex scenarios in dispute. In this sense, it is essential to highlight the political action of different actors and institutional contexts markedly influenced by regulatory frameworks, as a result of guidelines, commitments and perspectives, on a national and global scale, recommended, among others, by agencies and/or multilateral organizations and strongly assimilated and/or naturalized by public policy managers.

In this perspective, the discussion on such policies is articulated to processes broader than the intra-school dynamics, without neglecting, in this path, the real importance of the social role of HEIs and the processes related to the organization, culture and management intrinsic to them. Therefore, it is essential not to lose sight of the fact that the educational process is mediated by the sociocultural context, by the conditions in which the teaching-learning is effective, by the organizational aspects and, consequently, by the dynamics with which the political-pedagogical project is constructed and the processes of organization and management of higher education are materialized.

Thus, the analysis of the management of HEIs can be carried out by means of various clippings and plans. An important perspective implies not reducing the analysis of policies and educational management to the mere description of their conception and/or execution processes, but rather apprehending them within the scope of social relations in which the conditions for their proposition and materiality are forged. For the purpose of this analysis, and considering the specificity of the Mozambican educational system, this text seeks to situate the government models and their educational policies directed to the management of DLE in Mozambican HEIs.

The paradigmatic transition from modern science to a postmodern science, and from modernity to postmodernity, presupposes ruptures. According to Santos (2003), it can be seen that the driver of ruptures, so to speak, lies in the triggering of discussions on the crisis of paradigms, on the transition period that involves it and on the possible profiles that delineate for the future, and, especially, on the modes of management of HEIs. With this paradigmatic perspective in mind, HEIs should also adapt their policies, values and management practices.

From this paradigmatic change, in the educational area, there is a concern with the dissemination and democratization of access to education to meet the large mass of students, thus demonstrating the importance of distance education.
In Mozambique, DLE in higher education has been one of the Government's objectives in the field of education. According to the Government of Mozambique Portal (2015), the national education policy is to ensure access to education for an increasing number of citizens and to improve the quality of services provided at all levels and types of education. In this context, the Higher Institute of Science and Distance Education (ISCED) was created with the aim of contributing its knowledge to the development of the country and the African continent.

2 The Interface Models of Government and the Management of Higher Education Institutions as a New Public Service

2.1 Paradigmatic Change and Public Administration

The constitution and historical trajectory of government policies, especially the processes of organization and management of HEIs, have been marked, hegemonically, by the logic of discontinuity, by lack of long-term planning that evidenced state policies to the detriment of government policies. This dynamic has favored actions without the proper articulation with the education systems, with particular emphasis on management and organization, initial and continuing training, curricular structure, participation processes.

The Public Administration is understood as the set of organs, services and agents of the State, which aim to ensure the satisfaction of the needs of society, such as: safety, education, health and well-being of the population. Meirelles (2006, p. 60) defines Public Administration under various meanings:

[...] in the formal sense, is the set of bodies established to achieve the objectives of the Government; in the material sense, it is the set of functions necessary for public services in general; in the operational sense, it is the perennial and systematic performance, legal and technical, of the State's own services or assumed by it for the benefit of the community. In a global vision, the Administration is, therefore, all the equipment of the State prearranged to the accomplishment of its services, aiming at the satisfaction of the collective needs. (Grifted).

Faced with paradigmatic changes, the Public Administration has experienced three different models: patrimonial administration, bureaucratic administration and managerial administration. These modalities have emerged successively over time, but this does not mean that any of them have been definitively abandoned.

In the patrimonialist Public Administration, proper to the European absolutist states of the eighteenth century, the state apparatus is the extension of the ruler's own power and its employees are considered as members of the nobility. The patrimony of the State is confused with the patrimony of
the sovereign and the positions are considered as profitable occupations with little work. Corruption and nepotism are inherent in this type of administration.

In patrimonialism, the state apparatus functions as an extension of sovereign power, and its assistants, servants, have the status of real nobility. Consequently, corruption and nepotism are inherent in this type of administration. (MARQUES, 2008, p. 34).

The bureaucratic Public Administration, inspired by the weberian model, was created to combat the corruption and nepotism of the previous model. The principles inherent to this type of administration are impersonality, formalism, functional hierarchy, the idea of a public career and the professionalization of the civil servant, consubstantiating the idea of rational legal power. According to Marques (2008), in the bureaucratic Public Administration, the State was limited to maintaining order and administering justice, as well as guaranteeing contracts and property.

Managerial Public Administration presents itself as a solution to these bureaucratic problems. Priority is given to the efficiency of the Administration, increasing the quality of services and reducing costs. The aim is to develop a managerial culture in organizations, with an emphasis on results, and to increase the governance of the State, i.e., its capacity to manage effectively and efficiently. The citizen starts to be seen with other eyes, becoming an essential part for the correct performance of public activity, for being considered its main beneficiary, the client of services provided by the State (MARQUES, 2008).

More recently, however, a new Public Administration perspective is beginning to be consolidated, based on a new State-Society relationship, in which there is a greater involvement of the population in the definition of the political agenda, and, consequently, greater social control over state actions and the legitimation of society as a participant in the process of formulating and implementing public policies. According to Fleury (2001), this model is opposed to traditional strategic management, in that it tries to replace technobureaucratic and monological management (of a single actor) with a more participatory, dialogical management, in which the decision-making process is exercised by different subjects or social actors (of compound actors, without the presumption of the existence of a single thought). In this concept, management is understood as a political-deliberative action, in which the individual participates by deciding his or her destiny as a citizen, voter, worker or consumer; his or her self-determination is given by the logic of democracy and not by the logic of the market. Thus, a conception of democracy emerges that transcends instrumentality and tries to encompass the socio-political dimension of public management.

2.2 The New Public Service – NSP

According to Costa and Salm (2006), Public Administration is the set of knowledge and strategies in action to provide the common good for society, being composed of three theoretical lines: Old Public Administration, New Public Business (NNP) and New Public Service (NSP).
According to Salm and Menegasso (2006), in the course of the 20th Century, however, the Old Public Administration, until then dominant, went through transformations generated by contextual changes, especially the economic globalization movement and the reduction of the role of the State, giving rise to a new perspective of public management based on private sector practices and market management techniques. This type of public administration is called New Public Business (NNP) and was largely consolidated by the tax limits that made the Welfare State unviable.

According to Denhardt and Denhardt (2007), in the New Public Business, the administration of the public good is treated as something private and belonging to the State, which must manage it efficiently without considering the collective well-being. In response to the models of the Old Public Administration and the New Public Business, these authors present the proposal of the New Public Service, seeking to rescue the epistemology of the Public Administration. This proposal recognizes people as political beings who, duly articulated, act together with the community for the construction of the common good, a purpose that must precede private interests.

3 The Management of Higher Education Institutions as an Object of Political Action

In recent decades, higher education has progressively occupied a prominent place in government agendas, for being considered as essential to the scientific, technological, cultural, economic and social development of nations. At the same time, there are profound changes in the higher education systems and their institutions.

3.1 HEIS: Conceptual Approach

According to the Law n. 27, of September 29, 2009, of the Republic of Mozambique, higher education is a subsystem of the National Education System and comprises the different types and processes of teaching and learning provided by post-secondary educational establishments, authorized to constitute themselves as higher education institutions by the competent authorities, access to which is conditional on the fulfilment of specific requirements. The higher education sub-system is structured in such a way as to allow the mobility of learners between the various courses and institutions (MINED, 2015).

In the definition of the Ministry of Education and Human Development of the Republic of Mozambique (2015, p. 1), HEIs are:

[...] legal persons of public or private law, with legal personality, which enjoy scientific and pedagogical, administrative, disciplinary, financial and patrimonial autonomy, and are classified according to their mission or type of ownership and financing.
In the conception of Moreira, Moreia and Palmeira (2009), HEIs are social systems whose purpose is to offer third degree education, research and extension. They may take the form of isolated institutions, whose function is teaching, or as universities. They can also be described as university organizations, where the provision of educational services is part of a process that began a long time ago, when education was the object of human transformation.

According to the Ministry of Education and Human Development of the Republic of Mozambique (2015), HEIs can be public and private. The public are those whose main source of revenue is the State Budget and are supervised by it. Private institutions, on the other hand, are those belonging to private or mixed legal entities whose main sources of income are private, which can be classified as profitable and non-profitmaking and take the form of an association, foundation, commercial company or cooperative.

In terms of type, HEIs, depending on their mission, are classified as: Universities, Higher Institutes, Higher Schools, Polytechnic Higher Institutes, Academies, Colleges.

According to the Ministry of Education and Human Development of the Republic of Mozambique (2015), Universities are institutions that have human and material capacity for teaching, scientific research and extension in various fields of knowledge, providing a theoretical and academic training, being authorized to confer academic degrees and diplomas.

HEIS, on the other hand, are specialized institutions, whether or not affiliated to a university, which are dedicated to training and research in the field of science and technology or professions, as well as to extension, and which are authorized to award academic degrees and diplomas (MINED, 2015).

Higher Schools are defined as HEIs affiliated or not to a university, a higher institute or an academy, which are dedicated to teaching in a specific branch of knowledge and extension and which are authorized to award academic degrees and diplomas (MINED, 2015).

In turn, the Higher Polytechnic Institutes are HEIs affiliated or not to a university, which offer general studies or professional training and which are authorized to grant certificates and all academic degrees, excluding that of Doctor, reserving the attribution of Postgraduate degrees to affiliated Polytechnic Institutes (MINED, 2015).

In relation to the Academies, HEIs are dedicated to teaching in specific areas, namely: the arts, literature, technical skills, such as military and police, specialized training and trade, being authorized to confer degrees and academic diplomas (MINED, 2015).
Finally, there are Faculties, which are primary academic units of a university or higher institute that deal with teaching, research, extension and learning in a given branch of knowledge, involving the interaction of various academic departments and the provision of teaching leading to the obtaining of a degree or diploma (MINED, 2015).

3.2 Management Crises and HEIs today

This section aims to reflect on the profound and intense social transformations, as well as on the economic and technological advances that have culminated in various management crises. This scenario has stimulated a rethinking of paradigms in the most diverse sectors of society, especially in HEIs.

3.2.1 The crises arising from paradigm shift

Three major crises, in the conception of Santos (2003), came with the paradigmatic change: that of hegemony, that of legitimacy and that of institution. The crisis of hegemony began at the end of the 19th century, shortly after the HEIs were consolidated, but it will be more visible in the second half of the 20th century, at the same time as the crisis of legitimacy begins. The institutional crisis is more recent, although with strong signs already in the 1970s and 1980s. However, these crises have coexisted and coexisted over time, since, strictly speaking, none of these crises and their contradictions have been resolved - only through reforms, extended in space and time, expanding the functions of HEIs, their number and diversity, managing tensions more than releasing them.

3.2.1.1 The crisis of hegemony

The crisis of hegemony meant the crisis of the assumptions that underpinned the model of HEIs consolidated in the nineteenth century, which stated that these were the "privileged place of production of high culture and advanced scientific knowledge" (SANTOS, 2003, p. 139).

The first assumption, pointed out by Santos (2003, p. 139), is the view of high culture or erudite culture as a "culture-subject" centered on the HEI that will face the rise of mass culture, which, in its way, was also and is a culture-subject. The democratization of the HEIs was a frustrated attempt to massify the erudite culture itself, but this ended up generating a hierarchy between elite and mass HEIs.

As a second assumption, Santos (2003) indicates the separation between higher education and work, conceived as incommunicable worlds. But this would have to change given the economic transformations that have occurred since the end of the 19th century. The solution attempted was to replace separation with the education-work sequence, in which education would become education for work. This was how HEIs were able to maintain their centrality and active role in technological changes throughout the 20th century.
The third assumption, for Santos (2003), confirms the separation between theory and practice, in which HEIs would be the place par excellence of the production of scientific knowledge. Hence the primacy of pure or basic science. However, especially in the 1960s and 1970s, there was strong pressure for the practical use of science, resulting in a more direct subsumption of HEIs to the market and to capital.

The crisis of hegemony begins when it becomes socially visible that higher education and high culture are the prerogatives of the upper classes and begins to question for whom and what purpose the knowledge produced by HEIs serves.

3.2.1.2 The crisis of legitimacy

The second crisis, pointed out by Santos (2003), is that of legitimacy, which comes from the pressure for the democratization of HEIs, so that they were not institutions reserved only for the elites and only with the function of forming elites. Such pressure came from social movements and aspirations of the middle and even popular classes, as well as from the context of the redistributive social policies of the welfare state. According to Santos (2003), a compromise solution is adopted, namely: the decoupling of the search for HEIs, the search for democracy, through the stratification and internal differentiation of HEIs, from which come dualisms, such as university and non-university higher education; elite and mass HEIs; courses of great prestige and devalued, among others.

Based on the postulates of Santos (2003), the crisis of legitimacy began during the period of organized capitalism and is largely the result of the success of the struggles for social and economic rights and human rights, among which the right to education stands out. With this crisis, the HEIs started to produce knowledge not only for a small class, but also for a very broad and heterogeneous social layer, with a view to promoting their social ascension without losing their status. The kind of knowledge it produces has also changed, as it is now not only for the upper social class, but also for the children of workers, petty bourgeoisie, immigrants, women and ethnic minorities.

3.2.1.3 The institutional crisis

The most recent and most visible crisis since the 1990s, according to Santos (2003), is the institutional crisis of HEIs, which is basically the crisis of (relative) autonomy. It is now perhaps a question of the pillar of post-modern HEIs: autonomy. This is expressed, first, by the funding crisis. The contraction of the social budget, in the context of the welfare state crisis and redistributive policies, is fully affecting public HEIs, which are experiencing significant budget cuts.

Another expression, pointed out by Santos (2003), is the imposition of external evaluation, in which productivity becomes the main evaluation criterion, something that, until then, was more or less foreign to HEIs. Even if the evaluation is carried out by the HEIs themselves, it will still be external, since it is guided by values and requirements external to the HEIs. At the same time, if the State has
become less present as a financier, however, it has become more present in the surveillance and intrusion in relation to the application and management of this scarce financing.

The third expression is productivism. According to Santos (2003), in order to meet the new criteria and in the search for alternative forms of financing, the HEIs will have to participate, more and more actively, in the fight for industrial production.

3.3 Rethinking HEIs - regaining legitimacy

Of the crises presented, Santos (2003) considers the one of hegemony the widest, because in it is at stake the exclusivity of the knowledge that the HEIs produce and transmit. The crisis of legitimacy raises the need to democratize the transmission of knowledge; the institutional crisis, generated mainly by the government's financial cuts, has deepened greatly in recent years. In his view, even without being able to fully resolve such crises, HEIs have responded to pressure, mixing moments of resistance and passivity. Even so, the author evaluates that the current model is not able to remain in force for a long time. According to him, it is necessary to think in another direction, with medium- and long-term goals, in which the theses formulated today serve as a compass to face the problems.

The paradigmatic transition from modern science to a postmodern science, and from modernity to postmodernity, presupposes ruptures. In this sense, Santos (2003, p.224) points out that:

> It is the responsibility of the University to organize this commitment, bringing together citizens and academics in authentic interpretative communities that overcome the usual interactions, in which citizens are always forced to renounce the interpretation of the social reality that concerns them.

The great challenge now facing HEIs is to redefine their role in the face of the changes taking place in the world and to reflect on the knowledge they generate and the ways to make them committed to the collective advancement of humanity.

3.4 Management and Management Processes in HEIs

The managerial challenge is pointed out as one of the main problems of Public Administration, in the sense of seeking a model of excellence in management focused on results and oriented to the citizen. In this sense, Fischer (2007, p. 17) asserts that "there is a depletion of public management models", highlighting that:

> [...] the absence of the social dimension of management is especially evident, both in the isolated and decontextualized action of governmental and non-governmental managers and in the perspective of citizens who use public services.

Management, on the other hand, within HEIs, is defended by Andrade and Tachizawa (2002, p. 16), promoting "strategic management", when they advocate the "introduction of new
techniques and management modes" and "a differentiated approach to administration", considering the "process of transformation, in line with the new times of the knowledge era", which affect educational institutions.

Several changes at the social level are demanding new requirements for HEIs, which, in turn, cannot respond to such pronouncements without transforming their traditional structures and ways of functioning. It is in this context that HEIs need to adhere to Social Management and, at the same time, add values and principles of Strategic Management, such as: evaluation, planning, less bureaucratic controls, efficiency in spending, and effectiveness and effectiveness in results. However, the objectives of Social and Strategic Management are different. The Strategic Management acts determined by the market; therefore, it is a management process that stands out for the competition, in which the other, the competitor, must be excluded and the profit is its reason. Social Management, on the other hand, must be determined by solidarity, therefore, it is a management process that must excel by agreement, in which the other must be included and solidarity is its motive.

By definition, Tenório (2008, p. 54) understands Social Management as the "deliberative decision-making managerial process that seeks to meet the needs of a given society, region, territory or specific social system", guided by the discussion of four pairs of words-category: State-Society, capital-labor, Strategic Management and Social Management, as well as deliberative citizenship, a category that, according to the author, mediates the relationship between these pairs of words.

Thus, it is understood that it is very clear that HEIs have to take into account the issue of Social Management in their strategic planning. The characteristics seen are inherent to the very essence of the existence of an HEI and should, therefore, be inseparable from its practical actions developed from its Strategic Management.


4.1 Historical Evolution of Higher Education in Mozambique

The evolution of higher education in Mozambique can be divided into four distinct phases, from its origin in 1960 to the present. In 1962, by the Decree n. 44.530, of 21 of August, still in the colonial regime, the higher education appears in the form of University General Studies, as response to the criticisms of the nationalist movements of the Portuguese colonies, accusing it of doing nothing for the development of the peoples of the colonies. The general part of different university courses was taught, which had to be completed in Portugal. There was only one university institution, the University of Lourenço Marques (ULM), created by Decree-Law n. 43799, of December 1968, of the Council of Ministers, whose operating model was part of the regulatory framework of Portuguese universities.
This can be considered as the first phase of higher education in Mozambique. Second Rosary (2013, p. 3):

...] the construction of higher education in Mozambique is, above all, a work established and built from the arrival of the nationalist struggle for independence. And it grew with the very process and vicissitudes that independence brought.

The government that assumed power, when the country came to Independence, emerged from the guerrilla that had fought the colonial army. The Front for the Liberation of Mozambique (FRELIMO), transformed into a party-in-power, gave the expansion of education a prominent place in its country's development policy, as shown by a slogan of the time that called for "transforming the country into a school, where everyone teaches and learns" (BUENDÍA GÓMEZ, 1999, p. 225).

As a result of the profound political and social transformations resulting from the country's rise to independence, the University of Lourenço Marques (ULM) was transformed into the Eduardo Mondlane University (UEM). In 1976, this was the only HEI to be guided by its regulatory framework, international experiences and self-assessment system. It had an initial student population of about 2,400 students in the different university courses then taught. According to Rosario (2013, p. 4):

The function of the University of Lourenço de Marques, later transformed into the Eduardo Mondlane University (UEM), was essentially to produce paintings that could serve the Mozambican Revolution - technically, scientifically and ideologically prepared. For this reason, the university staff, its leaders, teachers, technical-administrative staff and students were considered to be cadres of the revolution and, therefore, each one also had a concrete task in the broad lines of the revolutionary process.

In the 1980s, the Faculty for Combatants and Vanguard Workers (FACOTRAV) was established at UEM. In 1985, the Instituto Superior Pedagógico (ISP) was created by Ministerial Order no. 73/85 of the Ministry of Education, due to the need to increase the level of entry of students and the increase in the duration of courses, in addition to the fact that, given its size, it would become unaffordable within the EMU. In 1995, the ISP was transformed into a Pedagogical University (UP), thus establishing the second Public University of the country, which operated in partnership with the EMU, in terms of self-regulatory instruments.

The introduction of the market economy in 1987 places new actors in the socio-economic and cultural scenario, namely the private sector and civil society. It is within this framework that the legal space is created that allows the intervention of the private sector in higher education, through Law no. 1/93, of 24 June - Law on Higher Education - which regulates public and private higher education, thus starting the process of creating the first private institutions of higher education, namely, the Catholic University of Mozambique (UCM), through Decree 43/95, the Higher Polytechnic and University Institute (ISPU), through Decree 44/95, whose activities began in August 1996. Thus, since 1987, the Government of Mozambique has been implementing a program of structural readjustment.
and macroeconomic stabilization, with the objective of promoting economic growth and reducing
apoverty levels in the country (MÁRIO; NANDJA, 2005).

In 1997, the Instituto Superior de Ciências e Tecnologia de Moçambique (ISCTEM),
created by Decree 46/96, came into operation. Immediately after the creation of the ISP, Decree No.
1/86 of February 5 created the Higher Institute of International Relations (ISRI), which is dedicated to
the formation of cadres for the areas of international relations and diplomacy.

The third phase begins in 1995, with the emergence of the first private HEIs, whose creation
will lead the State to initiate the establishment of rules and regulations to maintain harmony in the
system. This third phase is also characterized by a natural development of the number of institutions
and students, taking into account the teaching capacity then existing. According to Matos and Mosca
(2009), the expansion of universities has sought to respond to the demand for education by the growing
number of secondary school leavers who want and can continue their studies. However, the State had
not prepared itself for the rapid increase in the influx of students into higher education and had not
created new universities, courses and prepared scientific and pedagogical conditions for a
diversification of supply (types of courses) and elevation of educational levels (masters and doctorates).

Thus, according to Matos and Mosca (2009), the deficit in the supply of public higher
education was overcome with the emergence and development of private universities, without there
being teachers trained to increase the number of students and universities. However, the investments
were concentrated on installations. Public and private universities have multiplied in higher education
units, without teaching staff or other scientific, pedagogical, infrastructure and service conditions in
each location. The courses were offered without the framework of a pedagogical project.

Around the year 2000, a fourth phase emerges, with the very accelerated creation of HEIs,
rapidly increasing from around 5 to 38 in 2010, and passing, in the same period, from around 12,000
to 101,300 students, among public and private institutions, universities and polytechnics, police and
military higher education (MINED, 2012; UEM, 2012).

Until 2000, higher education in Mozambique operated within the general framework of the
National Education System Law. In addition to this general framework, in 2003 Parliament adopted a
specific law for higher education, which establishes the basis for the creation and operation of HEIs,
the rules of scientific, pedagogical, administrative, financial and asset autonomy, the forms of
coordination of this level of education, the educational programmes and degrees and the legal regime
for higher education personnel (MINED, 2012; MINED, 2015; UEM, 2012).

Today, in Mozambique, the number of HEIs is 49 between public (18) and private (31), as
can be seen in Tables 1 and 2, respectively.
Table 1. Public higher education institutions

<table>
<thead>
<tr>
<th>No</th>
<th>Institution</th>
<th>Location</th>
<th>Date of creation</th>
<th>Legal Diploma of Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eduardo University Mondlane (EMU)</td>
<td>Maputo City</td>
<td>1962</td>
<td>Decree-law n. 54 530, August 21, 1962. Decree No. 12/95 of April 25th</td>
</tr>
<tr>
<td>3</td>
<td>Higher Institute of International Relations (ISRI)</td>
<td>Maputo City</td>
<td>1986</td>
<td>Decree 1/86 of February 5</td>
</tr>
<tr>
<td>4</td>
<td>Academy of Sciences Police (ACIPOL)</td>
<td>Maputo Province</td>
<td>1999</td>
<td>Decree 24/99 of 18 May, 1 série nº 19, 4th supplement</td>
</tr>
<tr>
<td>5</td>
<td>Higher Institute of Health Sciences (ISCISA)</td>
<td>Maputo City</td>
<td>2003</td>
<td>Decree 47/03 of 18 December November</td>
</tr>
<tr>
<td>7</td>
<td>School of Nautical Sciences (ESCN)</td>
<td>Maputo City</td>
<td>2004</td>
<td>creation authorised by the Council of Ministers on 30/06/2004</td>
</tr>
<tr>
<td>9</td>
<td>Higher Polytechnic Institute of Gaza (ISCTEM)</td>
<td>Gaza Province</td>
<td>2005</td>
<td>Decree 32/2005 of June</td>
</tr>
<tr>
<td>10</td>
<td>Higher Polytechnic Institute of Manica (ISPM)</td>
<td>Province of Manica</td>
<td>2005</td>
<td>Decree 32/2005 of June</td>
</tr>
<tr>
<td>11</td>
<td>Higher Institute Tete Polytechnic (ISPT)</td>
<td>Tete Province</td>
<td>2005</td>
<td>Decree 32/2005 of June</td>
</tr>
<tr>
<td>12</td>
<td>University of Lurio (UNILURIO)</td>
<td>Nampula Province</td>
<td>2006</td>
<td>Decree 50/2006 of December 26, BR. Nº 5</td>
</tr>
<tr>
<td>14</td>
<td>Zambezi University (UniZambeze)</td>
<td>Province of Sofala-Beira</td>
<td>2006</td>
<td>Decree n. 77/2007 of 18 December</td>
</tr>
<tr>
<td>15</td>
<td>School of Journalism (ESI)</td>
<td>Maputo City</td>
<td>2008</td>
<td>Decree No 27/2008 of 1 July 2008</td>
</tr>
<tr>
<td>16</td>
<td>Higher Institute of Arts and Culture (ISARC)</td>
<td>Tete Province</td>
<td>2008</td>
<td>Decree No. 45/2008, of November 26th</td>
</tr>
<tr>
<td>17</td>
<td>Higher Institute Polytechnic of Songo (ISPS)</td>
<td>Tete Province</td>
<td>2008</td>
<td>Decree nº 22/2008, of July 27th</td>
</tr>
<tr>
<td>18</td>
<td>Higher Institute of Studies and Defense</td>
<td>Maputo Province</td>
<td>2011</td>
<td>Decree nº 60/2011 of 18 November</td>
</tr>
</tbody>
</table>

Source: Higher Education Statistics Brochure, 2014

Table 2. Private higher education institutions

<table>
<thead>
<tr>
<th>No</th>
<th>Institution</th>
<th>Location</th>
<th>Date of creation</th>
<th>Legal Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Higher Institute of Sciences and Mozambique (ISCTEM)</td>
<td>Maputo City</td>
<td>1996</td>
<td>Decree 46/96 of November 5</td>
</tr>
<tr>
<td>2</td>
<td>Higher Institute of Transport and Communications (ISUTC)</td>
<td>Maputo City</td>
<td>1999</td>
<td>Decree n. 32/99, June 4</td>
</tr>
<tr>
<td>3</td>
<td>Polytechnic University The Polytechnic</td>
<td>Maputo City</td>
<td>1995</td>
<td>Decree No. 44/95 of September 13, 1995</td>
</tr>
<tr>
<td>4</td>
<td>Catholic University of Mozambique (UCM)</td>
<td>Beira Sofala</td>
<td>1995</td>
<td>Decree No. 43/95 of September 14th</td>
</tr>
<tr>
<td>5</td>
<td>Mussa Bin University Bique (UMBB)</td>
<td>Nampula</td>
<td>1998</td>
<td>Dec. 13/98 of March 17</td>
</tr>
</tbody>
</table>
According to the 2012-2020 Strategic Plan for Higher Education (PEES), coordinated by the Ministry of Education (MINED) and EMU, higher education in Mozambique increased rapidly, from 12,000 students in 2000 to over 101,000 in 2010, which poses challenges to the quality of education and the functioning of educational institutions at different levels (MINED, 2012; MINED, 2015; UEM, 2012).

In the analysis of the evolution of the number of students and teaching staff in Mozambique, the PEES 2012-2020 points to the following characteristics: i) Natural evolution of the number of students until 2005, reaching around 28,300; ii) Sharply accelerated evolution of the number of students from 2006 onwards, having increased from 43,233 to 101,362 in 2010. It should be noted that the forecast of the then Strategic Plan was about 18,200 students in 2010, presenting a surplus of about 79,360 students in relation to the projection for 2000. Therefore, the growth in the number of students
became more pronounced between the years 2006 and 2010, due to the entry into operation of a high number of private HEIs (MINED, 2012; MINED, 2015; UEM, 2012).

According to the 2012-2020 PEES, the number and quality of teacher training did not increase in proportion in the same period, which led to a greater overload on existing teachers, causing the so-called ‘turbo-teacher’ phenomenon, thus degrading the quality of teaching, with an average ratio of 25 students per teacher. Furthermore, there has not yet been an equivalent increase in the infrastructural and laboratory conditions of the new institutions created during this period. Many new educational institutions have been adapting facilities for teaching for other purposes and expanding the shift towards more courses in the social areas, without many requirements in terms of investment in laboratories.

Another parameter considered by the 2012-2020 PEES, in the analysis of higher education personnel in Mozambique, is the average position of the country in relation to the proportion of the number of students compared to the general population. Mozambique has the lowest proportion of Southern African countries, with 440 students per 100,000 inhabitants, below the region's average.

Since 2001, some HEIs have started offering postgraduate courses, namely master's degrees, but on a still very small scale. In 2006, it started to offer, in a systematic way, post-graduation at doctoral level, and in 2010, the post-graduation represented 4.5% of the total number of students, with about 4550 enrolled, of which 34 at doctoral level.

The PEES 2012-2020 makes it clear that, assuming that post-graduation in Mozambican HEIs can grow to about 8 to 10% of staff by 2020, it is expected that by that time, about 10 thousand students will be enrolled in masters and doctorates (MINED, 2012; MINED, 2015; UEM, 2012).

4.2 EMU HEIs and distance learning - the importance of ISCED

Higher education is currently facing a new spectrum of challenges, with implications at the level of institutions, teachers and students, teaching and learning, giving expression and meaning to the imperative to respond to the new educational needs of knowledge-based societies, and translating into meeting the challenges, reading the opportunities, and changing. In a global and networked society, HEIs make increasing use of new technologies, which simultaneously represent one of the main reasons why change is necessary and offer adequate tools for the reorganization of teaching and learning and the reconceptualization of institutional models, in a step-wise approach to the new knowledge society and a new educational paradigm that is also emerging in distance learning.

The Eduardo Mondlane University (UEM) is an educational institution that aims to promote higher education, research and extension. In order to guarantee the achievement of the objectives, the EMU is organized in organic units, namely the Faculties, Schools and Centers, which are distinguished from each other by the activities that are carried out in them. Among the various organic units, there is the Distance Learning Center (CEND), an organ created in 2002, with the aim of promoting and
The distance learning programme of EMU is part of the distance learning strategy advocated by the government, which, recognizing that the expansion of educational opportunities will hardly be feasible in the near future, using only face-to-face educational institutions, considers that distance learning presents itself as an alternative for expanding these opportunities (UNIVERSIDADE EDUARDO MONDLANE, 2015).

It was also created by Decree No. 41 of 15 August 2014, approved by the Council of Ministers, under the terms established by Law No. 27 of 29 September 2009, which regulates higher education activities, precisely in its Article 4 (Access to Higher Education), the ISCED, a private institution owned by the African Institute for the Promotion of Distance Education (IAPED) (INM, 2015). In addition to the general and pedagogical principles defined in the legislation in force, the ISCED, as HEIs, acts in accordance with the following values: Defense of democratic ideals; Equality between men and women of various races, creeds and origins and respect for cultural diversification; Service to the Homeland and the ideals that led to the struggle for national independence; Defense of science and ancestral Mozambican and African traditions; Defense of ecology and environmental ideals that allow the development and well-being of each individual; Freedom of cultural, artistic, scientific and technological creation; Balanced development of the country and its communities; Research and free education, but ethical and deontological; innovative freedom.

The methodology used by ISCED in distance education allows a more individualized attendance, offering to the students’ mechanisms so that they can manifest themselves, mainly, through the resources of Information and Communication Technology (ICT) through Virtual Learning Environment (VLE) and attendance of classroom and distance tutorial.

The ISCED promotes meetings, which are developed remotely through the AVA, with monitoring of the online tutor, occurring 3 (three) face-to-face meetings in each semester. In the 1st meeting, which is not obligatory, the student orientation activities are developed, where the tutor presents the work methodology and the course organization; presents the forms of evaluation that will be used; proposes activities; clarifies doubts and makes the Introduction of the themes of the modules; guides the study of the contents and makes the distribution of Study Materials. In the 2nd and 3rd meetings, mandatory, are destined for exams of the 1st and 2nd blocks of modules.

In addition to face-to-face meetings, the course includes self-study, where the student develops online activities through AVA, where he can also deliver his work, interact with other students, formulate questions to the tutor and access the virtual library, which contains, besides the subject book, other works to complement the studies.
The videos classes form other mediation resources that are used to complement the relationship between teacher, tutor and student, which transcends the limits of space and time, are the visual audio material and the use of software that allow the student a greater depth of content, allowing a form of interactivity with the hypertext language.

In addition, didactic materials are made available to all students, in electronic/digital and printed form, in a note-book format, prepared by specialist teachers in the field of knowledge and that contemplate the content of the subject in a didactic manner, to enable the student, at a distance, the appropriation and incorporation of knowledge, skills and competencies necessary for their intellectual autonomy.

Regarding the tests, during the course, the student undergoes an evaluation process, which will verify his or her level of learning in each subject. The evaluation occurs through activities in the AVA and face-to-face examination. The modules are taught in blocks, lasting ten weeks (two months) each block. The number of modules per block varies from 3 to 4, depending on the number of subjects set out in the curriculum for the semester: in the 1st semester, with 7 subjects, two blocks with four and three subjects, respectively, are foreseen; in the 2nd semester, with 6 subjects, two blocks with three subjects each are also foreseen.

Among the courses offered by ISCED, there are the bachelor’s courses, being: Political Science and International Relations, Human Resource Management, Public Administration, Accounting and Auditing, Law, and Environmental Management, as described in Table 3:
### Table 3. ISCED DLE Courses

<table>
<thead>
<tr>
<th>LICENCIATURE COURSE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| Political Science and International Relations   | The degree in Political Science and International Relations is hosted by a significant diversity of professional paths, in the public and private sectors and governmental and non-governmental (NGOs), as well as in various types of organizations, from government diplomacy services to external services of industrial and financial companies and municipalities. The following potential employers stand out:  
• Public administration institutions at regional and national level; international governmental organizations and non-governmental organizations (NGOs), in particular those active in the fields of education, health, the environment, humanitarian aid, trade, technological and cultural cooperation and international development.  
• State business sector and public institutes;  
• Private companies and business associations;  
• Political institutions, in particular political parties or organizations representing interests;  
• Educational institutions;  
• Media.                                                                                     |
| Human Resources Management                      | Access to the labor market today is characterized by a strong competitiveness and the unavoidable demand for transversal skills related to communication, teamwork, time management, among others, which should be enhanced over the years of academic attendance in order to facilitate entry into working life. Thus, the professional outlets for Graduates in Human Resources Management are as follows: Human resources consultancy, academic career, recruitment agencies, non-governmental organizations, government organizations, etc.                                                                                     |
| Public Administration                            | The degree in Public Administration is hosted by a significant diversity of professional paths, in the public and private sectors and governmental and non-governmental, as well as in various types of organizations, from government diplomacy services to external services of industrial and financial companies and municipalities. The following potential employers stand out:  
• Areas of state or municipal public administration, especially in sectors linked to development and social policies;  
• Mastery of non-governmental organizations, associations and civil society organizations in general, which operate in fields of public interest;  
• Consulting and research;                                                                 |
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Accounting and Auditing       | The degree in Accounting and Auditing is welcomed by a significant diversity of professional paths, in the public and private sectors and governmental and non-governmental, as well as in various types of organizations in which stand out the following activities that the graduate may be able to exercise:  
  - Chartered Accountants;  
  - Internal Control;  
  - Financial Auditors;  
  - Business Managers; Reviewers  
  - Chartered accountants;  
  - Tables of Financial Institutions and Insurance Companies;  
  - Financial and Tax Consultants;  
  - Senior Public Administration Technicians (POCP). |
| Law                           | Graduates in Law may develop their professional activity in traditional legal areas, such as Magistrates in the Public and Judicial Prosecutor's Office, the Legal profession, registration and notary public services. They will also be able to act in areas such as legal advice and assistance to Public and Private Administration bodies, integrate the litigation services of public and private companies. Diplomatic and academic careers are also within the reach of our students. It should be noted, however, that the exercise of forensic professions in Mozambique and in the region requires the registration in proper Orders.  
  
  The main occupational tasks of the Graduate in Law, are:  
  - To provide technical support to regulatory bodies in the drafting of legal texts;  
  - Exercise the functions of judicial magistrate and public prosecutor;  
  - Practice law;  
  - To provide legal assistance and technical assistance to the Public Administration, the Private Sector and citizens in general. |
| Environmental Management      | The degree in Environmental Management is welcomed by a significant diversity of professional paths, in the public and private sectors and governmental and non-governmental, as well as in various types of organizations in which they stand out:  
  - Environmental Management in Organizations: act in the strategic management of organizations based on ethical principles and social and environmental rationality;  
  - Conservation planning: the management of soils, forests, river basins and other natural and built environments;  
  - Management of environmental impacts: identification and qualification of environmental impacts; understanding of the structure and functioning of the Ministry of Environment;  
  - Environmental management of production processes: minimization of generation and reincorporation in the production chain of waste, tailings and by-products; optimization of energy use;  
  - Urban Environmental Management: systems, instruments and procedures of Urban Environmental Management; |
• Urban space production planning;
• Research in Environmental Management: develop basic and applied knowledge related to the different aspects of Environmental Management;
• Education in Environmental Management: in the formal and informal spheres; environmental education for citizenship and conscious consumption;
• Environmental certification and audit: among others, the FSC forest management certification system, and the ISO Environmental Management standards (14000 series);
• Waste management: waste classification; waste management approaches; waste management technologies;
• Management and recovery of degraded areas: soil management and conservation; recovery of native plants, conservation planning;
• Tourism management of natural environments: planning, management and sustainability of tourism in natural areas.

To pass the course, the student performs activities in AVA and face-to-face exams, and must obtain the final average 10. The evaluation activities in AVA developed by the student are performed through participation in forums and seminars in groups and individual work, such as case analysis, research, exercises, among others.

In spite of the context presented, an African country with access difficulties and internet infrastructure, it can be seen that EMU promotes education, notably DL, on different fronts. Thus, the case of this institution meets the legal requirements (Decree n. 41/2014), promotes Mozambican educational values, and allows the achievement of education thanks to the offer of courses in distance learning modality.

As shown in Table 3, the six courses offered in the distance learning modality by EMU are classified into areas of knowledge that allow Mozambicans to qualify in order to exercise their professional skills as graduates. The DL panorama explored in this article reinforces the importance of the ties between HEIs and the national government to promote access to quality education and, in places of difficult access, DL becomes a preponderant tool for the achievement of these educational and training objectives.

5 Conclusion Remarks

The trilogy State, Management and HEIs, in Mozambique, over time, has been constituted as a regulatory and strengthening framework for dualist education, delimited by the social division of classes. However, the rationality imposed by the different governments, that is, the State in action, points to the need for accompaniment and reform in the field of higher education, in light of what happens at the international level, in an effort to overcome class differences and social inclusion of goods and heritage that, historically, were restricted to the dominant classes in a kind of supranational synergy, in which man becomes aware of his humanity.

Thus, it can be seen that DLE is currently considered as one of the alternatives to meet the different needs of higher education, and in some cases, such as in Mozambique, for example, it is the only way to meet these needs. Knowledge and the capacity for lifelong learning are now seen as conditions for human development. This is the context in which distance education is inserted and all the ways and means to understand it as an educational political action for the HEIs of Mozambique.

It contributes to this process of elaboration of distance learning courses, the ISCED, whose courses translate into the development of an environment to support the teaching/learning process supported by the new information and communication technologies, assuming a careful planning, which points to the need for a systemic approach in the production of courses, involving a multidisciplinary team, with specialized skills and knowledge. This systemic approach refers to
an interconnected treatment of processes linked to the design, production and implementation of distance learning programs and includes from the choice of the conceptual model of teaching/learning to management procedures that ensure the implementation of the project.

References


UNIVERSIDADE EDUARDO MONDLANE. *Relatório de atividades da UEM.* 2014.