# Review of Competences in Primary Education Curriculum in Mozambique – How an Assessment is Supposed to Be Done on It in Mathematics? –

Antero de Almeida NHANTUMBO, Hiroki ISHIZAKA, Satoshi KUSAKA

Naruto University of Education

# Abstract

This article aims to discuss competence assessment in primary education in Mozambique, based in the New Curriculum perspective (INDE, 2020), the transformations in the assessment regulation (MINEDH, 2019), and our experience as a teacher and pedagogical technician in Mozambique. The article consists in review of official documents, Primary Education Curricula and mathematic curriculum. The Mozambican assessment regulation previews different types of assessment, however, the summative assessment, highlighting grading, tends to be the most common practice, ignoring the development of competences that implies a competence assessment. We suggest a deep reflection to adjust the prescribed practices to the reality of primary education in Mozambique.

Keywords: competence, assessment, curriculum, primary education

# 1. Background

Addressing competencies in the Mozambican education system is challenging. The National Curriculum of Primary School of Mozambique (Plano Curricular do Ensino Primário: PCEP) (INDE, 2020) refers to an integrated primary education, describing it as one that is characterized by "...allowing student to develop skills in an articulated and integrated way, in all areas of learning that make up the curriculum" (p.11). The conceptual idea is to develop competences as an umbrella in each and every lesson or activities developed by teachers in their classes, as an incorporated part of the curriculum.

The referred document extends the issue of competences to co-curricular activities and refers to "...an evaluation system that integrates diagnostic, summative and formative components" (p.11) as a complement. As we can see, it opens the system to a wide range of possibilities of assessment, to not only be inclusive, but also consider the different rhythms of learning that characterizes each student. It should be noted that this document reflects, "... the integration resulted in the reduction of the number of subjects through the incorporation of competences and contents from some subjects to others" (INDE, 2020, p.11). In the past, some studies and even at school level, one of the most issues described was the large number of subjects that didn't allow teachers to focus on specific contents in each lesson, specifically for Portuguese, the official language, and Mathematics.

It is intended with the implemented curriculum in primary education, "...that the primary education graduates develop skills that allow them to effectively insert themselves in their community and in society in general" (INDE, 2020, p.9). This curriculum was developed also to respond to the claim of lack of competences in primary education students in Mozambique.

As we can conclude, this process requires not only an effort on the part of the school, but also a work coordinated by the different actors of the teaching-learning process, highlighting the local communities, guardians of knowledge and useful values for their survival. Even designed by the Ministry of Education, the first and last curriculum beneficiary is the community that sends their children and want them back, well prepared for life.

# 2. Competences

According to Dias (2010, p75), "the notion of competence refers to situations in which it is necessary to make decisions and solve problems, it is associated with the understanding and evaluation of a situation, a mobilization of knowledge, in order to act/react properly". On this notion, a competence is defined as ability or skills to understand situations students face, think about solution of problem or make decisions, using knowledge they have learned before, and then, solve the problem.

Keeley & Tobey (2011) refer that to develop competences, students must (a) have a deep foundation of factual knowledge, (b) understand facts and ideas in the context of a conceptual framework, and (c) organize knowledge in ways that facilitate application. Here they emphasize the pragmatic use of the knowledge by the learner.

There are different viewpoints about competences in education. Debate about what can be considered as competences rase and continue being relevant in the educational system and Curriculum in Mozambique. In some official documents in use in Mozambique, there confirmed definition of competences and interpretation of their contents as we will describe in the next session.

# 3. Competences in the national education system

The relevance of competences in the Mozambican educational system can be seen in the Law of Education System (AR, 2018), in which basic education is prescribed. Basic education in Mozambique includes primary education and first cycle of general secondary education, therefore, corresponds to grades 1 to 9. This law considers as competence "what allows to realize correctly a complex task." This definition stands from idea of problem solving, as they add "... capacity to mobilize knowledge, abilities and attitudes to realize a task or function" (AR, 2018, p.24).

According to AR (2018), it is important in basic education to provide "...fundamental skills to children,

young people and adults for the exercise of citizenship, providing them with general knowledge about the world around them and the means to progress at work and in learning throughout life" (p.20). More than just providing general knowledge, the education authorities is required to provide people with opportunities to plan the use of knowledge for daily life work, being responsible to develop competences.

The general knowledge referred in AR (2018), which allows people to understand the world and make up part of the competence's component, undoubtedly refers to the knowledge shared in the classroom through teaching-learning process. However, when referring to "means to progress at work", a doubt appears, especially about if we take into account limitations the school and teacher face.

However, the definition of competences by AR (2018), the one we can consider official is very similar to the scholars' definition we cited here. For example, Keeley & Tobey (2011) highlighted the importance of appropriate acquisition and use of knowledge for daily life problems or challenges, which is mentioned, of course, in the official documents of the MINEDH. Therefore, the question is how to deploy this definition of competences effectively in the description of each subject teaching in the national curriculum, based on what kind of assessment criteria or categorization of cognitive domains.

# 4. Competence in primary education

AR (2018) advocates a quality primary education, which offers the initial preparation that provides students with appropriate skills and abilities to achieve a certain well-being level. In concrete, according to INDE (2020), the primary education is defined as "the initial level of schooling of the child in the acquisition of knowledge, skills, values "and fundamental attitudes for the harmonious development of their personality" (p.14).

INDE (2020) refers also to quality education as "one that contributes to the development of practices based on the mobilization of a set of knowledge, skills and values, transforming them into action" (p.14). On the other hand, it's highlighted that "students learn to know how to be, to know how to relate, to know how to communicate, to know how to share, in a perspective of personal development" (p.14). Implicitly, there's a conception of competences associated with the teaching-learning process.

The competences to be developed by the primary education graduates, according to INDE (2020) are separated into seven areas:

- (a) Language and communication;
- (b) Scientific, technical and technological knowledge;
- (c) Reasoning and problem solving;
- (d) Interpersonal relationships;
- (e) Personal development and autonomy;
- (f) Well-being, health and environment;
- (g) Aesthetic and artistic sensitivity.

INDE (2020) highlights the area of reasoning and problem solving, in which Mathematics is inserted, mentioning that it "...allows student, in new situations, to find answers, mobilizing reasoning to decision making and the construction and use of strategies" (p.20). We find here a situation in which daily life requests from us readiness to respond by concrete actions and decisions. INDE (2020) also adds that "it also enables the development of algorithms and scenarios that consider various options, as well as the establishment of analysis criteria to draw conclusions" (p.15-16), concluding the idea of using knowledge and skills into real life.

In terms of skills for the area of reasoning and problem solving, the document mentions two key aspects aimed at the student, namely: "It solves problems of a different nature;" and "Plan activities according to an established structure" (INDE, 2020, p.15). As performance indicators, INDE (2020) mentions that student must: "analyze information from different sources and build value judgments; analyze the problem and make appropriate decisions for its resolution; critically analyze the conclusions reached, reformulating, if necessary, the strategies used" (p.15-16).

INDE (2020), on the other hand, refers that competences are materialized, specifically, in mathematics that were made up of the two cycles of primary education:

- In the 1<sup>st</sup> cycle (grades 1 3), student develops skills "counting numbers and performing elementary math operations";
- In the 2<sup>nd</sup> cycle (grades 4 6), student "deepens the knowledge acquired in the 1<sup>st</sup> cycle and builds new skills', highlighting the ability to 'make calculations quickly".

# 5. Competences in mathematics as a subject of primary education

The first cycle Mathematics' curriculum of primary education defines competences as solving elementary mathematics problems in different reallife situations (INDE, 2018; 2019). Teachers are challenged to develop their lessons in a high relationship with the society, the local reality. For example, INDE (2018) recommends, within the scope of primary education curriculum for the first cycle, as a competence for the subject of Mathematics, that student solves daily problems, which means, based in different situations created in class, "using natural numbers up to 1000".

To exemplify the application of the concept of competences in mathematics, considering what we proposed to discuss in this article, the applicability in national exams, we used a Thematic Unit on fractions,  $4^{th}$  grade from the national curriculum of mathematics (Table 1). Fractions are taught in Unit VII, in 10 teaching hours. The contents to be taught are notion,

Thematic Unity	SPECIFIC OBJECTIVES Student must be able to:	CONTENTS	LEARNING ACHIEVEMENTS Student:	Workload
VII Fractions	<ul> <li>Explain the meaning of fractions;</li> <li>Read and write fractions with numerator 1 and denominator from 2 to 10;</li> <li>Represent, graphically and symbolically, fractions with numerator 1 and denominator from 2 to 10;</li> <li>Compare fractions with numerator 1 and denominator from 2 to 10, based on observation of graphical representations.</li> </ul>	<ul> <li>Fraction Notion</li> <li>Reading and writing fractions;</li> <li>Comparison of fractions with numerator 1 and denominators from 2 to 10.</li> </ul>	- Applies the concept of fraction in solving real-life problems.	10

Table 1. Sample of contents description in Mathematics curriculum

Source: MINEDH (2019, p.137).

reading and writing, and also comparison of fractions. Students must explain, read and write, represent and compare fractions according to the level, age group and stage of development of the students.

The curriculum expects that students appropriately achieve the concept of fraction so that they can be able to use it in "real-life problem solving" (MINEDH, 2019). If students learn in lessons of fraction not only to read and write fractions, but also represent them graphically and symbolically, compare among them and explain well their concepts and meanings, they can approach to achieve the competences defined in the national curriculum, through applying the reallife issues.

However, in real lessons of mathematics in Mozambique, there may remain a strong risk of limiting the development of the lessons to basic knowledge and skills, if most of teachers still applies conventional methods of teaching and formative assessment (Yoneda et al., 2018). In addition, if the official governmental organization to develop and implement the national examination (Instituto Nacional de Exames, Certificação e Equivalências: INECE) and survey (Instituto the national Nacional de Desenvolvimento da Educação: INDE), cover the various aspects or components of competences for their examination or survey, to the extent students achieve competences can be measured appropriately. This article will discuss in the next sessions the assessment system, modalities, techniques, and types, and then about issues of the summative assessment in particular in the national exam, too.

# 6. Assessment system

MINEDH (2019) consider assessment as "...a curricular component, present in the entire teachinglearning process, from which data and information are obtained, allowing to relate what has been proposed and what has been achieved, critically analyze the results, formulate value judgments and make decisions, aiming to promote the development of competences, improve the quality of teaching and the educational system" (p.33).

This definition describes assessment as a part (component) and does not directly mean an instrument (test or other), but, what reflects a conceptual evolution. It also emphasizes the need to use the assessment data to improve learning, promoting the development of competences in class. Referring to the objectives of the assessment, measuring to what extent competences are achieved/improved is highlighted as one of the objectives of the end-of-cycle assessment applied to students. Following the new curriculum (INDE, 2020), at the end of grade 6 there programed a national exam (graduation exam) to be applied as a part of the assessment process. MINEDH (2019) underlines the teacher's primary

responsibility in analyzing students' development, "in order to assess their level of performance, taking into account the skills to be developed at each stage of the teaching-learning process" (p.34-35), so that teachers can refer to the competence as the perspective adopted. MINEDH (2019) also highlights as general principles of assessment: an effective planning and implementation, the consistency with the competences, the evolution, the role of the formative assessment, the development of life skills, and the consideration of students' learning rhythms. The stakeholders for the assessment are prescribed as the teacher, students, parents/or guardians, members of the school council, school board, technicians and educational institutions (MINEDH, 2019). Considered as a component to promote the competence development and improve quality of learning at the school levels, directly associated with benefits to the communities, and the educative system, the policies and decisions, (cf. MINEDH, 2019). The ideal assessment practice is supposed to be carried out taking in account these key principles, what means focus not on grading, but on the process, the progress, the competence development.

# 6.1. Assessment modalities

MINEDH (2019) mentions four assessment modalities, namely diagnostic, formative, summative and measured assessment. The diagnostic assessment is carried out at the beginning of a learning process, elaborated and applied to promote learning. The formative assessment intervenes in the entire teaching-learning process any time to identify students' learning level in order to produce useful information about the difficulties faced in the teachinglearning process and seek solutions. The summative assessment serves to collect information competencies' achievement, classify and certificate. The measured assessment is used to collect information to help the decisions making.

Despite the different assessment modalities, the most common in many schools as the most valuable is the formative, as it has a classificatory function, what is defined as the main condition, officially, by the regulation, to progress inside the cycle and certificate at the end of a cycle. Black & William (1998) raise important points to take into account in the analysis of teachers' formative assessment practices, starting from the misunderstandings about the meaning of formative assessment and accountability and teachers' practices, and the challenges for its implementation. In fact, the implementation of formative assessment is difficult, so that many teachers tend to apply just some instruments such exercise/test, ignoring the classroom practices or feedback.

Duarte (2012) questions the prevalence of the summative assessment in the context of the new curriculum that introduced competence-based learning in the Mozambique national educational system, in 2003. This assessment should be conducted under a dialogic relationship and in a way to measure to what extent students achieved learning contents as prescribed in the curricula, the competences.

#### 6.2. Formative assessment techniques

According to MINEDH (2019), the formative assessment is mainly based on the following techniques: observation, notebook verification, interview, homework, workshops and seminars. The selection of techniques depends on the level, class, subject, age group of students and the conditions of the place of learning.

The observation is to verify a fact, which can be methodical or planned, which allows the assessment of competences. The regulation advises the teacher to carry out casual (sponsorship) or systematic observation (assisted by a form), in order to obtain information regarding the student's performance, in order to accompany him. For notebook verification, it is indicated that the importance of supporting students to improve performance through a better organization of notes/notebooks, handwriting and spelling. The structured, semi-structured and unstructured interviews, consisting of questions asked by the teacher, are recommended to obtain information about the teaching-learning process

#### (MINEDH, 2019).

Besides, laboratory work, described as an opportunity to acquire, consolidate or apply knowledge, serves to assess practical skills. They require students to carry out individual experiences, in pairs or in groups, under the guidance of the teacher who continuously assesses the skills developed. Workshops are considered as sessions held in small working groups, in which something is done or produced using teaching materials, being suitable for carrying out practical activities. Seminars are defined as sessions that deal with the presentation and debate of a topic previously prepared by the students, allowing the development of research and organization capacity, analysis and communication, logical reasoning and the development of positive attitudes. The seminars, in the light of the device, can be materialized through bibliographic or field research (MINEDH, 2019).

Some of the considered assessment techniques in the old regulation of assessment (MINED, 2015) are now, in the current (MINEDH, 2019), nominated as assessment instruments. This new regulation of assessment shows not a conceptual or procedural change, but only its terminological one. Assessment procedures as homework, tests, questionnaire, project, research report, study visits or internships, portfolios, exams, exercise sheets and student notebook constitute the assessment instruments suggested to be implemented by teachers in their classrooms and other educative intervenient (MINEDH, 2019). it is noted that tests and exams seem redundant as considered as types of assessment in both regulations.

#### 6.3. Assessment types

Regarding the types of assessment, there does not confirm structuring innovations from the old regulation (MINED, 2015) to the new one (MINEDH, 2019), with an impact on the classroom, specifically on the teacher-student relationship. The following summary table represents the changes in terms of designation:

	MINED (2015, p.191)	MINEDH (2019, p.37)
a)	Continuous Assessment (AC)	Continuous and Systematic Assessment (ACS)
b)	Systematic Assessment (AS)	Quarterly Assessment (AT)
c)	Quarterly Periodic Assessment (APT)/ Semi-annual Periodic Assessment (APS)	Semestral Assessment (AS)
d)	Final Assessment (AF)	Final Assessment (AF)
e)	Exams	Exams

Table 2. Changes made in assessment regulations (2015 to 2019)

With respect to assessment types, there found omission of details and specification in the new regulation, in terms of practical strategies, procedures or criteria to be used by the teachers in their classes to assess and register, and the use of the data collected during the lessons, the formative assessment.

It is important to underline that in the Continuous and Systematic Assessment, it is prescribed that principal and its vice principal as responsible for monitoring the results of the formative assessment through the coordinators of cycles, areas and subject delegates, in the case of primary education (MINEDH, 2019). Quarterly assessments, in the old regulation, were requested from schools, and were determined in the new one, as the responsibility of the ZIPs (Zone of Pedagogical Influence), which are schools that host meetings of working groups of teachers from surrounding schools, under the coordination of a ZIP Coordinator.

Here you need to write brief conclusion about feasibility of formative assessment in terms of techniques, and ACS. Of course, we have no evidence, but we can support from Yoneda et al. (2018), indirectly, explaining that teacher centered education and scarcity of feedback to children, etc.

## 7. The National Exams

With respect to the Final Assessment, MINED (2015) mentions that "test that takes place at the end of the 1<sup>st</sup> and 2<sup>nd</sup> cycles of primary education..." (p.191), and is essential for the comprehensive evaluation of the cycle, which is now described as an Exam, considering its role in this phase. The role is to "prove the skills developed throughout the teaching-learning

process..." (MINEDH, 2019, p.37). The 6<sup>th</sup> grade, the last one of primary education in the new curriculum, students are submitted to a national exam, which is a graduation exam, to assess the development of required skills, in particular, of Portuguese and Mathematics (INDE, 2020). This exam is directly administrated by the Ministry of Education, through the INECE at all the nationwide. Another assessment is programed to be implemented at the end of the first cycle of the Secondary Education, in the 9<sup>th</sup> grade, the final grade of Basic Education (grades 1 - 9).

Clarke (2012, p6) describes examinations as an assessment "for making decisions about an individual student's progress through the education system (for example, certification or selection decisions), including the allocation of 'scarce' educational opportunities." The certification system is already incorporated in national exams in Mozambique. However, regarding to the specific characteristics of the country, economic, linguistic and cultural, there is an inevitable challenge if we take into account the distribution of educational opportunities based in the national exams.

The exam process is explained in the MINED (2007), by the ROPE (Regulation for the Organization of the Examination Process). The ROPE describes the entire exam's process, including elaboration, revision, printing, distribution in the exams' centers, realization, correcting, results' publication and the analysis of the results from schools to the Ministry of Education. ROPE is the key document used to conduct the exams' process in Mozambique. This is the documental basis to the stakeholders who are involved in the process of the exam.

#### 7.1. Table of Specifications

"Table of specifications is one of the tools in the planning of a test, which contributes to increase the evaluative efficiency and ensure the validity of the content of the test" (INECE, 2021b, p.3). According to the description of this table, it is supposed to allow teacher to implement an assessment based on criteria, indicators and techniques, which permit examiner to collect, analyze and synthesize, as objectively as possible, the answers and writings of the students (INECE, 2021b). With respect to the cognitive domains applied in the national examination, Bloom's cognitive domains (taxonomy) was declared to be accepted. The adopted key domains, which guide the development of question items of the national exams to measure the level of competences. The definition prescribed in INECE (2021b) is as follows:

• **Knowledge:** student recalls or knows information, ideas, and principles in the (approximate) form in which they have learned.

Example: Write, List, Name, Say, Define.

• **Comprehension:** student translates, understands or interprets information based on prior knowledge.

Example: Explain, Summarize, Describe, Illustrate...

• Application: student selects, transfers, and uses data and principles to complete a problem or task with minimal supervision.

Example: Use, Solve, Demonstrate, Apply, Construct...

- Analysis: student distinguishes, classifies, and relates assumptions, hypotheses, evidence, or structures of a statement or question.
- Example: Analyze, Categorize, Compare, Contrast, Separate...
  - Synthesis: student creates, integrates, and combines ideas into a product, plan, or new proposal to them.
- Example: Create, Elaborate hypothesis(es), Invent, Develop...
  - Evaluation: student appreciates, evaluates, or criticizes based on specific standards and criteria.

Example: Judge, Recommend, Critique, Justify...

INECE (2021a) conceptualizes a matrix of objectives and contents as "...a tool to help planning and organizing an evaluation" (p.3). This is seen as a kind of guiding document or, as described in the system, a key-tool for the assessment of contents, together with transparency, specifying the target contents and guidance to make easy the preparation. It contains objectives associated with each unit and also contents. The following table is an example.

The national exam (graduation examination) is elaborated based on a similar table as this. According to the Table 3, the key description of cognitive domain related to the definition of the competences measured in the exam is explained in the objective of the table, corresponding to the contents domain of question items of exam. For example, in the objectives written, application of knowledge to mathematical problem is questioned for "ratios and proportion" and "geometry", meanwhile only basic knowledge and skills are

Table 3.	Matrix	of objectives	and	contents	for	the	natio	nal
	exam	(mathematics	gra	de 7 - 202	20)			

Objectives	Contents			
The examinee must be able to: - Solve simple numeric expressions, involving the four operations, curved and spare parenthesis; - Calculate the value of the unknown parcel through use of inverse operation.	Fractions - Simple numerical expressions involving natural numbers. Fractions and decimal numbers with curved and spare parenthesis; - Equations of the type: a + x = b; x + a = b; a - x = b; and x - a = b			
<ul> <li>Transform fractions into percentages;</li> <li>Represent increases and decreases as percentages.</li> </ul>	Percentages - Representation of fractions as percentages; - Increases and decreases as percentages.			
- <u>Apply</u> the proportions' fundamental principle to solve equations.	<b>Ratios and proportion</b> - Proportion type equations			
- Determine the areas of simple figures, <b>applying</b> appropriate formulas.	Geometry (Areas) - Area of square, rectangle and triangle.			
<ul> <li>Identify direct and inverse proportionality;</li> <li>Build direct and inverse proportionality tables;</li> </ul>	<ul> <li>Proportionality</li> <li>Direct and inverse proportionality;</li> <li>Tables of direct and inverse proportionality.</li> </ul>			
- Calculate the arithmetic means and mode.	Some statistical elements - Calculation of arithmetic means and mode.			

Source: INECE (2020b).

Table 4.	Sample	of specification	on table	used for	or national
	exams (	(mathematics	grade 7	· - 2020	))

The section Unit	Cog	Questions'		
Thematic Unit	Knowledge	Comprehension	Application	Number
Fractions	0	2	1	3
Percentages	0	1	1	2
Ratio and proportion	0	1	2	3
Proportionality	1	0	1	2
Geometry (Areas)	0	0	2	2
Some statistic elements	1	0	1	2
Total	2	4	8	14

Source: INECE (2020a).

questioned for the rest of contents domain.

Accordingly, if we revise another table, which is about specification of question items in terms of thematic unit (contents domain) and cognitive domain, there are only basic cognitive domains examined among the selected question items such as "knowledge", "comprehension" and "application". Based on the Bloom's categorization of cognitive domains, there missed "analysis", "synthesis" and "evaluation". In addition, most of the question items applied for the national exam, for example, in 2020, would be categorized as "knowledge" or "comprehension" rather than "application". In fact, some questions can be categorized as "knowledge" or "comprehension", even though there recorded no item of "knowledge" or "comprehension" in the specification table (Table 4). The "application" type question items in the national exam are too simple, so that it would be difficult to measure to what extent students apply for the daily life problem. This is one of the important components of the competences prescribed in the national curriculum

#### 7.2. Other concerns related to the national exam

The matrix of objectives and contents (Table 3) is used in the preparation phase of the exam proposals (INECE, 2021a) and, on the other hand, in order to prepare students for the exams at the school level. This instrument can empty the primary role of teaching programs, primary source of contents and skills to be achieved or developed in schools.

Among the inevitable risks associated with the use of matrices, we can mention:

- The limitation to evaluate the performance of the education system;
- The weakness to evaluate the schools' performance;
- The risk of ignoring the program, focusing on the exams;
- The risk of interfering in the reliability of the national examination process;
- The occurrence of academic frauds by foreseeing probable exam questions.

If the Specification Table (Table 4) appears directly associated with the structure of the exam proposals to be prepared, which provokes limitation of teaching-learning process. Therefore, it is indispensable to take into account the need to design a balanced test in terms of mastery of cognitive domains defined for the competences, content, and also the degree of difficulty.

This instrument seems to obstruct the real meaning of assessment, especially in competences. We assume that if an instrument to guide the process of designing the test is public, it represents half of its essence or more. There is a strong risk of, for example, a student who, during the entire year, did not have a positive performance, being fortunately approved, causing a certain discredit of the teacher's work in the classroom, including the formative assessment. Another risk is related to the possible association to frauds conscious or unconscious.

## 8. Conclusions

Studies and Education Systems that emphasize the relevance of classroom assessment are not new and its development shows the need to reflect in the educational process highlighting student activities. Grading appears as the most relevant criteria to assess students and define their future, more than assessing their daily performance and competency. Black and William (1998) propose more emphasis "to the potential of classroom assessments to assist learning" (p.8), what can allow students to develop competences.

In general, the review of the evaluation regulation through MINEDH (2019), which revoked MINED (2015), seems to not reflect any structuring evolution with an impact on the improvement of the classroom environment. MINEDH is expected to take into account the main problems raised by teachers and students and also the difficulties of implementing an assessment system that focuses on the development of competences.

Our perspective is not to burn the testing perspective in classroom. But, to assess student as a strategy, not an instrument, to gather important information using different techniques as observations, a question posed in class, exercises and other that allow teachers to contribute to students rather than just grading them. We can use assessment to "guide instructional next steps for both the teacher and the student" (Chappuis & Stiggins, 2018, p3).

National Exams are applied mostly to certificate achievement of learning. However, as a regular national assessment in Mozambique, exams even only focused on graduates, it can be as an important source of data to evaluate the educational system itself, specifically the curriculum efficiency and efficacy, the students' mastery in specific contents, the efficacy of teaching strategies, and so on.

Teachers, school managers, supervisors, the

society and all the relevant educational actors must be ready to the challenge, sharing their values, experiences, and perspectives to build a strong and effective assessment system that can be objective, useful, inclusive, reliable, and motivate students to learn, giving them permanent feedbacks to improve their performance.

# References

- AR (Assembleia da República). (2018). *Lei 18/2018 de 28 de Dezembro*. I Série Número 254. Lei sobre o Sistema Nacional de Educação.
- Black, P. & William, D. (1998) Assessment and Classroom Learning, Assessment in Education: Principles, Policy & Practice, Vol.5(1), pp.7-74. http://dx.doi.org/10.1080/0969595980050102
- Chappuis, J. & Stiggins, R. (2018). *Classroom assessment* for student learning: Doing it right – Using it Well. 3<sup>rd</sup> Ed. Pearson.
- Clarke, M. (2012). What Matters Most for Student Assessment Systems: A Framework Paper." SABER-Student Assessment Working Paper Series. Washington, D.C. World Bank. (Last visited on 30<sup>th</sup> October 2022): https://openknowledge.worldbank. org/bitstream/handle/10986/17471/682350WP00P UBL0WP10READ0web04019012.pdf;sequence=1
- Dias, I.S. (2010). Competências em Educação: conceito e significado pedagógico. Revista Semestral da Associação Brasileira de Psicologia Escolar e Educacional, Vol.14(1), pp.73-78. https://doi.org/ 10.1590/S1413-85572010000100008
- Duarte, S. (coord.). (2012). Progressão por ciclos de aprendizagem no Ensino Básico: Desafios na mudança do paradima de avaliação. INDE e Editora Educar - UP. Maputo.
- INDE (Instituto Nacional de Desenvolvimento da Educação). (2018). Programas do Ensino Primário 1º Ciclo (1ª, 2ª, 3ª). INDE.

- INDE (2019). Programas do 2º Ciclo do Ensino Primário. INDE.
- INDE (2020). *Plano Curricular do Ensino Primário*. Maputo. INDE.
- INECE (2020a). Grelha de especificações do exame final de matemática - 7ª classe -2020. [Unpublished manuscript]
- INECE (2020b). Matriz de objectivos e conteúdos do exame final de matemática 7<sup>a</sup> classe 2020.
- INECE (2021a). Matriz de Objectivos e Conteúdos. Seminário de Capacitação de Técnicas de Avaliação. Abril de 2021. INECE. [Unpublished manuscript]
- INECE (2021b). Tabela de Especificações. Seminário de Capacitação de Técnicas de Avaliação. Abril de 2021. INECE. [Unpublished manuscript]
- Keeley, P., & Tobey, C.R. (2011). *Mathematics Formative Assessment (Volume 1)*. Corwin.
- MINED (2007). Diploma Ministerial 112/2007 de 23 de Agosto. I Série - Número 34. Regulamento da Organização do Processo de Exames (ROPE). MINED.
- MINED (Ministério da Educação). (2015). Diploma Ministerial 59/2015 de 24 de Abril de 2015. I Série
  Número 33. Regulamento Geral de Avaliação do Ensino Primário, Ensino Secundário e Alfabetização e Educação de Adultos. MINED.
- MINEDH (2019). Diploma Ministerial 7/2019 de 10 de Janeiro. I Série - Número 7. Regulamento Geral de Avaliação do Ensino Primário, Alfabetização e Educação de Adultos e Ensino Secundário Geral. MINEDH.
- Yoneda, Y., Kusaka, S. & Ishizaka, H. (2018). Current Situation and Challenges on Mathematics Teaching Method in Teacher Training Institution (IFP) in Mozambique: Towards Appropriate Teacher Training Corresponding to Actual Situation of Mathematics Education at Primary School, NUE Journal of International Educational Cooperation, Vol.12, pp.111-121. http://doi.org/10.24727/00028063