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The Assessment Impact on the Quality

of the Teaching / Learning Process.

A Case Study: Primary School

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Abstract

This field research investigated teachers' perceptions and practices of classroom assessment in Algerian primary school. The study tried to gain an understanding of the extent to which teachers use different classroom assessment strategies and tools to understand and to support both the learning and teaching processes, under the competency-based approach (CBA), Which is, in theory, the reference methodology for all school subjects.

Practices in the classroom were monitored by a survey of primary school teachers. The analysis showed that the way teachers understand competency based assessment in the Algerian school is important because such understandings are likely to influence how they implement the new assessment strategies under CBA curriculum adopted to improve educational system quality. Two main questions framed the present study:1- How do primary school teachers perceive classroom assessment? 2- Do teachers' perceptions influence their assessment practices? To the best of my knowledge there has been no research to date which has investigated Algerian primary school teachers' understandings and experiences with assessment strategies and technics based on CBA paradigm Roegiers (2006).

The collected data comprised surveys, in-depth face to face interviews, recordings and written documents to establish teachers' perceptions of classroom assessment. The study also used a lesson observation procedures, pre-lesson and post-lesson observation interview technics as main sources of data collection. The collected data helped to sketch out patterns between perceptions of classroom assessment and teachers' classroom assessment practices. Document analysis was used to scrutinize the information collected through observations and interviews. In addition, document analysis provided first hand information on the kind of written feedback students get and the nature of activities they do.

The probed data show that teachers perceive classroom assessment as tests that teachers give to their students at specified time intervals. Thus, what teachers said about their teaching was not reflected during their teaching practices. They showed limited ability to deal with different methods and tools to assess their students while teaching. The teachers' perceptions of classroom assessment have negative impact on their classroom assessment practices. 16 out of 20 teachers perceived assessment as testing, and classroom assessment practices were not clearly embedded in their teaching. Teachers' education and training program did not seem to improve teachers' perceptions of classroom assessment, however, teacher's academic qualification seemed to influence teachers' flexibility to accept new ideas.

This dissertation is intended to give a thorough report of the basic issues that lie behind assessment methods applied in the Algerian primary schools. More significantly, we aim at showing the location of assessment in the teaching/learning process relying on three fundamental elements: the syllabuses, the textbooks, and teachers' practices. These three elements are of key importance within any educational setting because either they enhance learning or impede it.

Abstrait

Cette étude de terrain a porté sur les perceptions et les pratiques des enseignants en matière d'évaluation en classe à l'école primaire algérienne. L'étude a tenté de comprendre dans quelle mesure les enseignants utilisent différentes stratégies et outils d'évaluation en classe pour comprendre et soutenir les processus d'apprentissage et d'enseignement dans le cadre de l'approche basée sur les compétences (APC) qui est, en théorie, la référence méthodologie pour toutes les matières scolaires.

L'analyse des pratiques d'évaluation en classe au primaire a montré que la façon dont les enseignants comprennent l'évaluation basée sur les compétences dans l'école algérienne est importante car de telles compréhensions sont susceptibles d'influencer la mise en œuvre des nouvelles stratégies d'évaluation du curriculum basée sur l'APC adopté pour améliorer la qualité du système éducatif. La présente étude s'articule autour de deux questions principales: 1- Comment les enseignants du primaire perçoivent-ils l'évaluation en classe? 2- Les perceptions des enseignants influencent-elles leurs pratiques d'évaluation? À ma connaissance, aucune recherche à ce jour n'a été réalisée sur la compréhension et l'expérience des enseignants algériens du primaire dans les stratégies et techniques d'évaluation basées sur le paradigme de l'APC, Roegiers (2006).

Les données collectées comprenaient des enquêtes, des entretiens approfondis en face à face, des enregistrements et des documents écrits relatifs à la perception des enseignants concernant l'évaluation en classe. L'étude a également utilisé des procédures d'observation de cours, des techniques d'entrevue d'observation avant et après les leçons comme principales sources de collecte de données. Les données recueillies ont aidé à comprendre le lien entre les perceptions de l'évaluation et les pratiques d'évaluation des enseignants dans la classe. L'analyse des documents a été utilisée pour examiner les informations recueillies lors d'observations et d'entretiens.

Les données ont montré que les enseignants perçoivent l'évaluation en classe comme un test que les enseignants donnent à leurs élèves à des intervalles de temps spécifiés. Ainsi, ce que les enseignants ont dit de leur enseignement n'a pas été reflété lors de leurs pratiques en class. Ils ont montré une capacité limitée concernant l'utilisation des différentes méthodes et outils pour évaluer leurs étudiants. La perception des enseignants concernant l'évaluation en classe a un impact négatif sur leurs pratiques d'évaluation. 16 enseignants sur 20 ont perçu l'évaluation comme un test et les pratiques d'évaluation en classe n'étaient pas clairement intégrées à leur enseignement. Le programme d'éducation et de formation des enseignants ne semble pas améliorer la perception des enseignants à l'égard de l'évaluation en classe; toutefois, leurs qualifications académiques semblent influer sur la capacité des enseignants à accepter de nouvelles idées.

Cette thèse a pour but de présenter un rapport détaillé sur les problèmes fondamentaux qui sous-tendent les méthodes d'évaluation appliquées dans les écoles primaires algériennes. Plus important encore, nous visons à montrer l'emplacement de l'évaluation dans le processus d'enseignement / apprentissage en s'appuyant sur trois éléments fondamentaux: les programmes, les manuels et les pratiques des enseignants. Ces trois éléments sont d'une importance capitale dans tout cadre éducatif, qu'ils améliorent ou entravent l'apprentissage.

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List of Abbreviations

AfL   Assessment for learning

AoL   Assessment of learning

CBA   Competency-Based Approach

CNRSE   National Education System Reform Commission

ITE   Institute of Technology and Education

NEOL   National Education Orientation law

ONS   National Statistics Office

PARE   UNESCO support program for the reform of the education system in Algeria

Dedication

I dedicate this thesis to special people in my life. First, to my wife who encouraged me to reach the highest level of education possible throughout my life, particularly during this PhD journey, for which I am greatly indebted. Second, I wholly dedicate this thesis to my butterfly Noor and my loving kids Moncif and Mouanis.

Without your initial love, care and concern, I would not have come this far.

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1.1 General Introduction

Algeria is undergoing important shifts in the field of education. The last decade has seen deep educational reforms to promote the quality of education, taking into account the scientific and technological developments to innovate and drive forward learning experiences in keeping with the needs of the future. From 2003 onwards, deep curriculum reforms were released. This process of curriculum reform was to follow the Competency-Based Approach (CBA) principles and standards, which focuses not only on the acquisition of general knowledge but also on values, skills, attitudes, critical thinking and understanding. It was hoped that all educational levels would have been exposed gradually to the new curriculum, and that the years that followed would see a fundamental review of the new educational era with a view to improving and refining the curriculum goals.

Educational reform cannot, therefore, ignore the assessment of the students' learning. Teachers must adapt their instructions to suit to the present day learning climate to be in synergy with the objectives of the educational reforms to conform to what is required from the role of teaching, learning and evaluation. Assessment of students' achievements is a central issue in the development of any education system. It is considered as a basic constituent of effective teaching and learning (Bryant and Driscoll, 1998; McMillan, Myran and Workman, 2002; Stiggins, 2002).

Elementary education is the most important official learning institution which has adopted several pedagogical duties and missions (Black, 1999).The fulfilment of the latter depends on the necessary tools such as suitable curricula with conditions and needs and consideration for the teaching and learning quality. This research study highlighted the close relationship that relates teachers' perceptions and attitudes and assessment performance as a result of the new implemented educational policy. In fact, classroom assessment encompasses a range of skills comprising creativity, critical thinking, problem-solving, decision-making, collaboration, flexibility, initiative support and accountability (Fuchs, 1999; Gardner, 2006; Arends, 2014). It follows that classroom assessment is an important segment of the teaching and learning process (Gipps, 2002; Black and Wiliam, 1998). Research has revealed that teachers have different points of views in regard to the theoretical framework of assessment strategies (Dietel, Herman, and Knuth, 1991). The teachers' assessment experiences within the classrooms education context, including the scope of assessment practices, have a crucial impact

on the students' experiences in the education program. The researcher tried to gain an understanding of the extent to which teachers use different classroom assessment methods, technics and tools to understand and to feedback the students' skills.It also provided in-depth insights about the accurate ways of applying assessment as classroom practice.

The present field research is a case study analysis. It will provide an opportunity to identify potential areas of assessment that are not addressed and to begin a discussion of what teachers should know about competency-based assessment from the standpoint of the classroom practices to enhance the quality of the pupils' learning. Moreover, it investigates Algerian primary school teachers' assessment of beliefs and practices. It examines teachers' espoused beliefs and understandings of assessment and feedback strategies; their purposes for giving feedback; and the implications of these beliefs and understandings on quality learning in classroom real situation.

This study endeavours to discuss the relationship between competency-based education (CBE) and the principles of assessment with a particular focus on the study of the role and impact of effective assessment, between what is assumed and what is observed on the real ground. Assessment will be described on the basic of a large corpus material comprising directly observed conversations, questionnaires and discussions covering a wide range of topics and interpersonal relationships. It highlights some of the most common variation patterns that may exist in the teachers' assessment practices, and surveys the major factors that may influence and shape the dominant patterns of their perceptions about classroom assessment.

In this chapter, I provide the contextual and background information relevant to the research project. This chapter starts by making explicit my interest and position in regards to classroom assessment and feedback in general, and in how it has been applied in Algerian primary school specifically. A brief discussion of my objective follows. Towards the end of the chapter, the significance of conducting research into assessment and feedback is justified, and finally, an overview of the five chapters is presented.

1.2 Background of the study

Education is a sensitive domain where the assessment issue remains the most important. It is an integrated process of determining the nature and extent of learners' process and development(Bell, 2001; Boud, 2013). Assessment is critical to the teaching

learning process. Popham (2008) claims that teachers who can test well will be better teachers and effective teaching will enhance a teacher's instructional effectiveness. Malcolm (2000:40) argues that assessment is used to guide teaching, and is used as part of teaching. Research has shown that teachers typically spend a minimum of one-third of their instructional time on assessment-related activities (Mertler, 2003; Bachman, 2014). Similarly, Stiggins and Conklin (1992) assert that teachers spent approximately one third to half of their time in the classroom to prepare and engage with assessment-related activities. According to Schafer (1993), teachers spend anywhere from 30% to 50% of their instructional time assessing students.

Assessment is a significant component of effective instruction. Concerns over students' development and achievements in classroom practices have been widely reported internationally (Shepard, 2000; Jones, 2005; Cutler & Graham, 2008; Sadler, 2010; Frank, 2012; Wiliam, 2013). They have investigated the implementation of assessment in relation to teacher beliefs and classroom practices regarding the new CBA syllabi. Researchers argued that teachers' conceptions of assessment have strong influences on how they match between their beliefs and feedback practice.(Chin, 2007; Nicol, 2006; Calderhead 1996; Hyland, 2000). Classroom assessment practices are dimensioned by teacher beliefs, attitudes, knowledge and smartness. Thus understanding teachers' classroom assessment practices is crucial in the educational decisions that can be made about students' learning achievements.

Research confirmed that students tend to learn more in classes where assessment is integrated into instruction than in those where it isn't (Shepard, 2000; Kitta,2014; Jabbarifar, 2009). Hence, Poor assessment procedures may result in poor decision making in the teaching-learning situation. Assessment allows teachers to identify the gap between what was taught and what is actually being learned. Classroom assessment is an essential component in teaching and learning process. It equips teachers with data about students for decision making in the classroom. Teachers use a range of assessment strategies to collect information about students' needs and abilities to confidently perform classroom tasks. They design assessment tools with two wide purposes; to gather information that will inform classroom instruction, and to supervise students' improvement towards achieving year-end outcomes. Teachers create opportunities for students to acknowledge their improvement and successes. Following this context, learners can acquire meaningful knowledge, skills, and attitudes which

enable them to act effectively and to develop options when confronted with new situations.

Recent years have seen increased research on classroom assessment as an essential aspect of effective teaching and learning (Biggs, 1996; Anderson, 1998; Rowntree, 2015; Baer, 2006).They started from the assumption that the way teachers perceive assessment may influence the way they teach and assess their students (Fennema and Romberg, 1999). Properly used, classroom assessments have the potential to support both students and teachers to develop their classroom performance.Teachers' intervention should be based on knowledge, skill and competence in the educational assessment of students to model effective assessment strategies. Central to this view, The National Commission for the Reform of Education System(2003), Commission Commission Nationale de Réforme du Système Educatif (CNRSE), the UNESCO support program for the reform of the education system in Algeria (2005), programme d'appui de l'unesco a la reforme du systeme educatif (PARE), and the Orientation Law (2008) regard assessment as a tool for learning. The CNRSE claims that successful teaching requires understanding the students' needs. The teachers' role should become more of helping the learning process and quantifying the learning outcomes through flawless marking. Hence, assessment should be based on a collection of details about what students know and what they are able to do in real-life situations Law and Eckes (1995:29). The Orientation Law insists on carrying effective assessment that informs teachers about the students' abilities and needs in order to take suitable procedures and creating favourable learning conditions (Guardino & Fullerton, 2010; Hannah, 2013).

Assessment of students' learning is very critical because effective teaching decisions reflect the smartness of teachers to understand their students and to match pedagogical actions with valid assessments McMillan (2008). Past research has shown that there are many problems associated with teachers' classroom assessment practices which may hinder the teaching-learning process. These include teachers' inadequate assessment knowledge regarding the basic testing and measurement concepts (Daniel & King, 1998; Schafer&Lissirz, 1987; Stiggins, 2005), lack of workshops training in assessment (Stiggings, & Bridgeford, 1985) and failure of teachers to apply and adhere to measurement guidelines they learned in measurement courses (Campbell & Evans, 2000).

Given the global increasing recognition of the important role of assessment literacy, educational researchers and assessment specialists alike have constantly called for teachers to be assessment-literate (Daugherty, 2010; Klenowski, 2013a; Popham, 2014). A deep

comprehension of the nature of teachers' classroom assessment literacy is important as they are the key operators in implementing the assessment methods. As such, their classroom assessment literacy is directly related to the quality of the assessments employed in assessing students' learning.

The global trend toward competency based education focuses on teachers' perceptions of classroom assessment practices, and probes to gain an understanding of the dimensions to which teachers use different classroom assessment methods and tools to understand and to support both the learning and teaching processes.The Primary school level is the cornerstone of any educational system because any default at this level would pervade to other levels of the educational system Webb & Jones (2009). It is important to know that the quality of instructions appears to be directly linked to the quality of assessments used in classrooms (Earl, 2013; Heritage, 2013b; Green, 2014). Accordingly, teachers should be knowledgeable on the techniques and methods of effective assessment, and the objectives of learning to be achieved in our schools.

Educational researchers and practitioners asserted that teachers' assessment has deep impact on the study patterns, self-perceptions, attitudes, effort, motivation of students and development of competencies they need in practice (Black & Wiliam, 1998; Brookhart, 2001; Rodriguez, 2004). They strived to establish a close substantive connection between assessment and meaningful instruction. However, the implementation of classroom assessment is reported to be under the expectations, and the performance of students in primary school remains poor. Black & William (1998) highlight that there is a wealth of research evidence showing that the everyday practice of assessment in classrooms is beset with problems. This fact highlights that educators demonstrate limited classroom assessment literacy, which will have a negative impact on their actual assessment implementation.

Assessment per se is the strategic approach which determines whether learners are ready to be promoted to the next grade. During the early nineties, educationists showed strong disapproval towards the traditional methods of assessment (Wiggins, 1993; Fraser, 1994; Bailey, 1998), and called for alternate strategies to improve assessment and to ensure the best feedback from it. Accordingly, increased research on classroom assessment was launched to raise the essential aspect of effective teaching and learning (Bryant and Driscoll, 1998; McMillan, Myran and Workman, 2002; Stiggins, 2001).

This research was elaborated to probe teachers' awareness of classroom assessment practices and strategies to better understand the current knowledge that students possess. The study sought to understand the methods, tools and technics teachers use to assess their students. The researcher studied closely how classroom assessment was being carried out in the classroom by focusing on the strategies and tools the teachers used to assess the learners. In addition, the researcher investigated teachers' perceptions of the role of assessment in different teaching and learning situations.

Given the above background and the general notion held on the importance of assessment, I feel it necessary to investigate the current status of classroom assessment, and to tackle the problems which may hinder the students' skills acquisition.The main objective of this study is to explore teachers' experiences in implementing competency based assessment, and to illustrate the process of assessing skills and competencies with reference to global educational standards.

1.3 The Algerian Context

Algeria, like most developing countries, endeavours to improve the quality of education. High rates of school enrolment and rapid growth in numbers for the different educational levels visibly marked the actual history of Algeria. Besides, The massive expansion of schooling and basic education are milestone involvement in guaranteeing all Algerian children access to compulsory schooling cycles from ages 6 to 16. (Executive Decree No.02-10). However, the performance of students in mastering knowledge at primary school remains poor. A survey conducted by the NATIONAL STATISTICS OFFICE, (Office National des Statistics) (ONS), revealed that the primary education system in Algeria has significantly expanded over the past few years, resulting in the establishment of hundreds of schools and classrooms; and thousands of teachers are employed at the primary school to satisfy the needs of millions of pupils.

Table. 1.1 students' enrolement in primary school

Primary education				
School year	2013/2014	2014/2015	2015/2016	2016/2017
enrolled students	3 730 460	3 886 773	4 081 546	4 231 556
Including girls on %	47,68	47,71	47,69	47,65

Table 1.1 shows the systematic increase of the enrolled students in Algerian primary schools from the year 2013 to 2017. Similarly, figure1.1 shows the growing number of primary school teachers especially the huge ratio of female teachers.

Primary school teachers' ratio

	2013/2014	2014/2015	2015/2016	2016/2017
■ Primary school teachers	156 737	164 930	168 230	174 115
■ Female	100 985	112 119	119 941	131 156
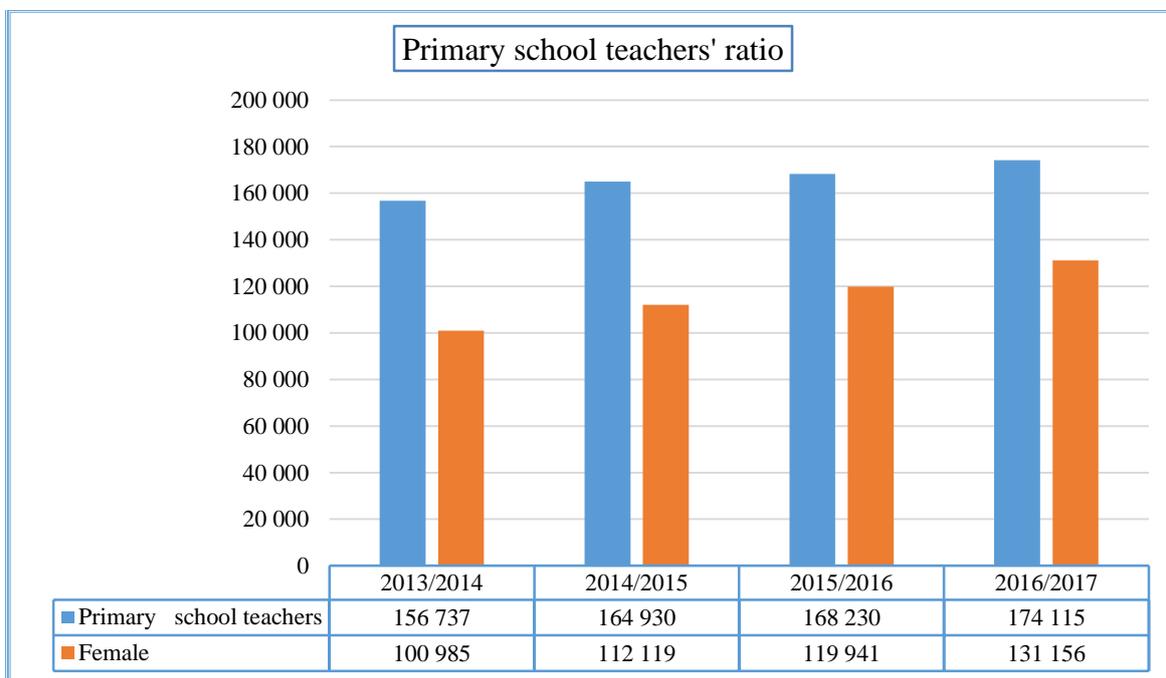
But despite all these efforts, the focus of public opinion on school deficiency, the failure of the education system to effectively provide students with adequate teaching and learning resources and the weakness in assessment practices hold much of the discourse through mass-media, social and political circles. Traditional methods failed to provide efficient learning that requires students to demonstrate higher-level thinking skills. Therefore, narrowing pupils' potential to low-level skills, and distorting the impetus shaping their learning futures. They emphasised that traditional assessment methods measure a limited number of cognitive functions and skills related only to memory and students' ability to recall material learned out of context (Van Dyke, 2014; Letina, 2015).

The Algerian primary school teachers have experienced repeated theoretical and pedagogical shifts from content-based instruction to objective-based approach, and currently, competency-based approach and have been required to adopt these changes into their classroom practices. Different training programs were designed for teachers as a pedagogical support. But the designers failed to diagnosis the classroom problems, especially at the assessment levels. CBA was introduced to address this demand. It is considered as a new trend that places less emphasis on the intellectual ability of the learners. It takes into consideration a leaner' s skills, attitudes, knowledge and values.

Competency-based assessment methodology provides students with meaningful paths to manifest their learning acquaintance and improves their skills by bringing into play complex functions of cognitive processing that require a higher level of thinking for problem-solving. It allows students to engage with meaningful problems that foster significant educational experiences (Garbus, 2000).

After more than a decade of educational reform, some teachers' instruction and assessment practices seemed to be far from the CBA dimensions.The Minister of Education clearly declared that teachers' level is very low and her department will start intensive and advanced training. She revealed that the national symposium on school reforms, which will take place on 25 and 26 July, does not affect Ben Zago reforms but tends to fix the education system weaknesses, emphasizing the priority given to primary school.(AL FADJR, DK NEWS FR, EL BILAD, EL WATAN, LE SOIR D' ALGERIE, LIBERTE, 2015).

In the quest of trying to improve the quality of education and increase the number of teachers, Algeria has moved from one teacher training program to another. Some of the programs that Algeria has used to train primary school teachers are the two-year conventional teacher training program, and the current integrated in-service teacher education program. Classroom assessment is the most important facet of education that needs to be understood and addressed if teachers are to support students to learn meaningfully, for instance. According to The Orientation Law on National Education issued in 2008, four articles (Articles 69, 70, 71 and 72) are devoted to the assessment practices. The latter is recognised as a pedagogical assessment tool, established in the daily schooling, that allows teachers to judge pupils' learning through analyzing available data and interpreting them so that to make educational and administrative decisions. Learning cannot succeed without developing a strategy for the assessment covering all types: diagnostic, formative, and summative, which boosts the development of learners' skills. Teachers were expected to be able to integrate their assessments with their instruction and students' learning in order to meet the needs of the reform goals such as training students for acquiring long life learning skills. That is, they are expected to assess students' learning in a way that is consistent with the new educational reforms.

The new curriculum strengthened the teachers' role in shaping the learning process of their pupils by adopting more creative teaching, learning and assessment strategies

attuned to learners' individual needs. It aimed at achieving high education levels by developing necessary skills and prepares students for the future by placing them at the center of the educational policy and enable him to capture basic competencies. Accordingly, Classroom assessment quality equips students to master learning skills and higher-order thinking to fulfil their needs. It is, therefore, essential to better comprehend the nature of teachers' classroom assessment literacy development, so that appropriate remedies can be used to address the issues in a timely manner, given educators are the key agents in the assessment process. Thus, the elaboration and validation of a set of scales to gauge the teachers' classroom assessment literacy progression, undertaken in the current study, could tackle these needs.

1.4 Statement of the problem

Accurate assessment of student's achievement is becoming increasingly imperative at the national level. Hence, classroom assessment is a cornerstone of the teaching and learning process; and   teachers are the mainspring of the education process. Accordingly, it is vital to understand the strategies and dimensions of assessment practice; and the teachers' perceptions, training and experience with reference to CBA in order to align educational standards and student assessment. This urged me to find ways of producing and using information from assessments measures that could have a direct input to the reframing and revision of curriculum McMillan (2001).

Classroom assessment is a real challenge in the primary schools. During the course of my duties as a school teacher and inspector respectively, I noticed that most teachers had no clear approach to assessment. Some teachers focused on assessment features that would only address the low level of Bloom's Taxonomy of Educational Objectives Bloom (1994); while others would reproduce items from past examination based on poorly structured assessment procedures.

Teachers' competencies in classroom assessment often become an issue in Algeria. Ministry of Education of Algeria has highlighted issues related to teachers' incompetency in assessment practices especially in constructing items. Teachers still lack knowledge and skills in applying assessment technics and methodology regarding CBA. One of the reasons for the incompetency among teachers refers to the lack of training in competency-based assessment in educational institutions. Besides, there was also an issue related to the

way teachers conduct classroom instruction emphasizing more the summative assessment; meanwhile, formative assessment is generally neglecting. Some teachers still fail to understand the basic notion of educational philosophy, curriculum purposes and its' implications on teaching and learning in classroom assessment. It is advisable for teachers to have adequate knowledge, skills and competency in classroom assessment.

This critical phenomenon incited me to carry on a field- study to identify teachers' perception and attitudes about assessment competency in correlation with classroom practices. Teachers' beliefs and perspectives about classroom assessment were analysed on the bases of academic qualification, professional qualification, experience in teaching, experience in constructing items and experience in attending assessment-related workshops and seminars. Also, teachers' assessment competency was investigated through five major constructs namely planning classroom assessment, constructing classroom assessment, administering assessment, and scoring and appraising classroom assessment. Besides, this study attempted to discover the relationship between teachers' perception and proficiency under the competency-based classroom assessment.

My interest in teachers' assessment beliefs and practices arose from my own teaching experience, my duties as inspector and my determination to understand the link between teachers' perception and the impact of such perception on students' learning. My knowledge of assessment was in the context of the Algerian education system, where assessment was a summative process of giving grades and marks, and where written work is seen as a product. All the classes I visited and the professional learning and development teachers underwent, were aimed at increasing students' proficiency to reach national standards. At the end of Year Five (Cinquième), students sat their first national evaluation exam, the Primary School Evaluation Test.

My concern in assessment became stronger when I was tutoring in-service teachers at seminars and workshops. Teachers attending professional learning and development courses were dubious about how assessment could inform learning and raise students' achievement. Teachers were reluctant to use competency-based assessment as a classroom teaching strategy as they found it time-consuming and disrupting to the normal classroom practice. My interest was stimulated by this situation and provided an ideal context for me to explore the critical relationship between teachers' beliefs and their practices in relation the new curriculum which requires teachers to focus on individual differences and abilities.

From these experiences, teachers' processes of providing assessment became the core of my interest and the basis of this research. I was interested in what teachers believed about assessment and how these beliefs impacted their students' learning strategies. The recent implementation of CBA in Algeria increased my concern, specifically in finding out how teachers might be able to implement assessment techniques in the classroom to enhance students' learning. Essentially, what began as a curiosity has developed into a theoretical and conceptual interest in classroom assessment at the primary school level. It has been about fourteen years since competency-based education was implemented in the Algerian educational system. But traditional ways of assessment continue to have a profound effect on school practices. My prime aim in this study is to offer a comprehensive analysis of the roles assessment can—and could—play in educational improvement. It also attempted to examine the disparities between teachers' perceived skill and use of classroom assessment practices.

1.5 Purpose of the study

There have been growing interests amongst educational researchers and assessment specialists concerning the impact of teachers' classroom assessment methods on students' learning motivation. According to Harlen and Crick (2003) and Brookhart (2013a), classroom assessment can have a great influence on students learning strategies and skills. It may guide their judgement of what is necessary to learn. Also, it may affect their motivation and self-perceptions of competence in structuring their learning strategies to develop and strengthen understanding by integrating and correlating the learning materials critically (Marton & Säljö, 1997; Biggs, 2012; Entwistle, 2012).

The primary purpose of the current study was to elaborate and validate a set of scales to investigate teachers' perceptions of the classroom assessment literacy development within competency based programmes in the Algerian primary education setting. The study probed the interrelationships amongst the four constructs: classroom assessment knowledge, innovative methods, grading bias and quality procedure that were thought to underpin classroom assessment literacy of the primary school teachers. It also sought to examine the level of teachers' classroom assessment literacy and its associated impact on their actual assessment implementation. It further investigated the influence of teachers' background characteristics on their classroom assessment literacy. Lights were shed on the assessment practices, skills, and beliefs about

assessment of primary school teachers in Algeria. The study attempted to determine teachers' views about assessment, areas of classroom assessment practices that are utilized or under-utilized, and whether teachers' perceived skills match the frequency with which they use assessment practices to improve learning and instruction Harris & Brown (2009).

A group of twenty elementary school teachers from   Sidi Bel Abbes, west Algeria was approached to collect data regarding their assessment conceptions and classroom practices in order to have a clear picture of how teachers' assessment beliefs relate to standard assessment practices. The independent variables of years of teaching experience, age, grade level assignment, level of education, and exposure to an assessment training were used to further identify the relationships between the variables of teachers' assessment beliefs and practices. I strived to strengthen my understanding to reach the following purposes:

 (a) To obtain information about teachers' perceptions regarding the nature and quality of the assessment training they received.

 (b) Determine teachers' beliefs about the purpose of classroom assessments.

(c) Examine assessment practices that teachers employ as they evaluate students learning.

(d) Examine teachers' perceived assessment skills.

(e) Determine classroom teachers perceptions on assessment.

(f) Explore the influence of teachers' perception on classroom assessment.

   This study endeavored to bring an awareness regarding how the Algerian primary school teachers generally perceive their classroom assessment practices to generate information to be used for making decisions about students' achievements Volante & Fazio, 2007; Bandalos, 2004; Lamprianou & Athanasou, 2009). Thus, have a clear picture about the nature and magnitude of assessment issues to be adopted in future. Also, the researcher wished to shed some lights on the dynamic relationship between teaching, learning, and assessment. Researchers held that assessment impact is significantly noticeable on students' outcomes (Struyven, 2005; Rockoff & Speroni, 2010). The way teachers approach teaching determines the way they perceive classroom assessment strategies. It has been generally accepted that better instructions generally generates better students' outcomes.

1.6 Research Questions

Starting from the assumption that classroom assessment knowledge base and personal beliefs about assessment are the underpinnings of classroom assessment expertise of teachers, the researcher tried to examine the interrelationships amongst these variables that form the teachers' classroom assessment experience, and to investigate the teachers' classroom assessment literacy level and its associated impact on assessment practices. It further examined the influence of the teachers' background characteristics on their classroom assessment literacy. How teachers understand CBA in Algeria is important because such understandings are likely to influence how they implement the CBA curriculum in the educational system reform. Two main questions framed the present study:

1- How do primary school teachers perceive classroom assessment?
2- Do teachers' perceptions influence their assessment practices?

The remaining questions directed the research focus towards assessment practices that related knowledge and beliefs and that possibly affect students' learning quality.
a- To what extent did assessment related knowledge and beliefs underpin classroom assessment?
b- What kinds of assessment methods and tools do teachers use to assess their students?
c- How do teachers define the role of assessment teaching-learning process?
d- To what extent did assessment support learning advancement?
e- To what extent do teachers manage challenges-related to classroom assessment?

1.7 Overview of the methodology

The present study is positioned in the qualitative research design. It focuses on searching the complex and dynamic process of teachers' assessment practices from an "emic" perspective, which is an inner perspective where the researcher provides interpretations of social phenomena from the perspectives of social actors Mucha (2006). Particularly, it aims to understand how people in everyday settings create meaning and interpret events in their world (Patton, 2005; Silverman, 2015).The qualitative methods enabled me to uncover teachers' assumptions about classroom assessment practices and to reveal the challenges they encounter in classroom assessment context. The methodology underlying the study will be discussed in further detail in Chapter Three.

1.8 Significance of the study

This present research is the first empirical study concerning teachers' classroom assessment belief and literacy within the primary education setting in Algeria. It is one of the few studies that have employed a mixed methods approach in gauging teachers' classroom assessment assumptions, literacy and practices within a given classroom. Despite the fact that this study has been undertaken in a specific educational setting, the findings will contribute to the general understanding of classroom assessment use in primary education. It could also present a benefit contribution to the development of the classroom assessment literacy which positively impacts students' learning.

Researchers contend that high-quality classroom assessments(Stiggins, 2004; Frey & Schmitt, 2010) have the potential to support students to acquire persisting learning skills of higher-order thinking to align with the objectives of CBA reforms. Thus, It is essential to better understand the nature of teachers' classroom assessment perceptions and literacy development so that proper remedies can be used to address the issues in due time. Thus, the development and validation of a set of scales to examine teachers' classroom assessment disposition and literacy progression, undertaken within the current study, could address these needs and capture the assessment related problem. The findings generated from the present study further provide important implications for theory, policy and practice, and the design of in-service teacher CBA programmes. The study also provides a valuable framework for future classroom assessment literacy research.

This study is intended to offer deeper insights into practices that underlay problems of teaching and assessing under CBA in Algeria. Concerning practices, this research project might serve as a help to primary school teachers as well as a guide to future ones. Regarding theory, this research may contribute in filling a gap of references about the present subject. The different ways in which teachers experienced assessment for learning will provide valuable insights into how competency-based assessment can be implemented effectively, which in turn may promote a better quality of instructions to support competency-based education in schools.

Educators have "meaningful goals for instruction and clear purposes for assessment" Wolf (1993). Therefore, it is significant to address teachers' beliefs and perceptions of students, learning, instruction, assessment, classrooms, and the subject matter to be taught. So, this study will provide accurate data on the extent to which a sample of primary school teachers have incorporated assessment for learning in their instructions. Such information could be used as a basis for further steps of improvement under competency based

instruction.The study's findings are intended to more clearly define teachers' assumption with regards to assessment and how these beliefs relate to teachers' assignment of value to various assessment practices (Black& Wiliam, 2005; Opre, 2015). Study results may inform a number of stakeholders, who play a role in the education, of the desired methods of achieving high-quality classroom assessment.The findings will contribute to the general understanding of classroom assessment literacy in elementary education level. It could also make a contribution to the development of the classroom assessment literacy scales in the field.

This study will have deep implications on both theoretical and practical. On the theoretical side, firstly, the majority of studies on teacher perception focus on secondary or tertiary teachers. This study was conducted with primary school teachers, and to my knowledge, no research has yet been conducted on teachers' beliefs in primary education in Algeria. Thus, the uniqueness of the participants and the context provides significance to the study. A longitudinal case study design was adopted to explore the relationship between teachers' perceptions and classroom practices. Thus, the findings offer insights into elementary school teachers' beliefs and practices in their real context. Moreover, teachers could draw lessons to implement and develop appropriate assessment strategies in their own classes.

Second, the findings of this study provide theoretical and empirical evidence of assessment used in the Algerian primary school as a response to the innovative pedagogical approach. The findings reveal factors that supported and impeded the implementation of competency-based assessment in an authentic, elementary school setting. Some teachers in this study appeared to successfully adopt and adapt some aspects of classroom assessment and giving useful feedback to their students. Meanwhile, other teachers still held traditional methods of assessment.

The results of this study may provide valuable insights for understanding teachers' classroom assessment practices and satisfy their needs. Information obtained in this study may also be exploited by the decision makers to improve the effectiveness of classroom assessment practices and to support teachers adopt adequate assessment procedures that guide students to reach quality learning. The emerged findings may also fill a gap in the existing assessment theory and practice within the Algerian educational system, and act as a framework for developing teacher training and professional development in the use of their classroom assessment.

1.9 Limitations of the Study

The study was confined to a few schools in Sidi Bel Abbes District, hence the findings could not be generalised to the entire Algerian education system. I opted to use purposeful sampling which includes most of the variables of interest (gender, years of experience, type of teacher education program, and school location). However, the reader must consider the following limitations:

1-The study does not claim overgeneralization of the claims or representativeness of the population sample. The findings in this study are limited to the scope and the sample chosen. This study will only be exploratory in nature and is not intended to represent all primary school teachers' population in Algeria. However, it hopes that through insights gained from a sample of teachers, some conclusions could be made and possibly applied to other cases similar to the one under study.

2-The research does not focus on the development and evolution of teachers' beliefs. It only covers the beliefs expressed at a certain time in a certain place. It only represents beliefs in a snapshot.

3-The beliefs contoured in this research are not exhaustive. The study acknowledges that beliefs are different and difficult to assess. It only gives a sample of what these beliefs are as identified by the researcher. I consider that the same study if undertaken by another researcher could generate different beliefs from the ones in this thesis.

4-Perceptions and beliefs are hard to investigate. This study does not claim exemplariness and perfectness in its findings. It only attempts to use theory as a framework to give interpretations to beliefs and attitudes exhibited in a research context.

The sample size, sample frame and sampling method make it difficult to generalize the results to the whole population of teachers and primary schools in Algeria. However, the results are generalizable to the schools sampled and give an insight of what the picture could be like if more participants and other sampling methods were used.

1.10 Organising the study

This study is structured into five chapters: Chapter one serves as an introduction to the study. It provides the rationale for the study and describes the background of this work, including the theoretical framework of the classroom assessment practices that underlie it and overviews the contributions of past studies and arguments of academic researches in this area. These past empirical studies based on the relationship between

assessment and effective learning will also be reviewed and gaps identified with respect to the methodologies applied in attaining their conclusions. Its main purpose is to raise the issues of assessment as an important component in any educational system and described to point out the complexity of assessment and evaluation. The researcher purpose is to shed lights on the dynamic relationship between assessment and effective learning.

The second chapter reviews the literature associated with theoretical and empirical research relating to assessment history, assessment literacy, conceptions and beliefs of assessment, and their resulting assessment practices. It explores the key stages of classroom assessment processes, together with the body of studies on classroom assessment practices as they relate to the assessment activities. It goes further to discuss the   literature review and explores the effectiveness of pre-service and in-service teachers' assessment development, as well as research related to elements of effective classroom assessment use. The literature review summary concludes chapter two.

Chapter three proposes the theoretical framework that underpins the design of the study. This chapter also explores the concept of literacy in general and various definitions of classroom assessment literacy, and further documents the key factors that underpin classroom assessment proficiency. It presents the methodology employed in the study, in terms of a mixed methods approach including quantitative and qualitative methods.

Chapter four exhibits the case study findings, beginning with the presentation of teachers' demographic surveys including their familiarity with competency-based assessment documents, and their level of teaching experiences. The seven themes that surfaced from the four data sources are then discussed using the explanation building technique of case study approach Yin (2003). The findings are discussed in light of the key literature explored in Chapter two and further relating the findings to the beliefs underpinning competency-based assessment as detailed in the teachers' CBA in-service study guide.

Chapter five presents a discussion of the results particularly in relation to competency-based assessment and the teachers' broader understandings of CBA and its policies in Algeria. It gives a summary of the whole study, draws conclusions based on the research findings and makes recommendations and suggestions for further research.

1.11 Conclusion

The prime purpose of this chapter was to present the background context to my research. It also focused on purposes and methods used in the current study. I provided the rationale and the research questions, explaining the research strategy and the important concepts mentioned throughout the dissertation. Based on the statement of the problem, research objectives are formulated with the hope to find out competency of teachers in classroom assessment. Research questions are created to get a clear picture about teacher competency in Algerian primary schools. I conducted my research within a qualitative research paradigm that allowed me to follow a constructivist approach to data collection and analysis. This research hopes to be beneficial for teachers, students and educational authorities for better education and assessment in near future.

Having developed the above foundation for the study, in the next chapter I explore the global scholars' views about the literature review related to teachers conceptions and beliefs towards classroom assessment, what other scholars have identified as challenges affecting teachers' classroom assessment practices, how these challenges influence effective teaching and learning, and also how teachers in those studies dealt with the assessment challenges. I also look at different views on assessment principles and practices as well as the context of classroom assessment in the Algerian primary school.

2.1 Introduction

Teaching, learning and assessment are closely intermingled and this relationship is important for the success of education (Biggs, 1999; Broadfoot, 2007; Sebatane, 1998; Wiliam, 2007). Assessment is crucial to the teaching and learning process because information about students' learning is important to teachers. Kulm (1994: 11) states that assessment permits teachers to "find out what we know, do not know, and might like to know about our students". Much discourse on assessment brings into focus the use of assessment to support teaching and learning and how assessment information is used to provide information on the quality of schools. Rowntree (1977:1) confirms that: "If we wish to discover the truth about an educational system we must look into its assessment procedures."

Assessment does not function on its own as a separate component in the education field. It has a meaningful impact on both curriculum and instruction. The curriculum determines the competencies that ought to be taught and learned, whereas instruction incorporates the teaching methods and learning activities to achieve the curricular ends. Thus, assessment is described as a process that judges the extent of student achievement of the goals set within the curriculum. Accordingly, assessment and instructional practices must be aligned with curriculum objectives to support quality learning.

Research has recently increased in the field of general education with respect to assessment reforms, teachers' beliefs about them, and how these beliefs influence teachers' assessment practices. In contrast, primary school teachers' implementation of assessment reform and how their beliefs and other contextual factors influence the way they interpret and implement such assessment reforms has attracted little attention. Thus, little descriptive data about teachers' assessment practices under the CBA reform are available, and even less insight has been provided into the beliefs and factors that stimulate teachers' actual practices. This is clearly a gaping hole in the research agenda for teachers' assessment, which needs significantly more attention and further investigations.

My aim in this chapter is to make the case for this study by reviewing the literature in the two areas in which the present study is grounded. I define the broad terms associated with assessment and illustrate the key elements of assessment strategies. I then provide a rationale for assessment, discuss the implementation of assessment in various contexts, and report the challenges that have influenced the implementation of assessment in certain global contexts. The second main area of this review focuses on

teachers' beliefs. This review addresses the following topics: the definition of beliefs, the importance of beliefs in teaching practices, and the impact of teachers' beliefs on their instructional practice and students' quality learning. Finally, the review of related literature will look at assessment procedures in the Algerian schools as well as challenges that are encountered by teachers in carrying out assessment in classrooms.

2.2 Defining assessment in literature

Assessment is a systematic process for collecting information that can be applied to make inferences about features of people or objects (Reynolds, Livingstone, & Wilson, 2009). Assessment is a pedagogical instrument that aims at serving teaching. It helps teachers to make decisions about the instruction they use in class. Various definitions and descriptions of assessment exist in the literature, most of which are closely linked with the process of decision-making. Teachers are continuously taking decisions and judgments in their classrooms to determine students' progress. These judgments require teachers to have access to relevant and credible data to guide the decision-making process so that good decisions are made. (Dhindsa, Omar, & Waldrip, 2007:1261) argue that assessment is an essential component of teaching. It is defined as "a systematic process for gathering data about student achievement." In a similar context, Stiggins (2005: 5) consolidates the view that classroom assessment is "the process of gathering evidence of student learning to inform instructional decisions." Assessment is generally described as a process for collecting information for educational decision-making Nitko & Brookhart(2011).

Assessment is viewed as a process which requires two main activities; collecting appropriate information, followed by the interpretation of this information in a sense that informs teachers about the extent to which their students have learnt something Harlen (1994). Information gathered in assessment is a "purposeful collection of data, both qualitative and quantitative" Gallagher (1998: 12) to support teachers in taking decisions about their students' learning. Tsushima (2015) supports this trend and confirms that assessment involves gathering information using quantitative and qualitative inquiries, observations, and many other techniques. Airasian (2001:8) added the synthesis phase, defining assessment as "a process of collecting, synthesizing and interpreting information to aid in decision-making". Anderson (2003: 4) introduced a more general definition of assessment. The latter was defined as a process of "gathering

information about students ... to aid teachers in the decision-making process".
According to Gronlund (2009) assessment embodies of a couple of methods and
procedures that are used to determine the level of students' achievement with respect
to the learning objectives. In the same context, Sutton (1991:2) claims that assessment
is the corner stone of promoting pupils' learning abilities. It is a human process
conducted by and with human beings. Through assessment, teachers can define and
describe learners' progress and achievements level of in the learning process.

These definitions entail that the teachers collect facts of learners' progress towards
achieving stated results. Hence, the quality of assessment depends on the information
teachers have gathered about learners' achievement. Lubisi (1997) points to the role of
assessment as a development and monitoring tool through which the efficacy of the
teaching and learning procedures can be assessed. Assessment practices are frequently
intertwined with classroom teaching that requires teachers to make decisions about
their learners' achievements. These assessment practices have a great impact on
figuring out which assessments are to be used, and how, in and after class.

To plan effective instructions-embedded assessment activities and practices, teachers
regularly need to know what are the students' understanding and misunderstandings and
where do the misconceptions lie. Such assessment procedures provide a variety of
different assessment tasks to be considered during the school year and help teachers
formulate the next teaching steps. Teachers devise individual instructions for learners to
ascertain that every learner achieves the planned outcomes. Assessment emphasizes on
the attainment of clearly defined objectives, making them possible to credit learners'
achievements at every level. There is an increasing awareness that assessment quality is
a critical issue in understanding assessment practices and using assessment to inform and
help in the teaching and learning process (Hill & McNamara, 2012; Johnston, 2012;
Maxwell & Cumming, 2011; Broadfoot & Black, 2004).

Assessment, in its broader term, is considered as a comprehensive process of
planning, collecting, analyzing, reporting, and using information obtained from learners
over time. It includes all instructions that teachers use to support students' learning and
to gauge learners' progress. Recently, assessment has been a major discussion topic in
the reform of education to increase student learning and achievement in schools. The
main theme of these discussions is that assessment can be an effective tool to monitor
and shape student learning toward intended learning outcomes Black and Wiliam (1998).

Besides, assessment is perceived as a multifaceted process providing information needed for decision-making at the institutional, programme and classroom levels Evans (2002). This view is supported by Brookhart and Nitko (2007: 4), who define assessment as a process of "obtaining information that is used for making decisions about students, curricula, programs, and schools". Assessment encompasses all practices that teachers and student undertake to gain information, facts and details that can be used to diagnose and adjust both teaching and learning.

The definitions and descriptions presented above highlight assessment as a process with two main characteristics. The first characteristic is that assessment generates information, and the second characteristic is that assessment involves making decisions and judgements based on the gathered information. Accordingly, assessment can be perceived as a means of identifying and describing the learners' knowledge, understandings, abilities, and skills. It is a classroom activity used to promote learning by gathering data and giving feedback Black &William(1998). Assessment is the process of knowing about how learners are learning so as to make the accurate decision in designing and planning lessons. (Wiliam, 2007; Berry, 2008; Miller, Linn and Gronlund, 2009) provide more detailed descriptions of assessment. McMunn (2000) states that assessment includes the ability to interpret information about a learner's performance, which is collected through multiple assessment techniques or practices:

> Assessment is an ongoing process through which teachers and learners interact to promote greater learning .The assessment process involves using a range of strategies to make decisions regarding instruction and gathering information about learner performance or behaviour in order to diagnose learner problems monitor their progress, give feedback for improvement. The classroom assessment process also involves using multiple methods of obtaining learner information through a variety of assessment strategies such as written test, interviews, observation and performance tasks. McMunn (2000:6)

Wiliam (2007) viewed assessment as a process that is interactive in nature and functions "as a bridge between teaching and learning, helping teachers collect evidence about student achievement in order to adjust instruction to better meet student learning needs, in real time". He argues that assessment generates information which helps

teachers reshape their classroom strategies. He emphasizes that assessment can endorse students' learning as well as gauge their learning outcomes. Berry (2008: 6) reported assessment activities as "conscious and systematic activities used by teachers and students" to generate information which is then analyzed, interpreted and deduced to help in taking decisions that strengthen teaching and learning. Assessment as a broad term includes all strategies and procedures that generate information about the state of students' learning. It is a systematic process which:

> "begins with the identification of learning goals, monitors the progress students make toward those goals, and ends with a judgment concerning the extent to which those goals have been attained" (Miller, Linn and Gronlund, 2009: 26).

Assessment serves as primary sources of information for both teachers and learners. For teachers, decisions with regard to different types of teaching materials, learning activities, teaching approaches and types of feedback to be given are driven by information collected through assessment Wiliam (2007). Students, on the other hand, use assessment-generated information to promote their learning, for example, by identifying their areas of strength and weakness, understanding the reasons for the mistakes they make and to be conscious of the learning expectations that need to be achieved Berry (2008). Therefore, assessment is necessary for regulating the quality and effectiveness of both teaching and learning. Morris and Adamson (2010: 127) define assessment as, "those actions we undertake to obtain information about pupils' knowledge, attitudes or skills". They argue that assessment is not just about collecting data, but is also a process used for providing the foundation for decision-making and planning for instruction and learning to assess students' understanding, competencies and skills. It is closely linked to a program's intended learning outcomes.

All the definitions and descriptions presented in the above discussion describe assessment as a process, the main product of which is a collection of information that is essential in guiding the educational decision-making process to improve teaching and learning quality. Assessment is a set of procedures that is intended to improve, describe, and inquire about learning outcomes. It is an educational means used by the teachers to gather and integrate data for the purpose of assisting in the teaching and learning process. It serves a purpose in achieving a sense of accountability, which is

accomplished through the use of tools such as tests, observations, interviews, case studies, and particularly devised tools and measurement procedures that are used according to the aim of each assessment.

In this dissertation, assessment is considered as a means of gathering information that is used to make educational decisions about students, to give feedback to the student learning progress, to gauge instructional efficiency, and curricular appropriateness, and to inform policy.

2.3 Defining classroom assessment in literature

The pervasiveness of assessment in the classroom and its potential to assist learning urged researchers to explore the use and misuse of classroom assessment in order to widen teachers' conception and to show the important role of assessment in classrooms, and the necessity for teachers to become fully aware of its perspective. Teachers are called on to adopt relevant assessment procedures to supervise and assess students' progress in their own classrooms Davison & Leung (2009).

Contemporary literature in education has focused on issues related to classroom assessment. It strives to explain the underpinning factors of assessment strategies. Relevant literature would provide information concerning the setting of goals and criteria, the role of assessment and its impact on quality learning. Wiersma and Jurs (2005: 32) state that reviewing the literature helps a researcher to put the proposed study in proper context and to devise inquiries that have not been already tackled. Besides, it is necessary to understand their teaching practices, particularly how they assess and evaluate student learning outcomes. For this reason, (Reynolds, Livingston, & Willson, 2009; McMillan, 2008; Nitko, 2001) maintain the common argument that classroom assessment plays an important role in schools as teachers spend enough time involved in assessment-related activities they should master some basic assessment competencies.

Buhagiar (2007) states that classroom assessment is a process carried out within the classroom. It comprises knowledge and facts of student learning to promote classroom instruction, and to provide useful feedback to students to enhance learning (Kulm, 1994; Shepard, 1989). The assessment process covers a variety of classroom decision-making in different contexts and acts as a means of carrying information to learners Stiggins & Conklin (1992:179). Assessment provides information that informs teachers

about student learning, to appraise and guide classroom instruction and to offer students feedback that may be used to promote their learning quality In the same sense Brookhart (2008), asserts that through classroom assessment, teachers are able to monitor students' learning growth and grasp of concepts in relation to the learning purposes within the classroom context. Most teachers are facing the challenge of creating and implementing pertinent assessment that provides relevant and useful feedback about students' learning Butler & McMunn (2006).

Research has revealed that teachers spend a significant amount of their time on assessment-based activities (Crooks, 1988; Stiggins & Conklin, 1992; Chappius et al. (2012).They stressed the potential benefits of effective classroom assessment. They claim that it "can motivate the unmotivated, restore the desire to learn, and encourage students to keep on learning, and it can actually create, not simply measure, increased achievement." Accordingly, the teachers' well use of assessment can be considered as a feature of good teaching. Stiggins (2000: 5) asserts that teachers who are assessment literate understand the importance of selecting appropriate assessment methods "to gather dependable information about student achievement" and are able to use this information to support students and urge them to raise their learning achievement.

Figure 2.1 describes the procedures undertaken in classroom assessment.

Figure 2.1 Classroom assessment
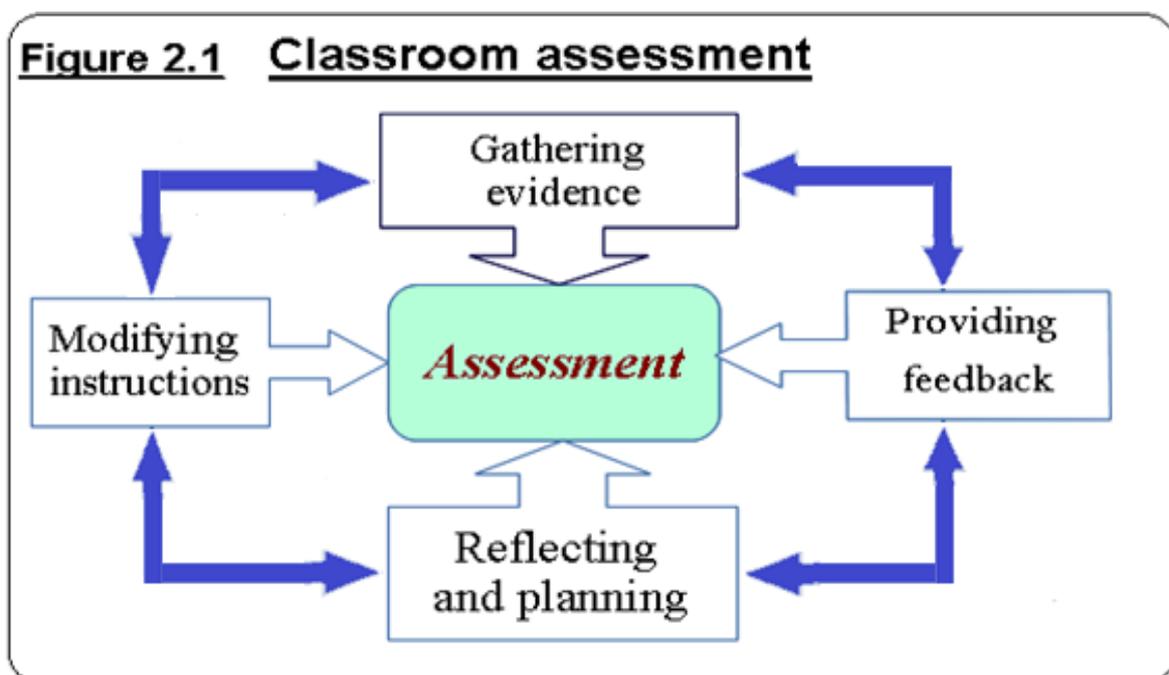
Figure 2.1 schematizes the classroom assessment process which centres on increasing learners' performance. It indicates that assessment comprises four main steps: clarifying learning targets, gathering evidence in a variety of ways, analysing assessment data, and modifying instruction. Thus, teachers tend to use evidence to monitor progress, increase performance, and improve classroom instruction.

The literature indicates that assessment is closely bound to instruction and learning because it improves the quality of teaching and increases the learners' performance. In practice, assessment relies on varying methods to ensure that learners positively demonstrate levels of their learning competencies and what they still fail to master. This can be reached by gathering evidence, designing daily constructive feedback, setting good classroom activities and adjusting the instruction according to learners' needs. The use of a variety of techniques of assessment provides data for instructional improvement and for monitoring learner learning Angelo & Cross (1993). Hence, assessment is expected to play a supportive as well as evaluative role in the teaching and learning process.

The main focus of classroom assessment is to improve instruction and learning at the classroom level. It comprises tools and techniques that should be used in class so that teachers can better understand their learners' needs, wants, and problems. It is a pedagogical work needed to collect information about learners so as to accurately identify their strengths and weaknesses. Pellegrino et. Al. (2001: 25) argued that:

> "Improvements in learning will depend on how well assessment, curriculum, and instruction are aligned and reinforce a common set of learning goals, and on whether instruction shifts in response to the information gained from assessment".

Drawing from the definitions presented in the above review, classroom assessment in this study refers to the assessment process that incorporates assessment techniques and strategies employed to gather information, interpretation and use of the collected information for decision-making within the classroom context, taking into account the need to adapt relevant classroom instructions to learning outcomes.

2.3.1 The distinctive features of classroom assessment practice

Assessment is a pedagogical means, usually considered as a central part of classroom

practice. It includes the instructions, tasks, and questions that stimulate learners to exhibit their acquaintance, understanding, and competencies.Besides, assessment helps gather, interpret and judge evidence about the learning outcomes Earl (2013). It is a key professional skill for teachers who constantly gather and analyse evidence so as to give constructive feedback to learners and adjust the instructions according to their needs. In this sense, teachers should be conscious about the impact that assessment may have on their learners. Therefore, feedback, comments, and grades should be used to enhance the learners' confidence and motivation to move the steps of their learning progress.

The basic distinction between internal and external assessment Wolf (2011) is that the classroom internal assessment involves teachers and learners; whereas, external assessment includes standardized national tests or exams designed by other assessors for the reason of grading and marking learners. Assessment conducts the learning process by telling whether learners achieve the outcomes or not. Assessment in the classroom can help teachers to review their teaching and assessment strategies from time to time. This will be done so that teaching and assessment procedures help learners to achieve the outcomes teachers wish they should achieve in the learning environment. Teachers conduct classroom assessment not only by setting formal tests, but also by making continuous classroom observation and applying instructional activities.

The way in which teachers prefer to assess has a great impact on their learners. Classroom assessment requires teachers to make regular decisions and judgment about the teaching-learning process. It is a process that occurs on ongoing bases. This is why, identification, cognition, observation and interpretation can be seen as key factors that need to be considered when designing and implementing classroom assessment.

According to Spady (1994:9), the philosophy that 'all learners can learn and succeed, but not on the same day in the same way', takes into account differences in learners' learning rates and learning style. This optimistic view open new horizons to learning potential for all learners. They should be given more chance to learn until they achieve the wanted outcomes. Classroom assessment practices provide teachers and learners with insight into learner errors and misconceptions and helps lead the teacher directly to action.

> Classroom assessment informs teachers how effectively they are teaching and learner show effectively they are learning. Through classroom assessment, teachers get continual feedback on whether and how well

learners are learning what teachers hope they are teaching. And learners are required, through a variety of classroom assessment exercises to monitor their learning, to reflect on it, and to take corrective action while there is still time left in the semester Cross (1998:6).

Teachers are supposed to have a precise conception about assessment strategies when planning their classroom activities. Their assessment methods should designate clearly what learners be will be learning. Teachers should plan thoroughly and show clearly what learners will be learning if they have an understanding of what learners have to do. It is important for assessment practices to show clear evidence of what learners are learning. Barksdale-Ladd and Thomas (2000) identified some essential aspects of classroom assessment competencies that teachers should adopt as they assess students. Teachers should provide students with feedback for purposes of improving students' learning, and take assessment as part of a student's work. They have to exercise some flexibility in assessment so as to positively impact the students' learning

Sliwka and Spencer (2005) contended that effective assessment practices help teachers to manage and "think about their assessment tasks during the planning, the implementation and the evaluation stages of their teaching". That is, effective classroom assessment practices go beyond just gathering student performance information. These practices are about teachers using this information to make decisions and to adjust and monitor their own ongoing teaching behaviours Hargreaves et al. (2010).

When assessing learners, teachers use procedures that seek more than a reproduction of content. To ensure validity when assessing learners, pertinent strategies to measure specific outcomes should be followed. Different assessment strategies could be incorporated and implemented so that knowledge, values, skills, attitudes, and learning activities can be assessed. Biggs (1999) claims that important functions can be pointed out for classroom assessment: One is to show whether or not the learning has been successful, and the other one is to interpret the expectations of the teachers from the students Dunn et al. (2004).

Because learners differ, teachers should follow different teaching and assessment strategies to accommodate all the learners in the teaching and learning situation. Teachers should use a range of teaching skills and assessment procedures to engage multiple minds in their classroom practices. Teachers are expected to have clear insights of their learners' capabilities to define whether or not learners are meeting

standards. With little or no teacher education in assessment, the ability to determine learner achievement becomes a difficult task for the teacher Stiggins (1992).

2.4 Forms of classroom assessments

The term assessment is commonly associated with all practices and procedures teachers apply to support students' learning and to gauge their progress. However, these practices bring advantages and limitations about assessment issues and concerns. It can be asserted that no single method of assessment can satisfy all conceivable purposes and reactions. William & Thompson (2007) state that teachers choose assessment forms and tasks but their implementation depends on the purpose of assessment. Thus, the interconnection between assessment forms fairly impact the students' learning.

Assessment activities are frequently intertwined with classroom teaching that requires teachers to make decisions about their learners' achievements. These assessment practices have a great impact on figuring out which assessments are to be used, and how, in and after class. According to Rea-Dickins (2001) and Hill and McNamara (2011), planning assessment includes three basic elements: (1) identifying the assessment purpose; (2) choosing a focus for the assessment; and (3) selecting the assessment activities with reference to curriculum specific objectives.

Assessment has a deep impact on what and how students study. This impact can be either positive or negative following teachers' conceptions about classroom assessment. Hence, effective use of appropriate assessments in primary school helps to explore students' ideas and monitor their learning process. Burns (2005: 31) posits that: "The insights we gain by making assessment a regular part of instruction enable us to meet the needs of the students who are eager for more challenges and to provide intervention for those who are struggling." It facilitates students' learning and improving instruction, and can take a variety of forms. Classroom assessment is generally classified into three types: diagnostic, formative, and summative. Figure 2.2 Shows the relationship between diagnostic, formative, and summative assessments (redrawn from Crisp, 2009). This figure presents practical procedures related to setting up a classroom assessment environment that will help to put the learners on a path to school success which incites them to master the foundational skills to meet the Learning standards. It considers the assessment and grading practices for effective learning suggested by Jay McTighe and Ken O'Connor (2009).

Figure 2.2 the relationship between diagnostic, formative, and summative assessments
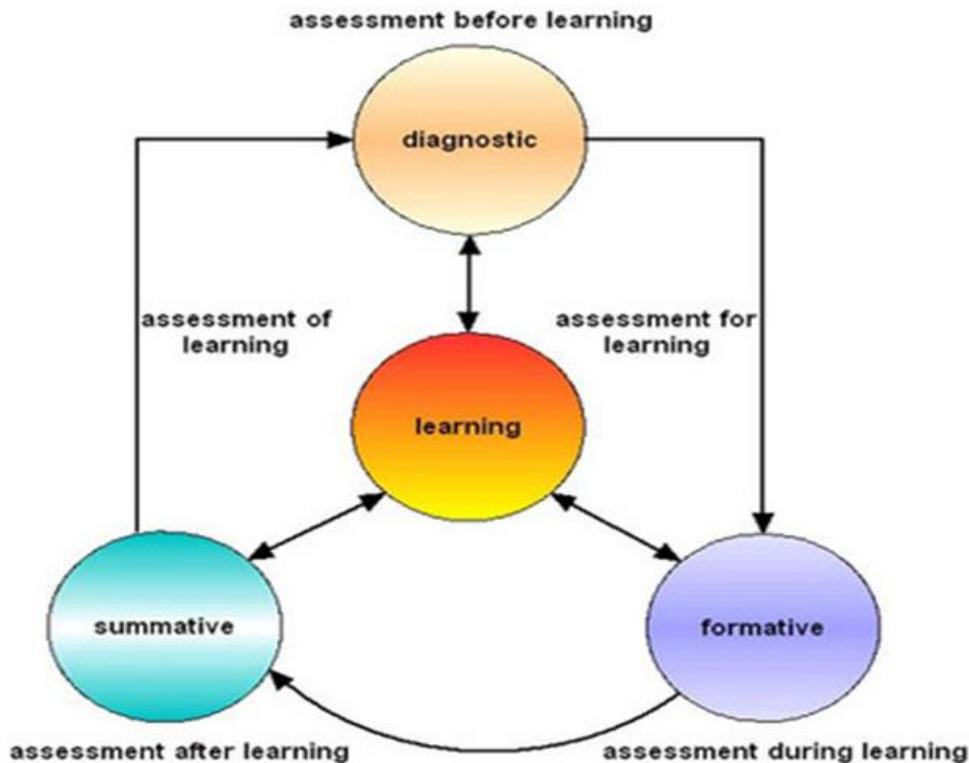
Due to its critical position in reporting and facilitating student learning, many forms of assessment have been developed and researched, and various terms are used to denote its different orientations or functions. The assessment specialists classify classroom assessment into two broad types: formative and summative (Bloom, Hastings, & Madaus, 1971; Harlen & James, 1997; Harlen, 2005a; Wiliam, 2010; Brookhart, 2011b; Chappuis et al., 2012; McMillan, 2014). Assessment used for a formative purpose is typically associated with enhancing instruction and improving learning, whereas a summative purpose is relevant to summing up learning achievements to be communicated to administrators and/or other relevant stakeholders.

Others (Gipps, 1994; Black et al., 2003) distinguishes between two categories of assessment: assessment for learning (formative) and assessment of learning (summative) Scriven (1967:41) in order to recognize and identify the different functions of evaluation. Hence, assessment is supposed to fulfil two different purposes: 1) informative, to improve instruction, and, 2) summative to measure students' achievement. (Scriven, 1967; Bloom, 1969) introduced the terms of "formative" and "summative" assessment as two distinct forms of assessment. Boud (2000) argues that assessment has a multi-faceted duty including the assessment of learning(AoL) and assessment for learning(AfL), focusing

on immediate tasks and on the importance learning outcomes. Formative assessment is introduced as a continuing process of assessing students' learning outcomes, providing feedback to adapt instructions and learning. Meanwhile, summative assessment, is restricted to administrative decisions and give grades to the tests. It serves the goals of accountability, of ranking, and of approving competence Black et al. (2003).

Contemporary literature distinguishes between testing and assessment Clapham (2000). Testing is described as a systematic procedure of collecting a sample of a learner's behaviours at one specific point Gottlieb (2006). It gauges what a learner has mastered during some time. In contrast, assessment involves much more than testing. It is a continuing process that incorporates many formal and informal activities devised to monitor and improve teaching and learning quality.

Many types of assessments may occur in different times, at different levels, in different forms to accomplish multiple purposes. The types of assessment below are classified as pairs of opposites, but in practice, most teachers use some form of both types, as well as hybrid variants in between Wragg (2003). The issues described under each of the headings are closely linked one with another, rather than separated:

1. Summative assessment vs. Formative assessment
2. Assessment of learning vs. assessment for learning
3. Assessment vs. testing and evaluation
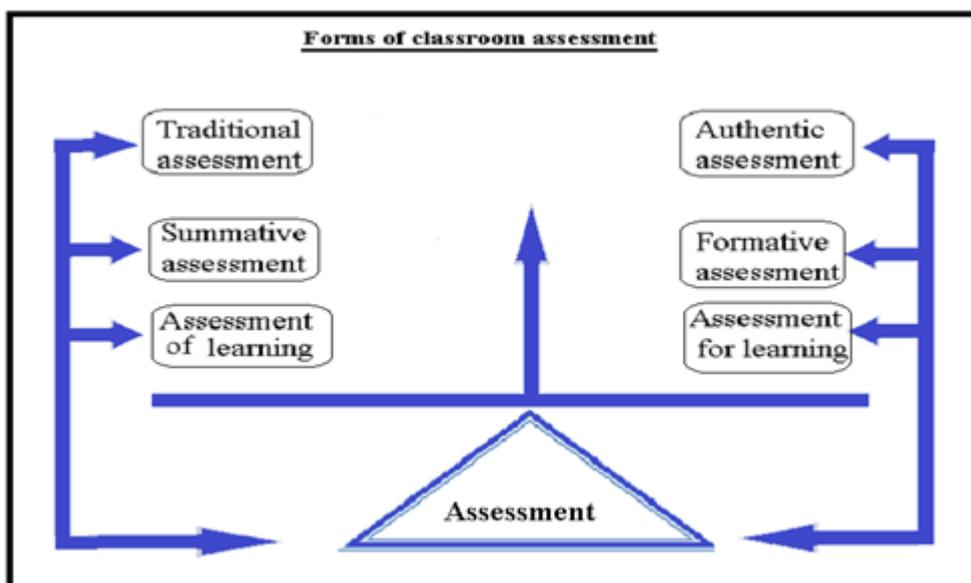
Figure 2.3 describes the common types of classroom assessment and highlights the significance of the complex interconnections between different facets of assessment.

2.4.1 Summative assessment

Summative assessments are used regularly at a given point in time to decide what learners know, and what they fail to know during a specific period of time. It has been considered as a means of verifying learners' levels of accuracy and occurs after learning has taken place Rudder & Schafer (2002). The intended purpose is to establish a judgment about the efficacy of a course or an instruction and to indicate what students know and understand at a limited range of time, usually carried out after a course, a project or at the end of a definite period of learning. Harlen (2008: 139) argues that in summative assessment 'the concern is to judge achievement against broader indicators, such as level descriptors or grade level criteria'.

Butt (2010) attempts to understand whether the goal of assessment should only be to obtain a set of grades, to summarize what each student has performed, or is it also a means to empower students to take their next step with certainty? Should assessment focus on the summative forms at the expense of the formative forms, or should a more proper approach be requested? The judgment may be used to make decisions that improve classroom instructions and teaching adjustment. Black et. al. (2003: 2) denote that summative assessment incorporates: "Tests that are frequent, isolated from learning, carried out on special occasions with formal rituals and often conducted by methods over which individual teachers have little or no control". This state of affairs generated many arguments regarding the ways teachers manage students' assessment practices.

Summative assessment occurs at the end of an instructional unit with a purpose to put a letter or number grade on a student's learning with respect to their outcomes in association with definite standards. Data drawn from summative tests can be used by schools to determine where their students rank against their peers, to discover weaknesses in the school, and to choose instructions which support teaching. That is, the information gathered through assessment is used summatively for documenting how much learning has occurred at a point in time for the purpose of providing grades and marks (Brindley, 2001; Crooks, 2010). This view considers that there are appropriate ways of evaluating a student's competencies using summative assessment, which is required to understanding to what extent they have understood the material that is laid out in the curriculum. This type of assessment is typically graded and can take the form of tests or exams. Muñoz & Guskey (2015) claim that teachers commonly consider assessment as separate from their daily teaching regime, serving the purpose of assigning grades.

Summative assessment provides evidence of what learners acquire by the end of an instructional unit so that to make clear judgments about the learners' extent of success and the points of failure. Besides, it marks the important stages of learners' development and is formally recorded in the form of scores and marks. It is planned in advance so that learners have enough time to prepare themselves and gain confidence in whatever area they are assessed for the sake of knowing the students' level of acquiring the target skills as it gives a clear picture of learners' performance.

Summative assessments are employed to determine if a student has succeeded or failed a class. Anderson (2003) claims traditionally the primary role of student assessment has been to provide students with a grade. Airasian, Engemann, and Gallagher (2007) claim summative assessments are usually designed to be reached as the outcome of a classroom process, unit, or course. They are exemplified by end of unit tests, projects, term papers, and final tests. Butt (2010: 53) writes: "Good summative testing is important to our educational system. Our intention should be to use well-designed tests - which are valid, reliable, and fit for purpose - to enable an accurate assessment of student attainment".

2.4.1.1 Shortcomings of summative assessment

With the world wide waves of educational reforms, the traditional type tests gradually lost their credibility on the basis that even the best known of these high stakes tests, including public examinations, do not determine the degree of the intended accurately assessing levels of students' attainment Butt (2010). Summative assessment is criticized on the ground that it would not give information that is necessary for assisting and guiding pupils throughout the learning process. In contrast, learner centred process and strategy driven teaching became popular. This assessment model looks for a more comprehensive qualitative account of learner's ability through multiple measures in multiple occasions.

Ickes-Dunbar (2005) claims standardized testing can have a covert agenda of blaming students, teachers, and schools for failure. This can demoralize students, teachers and parents. Kohn (2000) feels standardized tests are not totally objective; there is too much subjectivity. He adds test anxiety may generate less valid scores. As a test increases in value, anxiety also increases, and so the test may not give a real picture of what the student really knows. Some students do not take these tests seriously, especially if they do not impact their mark in a particular course. These issues discredit the effectiveness of test results. Amrien and Berliner (2003) argue that there

is very little evidence to support the idea that high stakes exams actually increase student achievement.

Stiggings (2001) asserts that the public opinion, policymakers and school leaders have neglected classroom assessments. This disregard may conduct to low assessment literacy for teachers. Ultimately this has produced an inaccurate assessment of achievement and ineffective feedback for students. Such deficiency urged practitioners to search how teachers view student assessment practices. Ohlsen (2007:4) stated that "policy makers and the public support the use of high-stakes testing as the measure of student and school achievement despite serious reservations on the part of the educational classroom assessment". One of the controversial issues is that teachers take on assessment methods that were used on them as students. Stiggins (2001) incited teachers to refrain from the traditional assessment practices and to pay special attention to the kinds of assessment strategies to impact on the relevance, values and quality of classroom assessment methods, and adapt them to help learners meet their educational potentials.

(Kohn, 2000) claims public standardized tests do not usually provide students with enough opportunities to display higher level thinking. They ignore the process and focus on factual information that kids must store into their short-term memory. Teachers are considered as curriculum-dependent professionals who strive to cover scripted syllabus dictated by the school board in an attempt to raise test scores.

Winchester (2006) Raises another problem with standardized tests is that the results are often returned to the teacher after the student has moved on and so cannot be applied to assist students who undergone the test. According to Kohn (2000) tests compare kids to one another, which contribute to the pathological competiveness of society and leads to us seeing others as obstacles to our success. Schooling is about trumping everyone else rather than about real learning, and even worse, people who do poorly feel they cannot learn. Glaser (1990) asserts assessment must be used to support learning rather than just to indicate current and past achievement. Assessments must focus on the learners' ability to use knowledge and skills learned. It is therefore important to interrogate the rationale of assessment.

The pressure to do better on tests may lead to a lower quality of education. It constricts the ability of teachers to inspire and engage students in real learning. The arguments against summative assessment in the form of high-stakes exams certainly seem to be valid, yet they still persist as one of the most commonly accepted kinds of

assessment. Summative assessments cannot diagnose learner's needs as learning happens, and provide instant feedback that is needed to make significant instructional decision Angelo & Cross (1993).This can be effectively done through assessment for learning which will be discussed in the next paragraphs.

2.4.2 Formative assessment

Formative assessment is generally carried out throughout a course or project. It aims at helping students develop their learning capabilities in an educational setting. Formative assessment provides continuous feedback on students' learning progress and would not compulsory be used for grading purposes. It may take different forms namely diagnostic assessment, standardized tests, quizzes, oral question, or draft work. Formative assessments are carried out simultaneously with instructions. It is integrated into teaching activities. The formative assessments aim to see if the students perceive the intended instructions and prompts them to reflect on what has been got and what still needs to be done. Popham (2008: 6) posits that: "Formative assessment is a planned process in which assessment-elicited evidence of students' status is used by teachers to adjust their ongoing instructional procedures or by students to adjust their current learning tactics." Antoniou & James (2014) states that formative assessment is a suitable tool used to guide students and keep them on track to master the subject skills. It raises the students' awareness and supplies them with information that satisfy their needs to promote learning and improve performance to reach their goals.

Formative assessment starts from the expectations of what students are supposed to learn and what learning they are expected to exhibit during the assessment stage. Wei (2011) claims teachers should identify deficiencies without being too critical. Appropriate and instant feedback about every little progress can help students experience the comfort of success and motivate them to better improve their skills. Garrison and Ehringhaus (2014) assert that formative assessment makes use of sound instructional strategies to collect information on student learning. Jenkins (2010: 567) writes: "As well intentioned as formative assessment is, the effectiveness of it is reduced if students are not appropriately informed of what they are expected to demonstrate a knowledge of".

Practitioners go on to say, formative assessment facilitates improved instructional practices, identifies gaps in the curriculum and contributes to increased learner

performance. Black & William (1998:10), define formative assessment as, "All those activities undertaken by the teacher, and or their learners which provide information to be used as feedback to modify teaching and learning activities in which they are gauged." Formative assessment is a daily classroom process which requires skilful teachers who can better obtain and interpret information to improve both teaching and learning procedures. It is distinguished by its progressive nature as it can happen at any period of time and may take different forms: planned or unplanned, proactive or reactive, formal or informal.

Formative assessment happens when teachers supply adequate instructions back to learners in a sense that empower the learner to engage in self-reflective processes which may open new horizons for better quality learning. Formative tests are used as an ongoing diagnostic tool that teachers employ to modify and adjust learning practices to determine the needs and progress of learners. Sadler (1989) claims that formative assessment is interested in the way judgment about the quality of learner's answer can be used to mould and improve learning competencies. Black et al. (2003:2) also contend that classroom based formative assessment:

> "…can occur many times in every lesson .It involves several different methods for encouraging learners to express what they are thinking and several ways of acting on such evidence. It has to be within the control of the individual teacher and for this reason; change in formative assessment is an integral and intimate part of the teacher's daily work."

In order for an assessment to be formative it should supply feedback on the gap between what the student has displayed and what is expected, and it should give instructions on how to bridge this gap. Nyogi (1995) claims teachers communicating with students will reveal their deficiencies and strengths in a way that seems difficult to do through standardized testing alone. Heritage (2010) states that formative assessment utilizes data to accurately prescribe and gauge students' instructional level of learning and to adjust lessons to support students with achieving an identified learning goal. Besides, formative assessment engages both teachers and students in learning goal development, progress monitoring, and preparation of future learning steps.

Research showed that learners differ in ability, attitudes, learning strategies, and needs Gregory and Chapman (2012). Accordingly, instructions should be adjusted according to to the individual capabilities. Lessons associated with formative assessment must be flexible; far from the one size fits all philosophy (Tanner and Jones, 2003). The

aim of differentiating instruction is to maximize students' learning based on their assessment data and assisting them to reach their goals Gentry& Sallie, et al. (2013). Following this line of thought Popham (2008) argues that formative assessment provides teachers with needed evidence to make instructional adjustments by differentiating strategies and diversifying learning activities to support students master learning of concepts. This means finding interesting, engaging, and suitable ways of teaching the curriculum Gregory and Chapman (2012) to remediate deficiencies recognized by the formative assessment process. Diagnostic assessment is a widespread form of formative assessment. Diagnostic assessment gauges students' current knowledge and skills for the purpose of identifying a suitable program of learning Ronan (2015).

These definitions broadly highlight the nature of formative assessment as any kind of assessment in which teachers or student uses the outcome to tailor the teaching and learning to the student's requirements. Accordingly, formative assessment is a continuous, interactive, and dynamic practices applied in ways that support students make a real progress in their learning. It is also an ongoing generative process which is designed to support learners move the next learning stages with confidence. This process involves various strategies, namely sharing the learning goals and the assessment criteria with learners.

It is important that throughout the unit teachers practice formative assessment so that they are constantly considering the progress of their students, which I consider to be the most relevant method of assessing students' competencies. Teachers plan for formative assessment and schedule it along the day. Thus, teachers are constantly using formative assessment by providing students with optimal learning opportunities performed in many ways. Observations, checklists, discussions, and other methods of formative assessment are compulsory for teachers to assess a student's progress and to provide feedback for the student. Accordingly, I believe that smart teachers use formative assessment effectively as the main source of assessing students' progress and achievement. For the formative assessment process to work properly teachers must look at the assessment evidence and make changes where needed and provide adequate feedback so that students can monitor and modify their learning. This process is also often a better indication of what the student actually knows, compared to a summative assignment, which could create anxiety and therefore poor learned performance.

Educationists stated that students are expected to perform better on an assignment that they are completing to assess their own knowledge of a given subject area than when they knew they are being tested and graded by a test or an exam. With the use of formative assessment, students often do not realize that they are being assessed, which reduces their anxiety and provides a more accurate measure of the learned outcomes. Figure 2.4 below describes the basic steps to be undertaken in formative assessment. It shows the four basic components required for the success of formative assessment in the classroom. It outlines the factors which may create brainstorm atmosphere and help to transform all learners into active participants in constructing their own education.
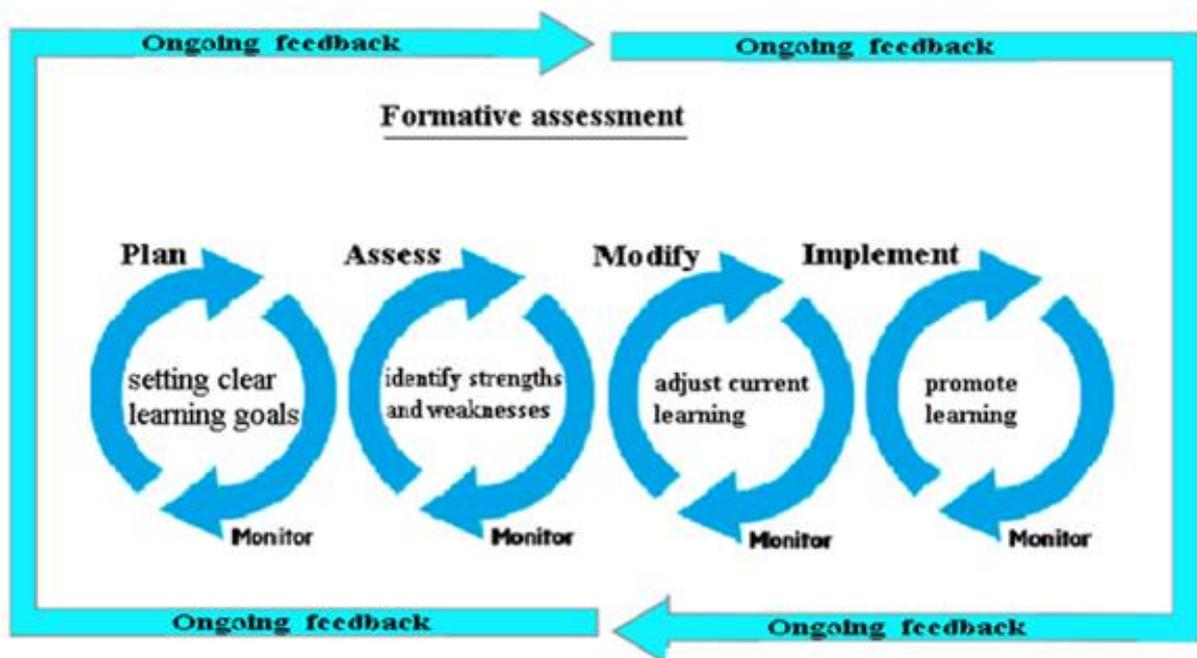
2.4.2.1Advantages of formative assessment

Formative assessment is reported to be advantageous because students and teachers know what they are supposed to achieve during and by the end of the learning stage. This requires the teacher setting clear learning goals for individual students as well as the class and strive that these classroom goals have been achieved (Butler & McMunn, 2006; Gardner, 2012). The teacher sets these goals by reflecting on the students' level of performance who are in the classroom and reviewing the required set of curriculum texts and their presumed grade standards. The teachers' ability to personalize the teaching content in the context of the students' needs and the requirements of the overall curriculum is an important part of the classroom assessment instruction goals that lead learners to successfully achieve better learning outcomes.

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Mertler (2009) argue that assessment provide evidence about students' learning on different types of performance tasks and even in different settings. It also intend to measure the students' ability to think critically, to cooperate, to solve problems, to research, to communicate and to gauge the students' level of competencies Earl (2012). Hence, teachers tend to optimize their teaching strategies by identifying the real needs of their learners. More importantly, assessment depends on teachers' competence to analyse data and use information to formulate inferences and give adequate corrections. Phelps (2010:132) notes: "By applying strategies of formative assessment, students not only continually improve their learning, but they also become better prepared for summative tests."

Black and Wiliam (1998a) assumed that student learning reacted most positively to instant formative assessment. They held that students tend to maximize their performance and depict their learning in terms of what is needed for them to perform better. Accordingly, most of the teacher-made assessments strategies should be tailored according to daily instructional needs. These procedures are supposed to provide immediate feedback about learners' mastery of specific skills.

Due to its significant roles in the learning process, teachers use a wide variety of assessment activities which aim at gauging what learners know and can do to reach appropriate learning standards. It is known that assessment cannot be regarded only as a process of evaluating, placing, and grading learners, but also as a broad process that assumes various forms and roles to reach definite goals. It is perceived as a set of procedures that offer teachers copious opportunities to make judgments about their learners' abilities. Angelo and Cross (1993) highlighted the following advantages of formative assessment:

• Allows for the identification of conceptual misunderstandings and mistakes.
• Promotes effective thinking of classroom instructions.
• Encourages ongoing feedback that enhances learning.
• Prevents motivation for learner cheating.

The role of assessment in stimulating the learning is undeniable. Assessment in education involves the many processes and strategies that help both teachers and learners achieve successfully the educational objectives. It enhances learners' motivation, encourages self-esteem, and develops students' learning competencies. More importantly, it defines the learners' needs and attitudes by identifying their fields of strengths and weaknesses. Thus, teachers can give constructive feedback rather than giving only ranks and grades.

2.4.3 Formative versus summative assessment

   The term assessment has incorporated a diversity of meanings within the education sphere. The term can denote the process of grading student assignments, to nationwide standardized testing imposed on schools as part of external accountability, or to any assessment methods adopted to gather data on the students' achievements, success of a program, course, or school curriculum. These various practices have urged researchers to lead deep studies about the notions of assessment in educational institutions. Two main views advocate two forms of assessment: formative and summative which differ in process and purpose.

   Educators are constantly faced with opinions surrounding assessment issues. Recently, educational assessment has seen a deep paradigm shift. Assessment and student learning are considered a practical tool for underpinning students' learning (Davison and Leung, 2009; Stiggins, 2008). This change in assessment paradigm is due to some educational reform undertaken in various settings around the world to improve educational planning and practices (Black and Wiliam, 1998; McMillan, 2003; Alkharusi, 2007; Chow and Leung, 2011; Darling-Hammond, L. and A. Lieberman (2013). There is a shift from the traditional testing method where instructions and assessment are perceived as independent from each other, towards an assessment based on both formal and informal instructions and   aligned with classroom instructions to increase students' learning quality (Black et al., 2003; Davison & Leung, 2009).

   Brill and Twist (2013) claim that teachers should be trained to secure significant understanding of assessment, particularly in a time of reform in assessment policy. There is mounting evidence that some teachers are misunderstanding formative assessment to mean frequent testing, manifesting a lack of comprehension of the aims of classroom assessment. Ussher and Earl (2010) contend that classifying assessments as either formative or summative has created some misconceptions about what they really measure and how they should be implemented, and generated uncertainty in teachers' conception.

   Black & William (2005: 9) write: "Assessment in education must, first, and foremost, serve the purpose of supporting learning". Harlen (2005) states that the terms summative and formative assessments may be considered different kinds of assessment associated to different means of gathering data when in fact they simply imply that the data is being used differently. Jenkins (2010) stresses that formative and summative assessments should not be

perceived as a dichotomy: in reality, the distinction between the two is less clear. Even though there is some misunderstanding between the terms formative and summative, a balanced assessment system should include both as a means to gather information. Depending exhaustively on one or the other may not lead to a clear picture of student achievement Garrison and Ehringhaus (2007). Taras (2009) claims that there is an inseparable link between summative and formative assessment; summative assessment is the starting point for any assessment.

It is important to note that assessment may inherently be a formative or summative product, it is its use by teachers that really defines its role. If the assessment is used only to guide instruction, it is formative; if it is used only to judge instruction, it is summative; if it is used for both processes, it is a formative/summative assessment. Crooks (2001) states that summative assessment is designed to review learners' achievements at a particular time, whereas formative assessment is meant to promote further improvement.

Formative assessment is introduced as a continuing process of assessing students' learning outcomes, providing feedback to adapt instructions and learning. The information collected through the assessment is used formatively to support the teaching and learning process which includes providing learners with help and regular feedback to support their strengths and mitigate their weaknesses (Hill, 2000). In contrast, summative assessment is restricted to administrative decisions and give grades to the tests. It serves the goals of accountability, of ranking, and of approving competence Black et al. (2003). Also, Harlen (2006) explains that using the terms 'formative assessment' and 'summative assessment' can be confusing as it indicates that these are different types of assessment or are correlated with different strategies of securing information. Thus, it is for this reason that the terms 'assessment for learning' and 'assessment of learning' are sometimes used instead. In this study, when summative and formative assessments are used, I refer to the purposes for assessment – so almost identical with assessment of/for learning. Table 2.1 summarizes the characteristics of both summative and formative assessment.

Table 2.1	Formative vs. summative assessment		
	Formative	**Summative**	**Similarities**
Purposes	- Guide the teacher in planning and improving instructions	- Let teachers and students to know the level of accomplishment attained	- Both are ways of assessment

	- help teachers modify future lesson based on learners' needs - Help students improve learning	- scores used for accountability	-Assist in future lesson planning
When	- Before and during instruction - integrated into teaching/learning	- End of instruction - end of unit or chapter = tests - end of term/semester = exams	
Activities Practices	Classwork Homework Observation	- State / district formal tests	

2.4.4 Assessment of learning vs. assessment for learning

Summative and formative assessment are viewed in the educational field as AoL and AfL respectively. The former tends to measure summatively the learning outcomes, at the end of a class, course, semester or academic year and report those results to students, parents and administrators. The latter is usually formative in nature. It is applied by teachers to ponder over teaching approaches and the next steps to be taken for individual learners and the class Earl (2013).

Given the important role of assessment in increasing standards of achievement and to sustain student learning, AfL has been inserted in contrast to AoL in classrooms (Gipps, 1994; Black and Wiliam, 1998; Black et al., 2003; Stiggins, 2005, 2008; Wiliam and Thompson, 2007). Hence, recent studies showed mounting evidence for the good impact of formative assessment on children's learning. Hattie (2006), Gardner et al. (2006) and Berry (2008) have raised the status of AfL, whilst evidence confirming the harmful effects of high stakes summative testing (Newton, 2009) and its perverting effects on the taught curriculum. Wiliam (2003) has incited some teachers to view AfL and AoL as the 'good' and 'bad' sides of assessment respectively Harlen (2013). However, in practice it is sometimes difficult to make sharp distinctions between AfL and AoL Davies et al. (2012).

Harlen (2007) and Hodgson and Pyle(2010) claims that AfL and AoL differ only in

purpose and degree of formality, which suggests that rather than a dichotomy, it may be more useful to consider these assessment processes as dimensions (Rowntree, 1977; Mc Alpine 2002; Harlen, 2013) or a continuum (Wiliam and Black, 1996). Harlen (2013) declares that any assessment case can be used for formative or summative purposes, thus it is the purpose rather than the strategy which decides the assessment name.

AfL is constituted of two subcategories: diagnostic assessment and formative assessment. Both of these assessment strategies are used by teachers to adjust their teaching strategies and instruction to fit the students' needs. It is important to conduct a diagnostic assessment at the start of a unit so the teacher can form an idea of what knowledge each student has of the given unit so that they can prepare their lessons and instruction to satisfy the individual needs of each student. This provides the teacher with adequate knowledge of the class levels in terms of students who have minimal knowledge, some knowledge, or lots of knowledge of the subject area. Knowing this, we can create lessons that focus on the key concepts for students who need to learn the foundations of a particular subject and provide enrichment for students who require expansion of the unit material.

Chappuis et al. (2012) and McMillan (2014) argue that AfL is typically conducted to plan future instruction, diagnose students' needs, and offer accurate feedback in improving their work quality. In contrast, AoL is undertaken to gather evidence to determine students' achievements/grades at a single point in time or to make decision about programmes. Thus, AfL is a term for formative assessment while assessment AoL is a term for summative assessment. Table 2.1 summarises the main purposes for carrying classroom-based assessment.

2.4.5 Assessment VS testing / Evaluation

Generally, assessment is considered as a synonymous word for testing Torrance & Pryor (2001). Some teachers consider assessment to mean measurement and evaluation, and yet the terms are different as will be exposed. Woods (2015) asserts that a test is a specific form of assessment but not all assessments are tests. In the way, Linn and Miller (2005:26) maintain that a test is "an instrument for measuring a sample of behaviour." Tests usually denote one item of classroom assessment information, devised to measure skills, performance, capabilities intelligence, or aptitude of an individual or group McMunn (2011). Tests are devised for special objectives, such as

individual diagnostic strategies, summative assessment or individual achievement.

Evaluation is chiefly involved in making judgments about the quality of the assessment results. The decision to pass or fail and grade assigning to learner learning results is a function of measurement and evaluation. Linn and Miller (2005:26) claims that it is: "the process of obtaining a numerical description of the degree to which an individual possesses a certain trait." Black and William (1998) assert that classroom evaluation practices usually support surface and rote learning, focusing on recall of separate details, generally matters of knowledge which students soon misremember. They add that there is a tendency to use a normative rather than a criterion approach, which emphasizes competition between pupils rather than personal improvement of each. Such instructional practices generate bad feedback effect in a sense that it teaches the weaker pupils that they lack ability, so that they are de-motivated and lose confidence in their own capacity to learn.

Literature associated with classroom assessment and learning outcomes have always been a debated issue between traditional evaluation, sometimes called test, AoL and summative assessment, and authentic assessment usually known as formative assessment or AfL. The advocate of traditional evaluation started from the assumption that tests' role is confined to improve the students' achievement and instructional practices. Such view is based on fair grading practices, and favour the cognitive side of instruction, i.e. the skills and knowledge that students are expected to develop within a short period of time (Segers & Dochy, 2001; Linn, Baker, & Dunbar, 1991).

Supporters of authentic assessment deeply criticised the traditional forms of assessment because they do not match the emerging content standards. Alternative assessments are required to guide students and support them to exert what they know and can do in real-life situations. They argued that authentic assessments are the only ones that can measure students' skills rather than traditional forms of assessments (O'Day & Smith, 1993; Reynolds, Livingston, & Willson, 2009).

In the field of education, assessment and evaluation are commonly practised interchangeablyCooper (1999). Evaluation is largely concerned with making judgments about the quality of assessment results. It is seen as a process of using methods and measures to judge the learners' achievement for the purpose of grading and reporting. Evaluation in education is a means of collecting, analyzing and interpreting data about instruction and learning in order to take adequate decisions that support students' performance and the advancement of educational programs(Rea-Dickens and Germanie,

1993; O'Mally and Valdez-Pierce, 1996; Genesee and Upshur, 1996; Praslova, 2010).

Assessment is the procedure of classroom techniques and methods that provide information on how learners respond to particular teaching approaches. Whereas, Evaluation is a summative result used for judging and appraising. It occurs through quizzes, exams, papers or tests. In brief, assessment is used to serve the learning while evaluation is used to assess it.

2.5 Assessment is central to teaching and learning

Assessment is a formal process that entails deliberate efforts to get evidence about learners' abilities and weaknesses. This process includes a range of methods and has the vital goal of getting valid and reliable information which is the basis on which teachers can make their decisions. Teachers' involvement in classroom assessment practices is associated with different domains of decision making, namely on selecting methods and technics, when assessing students. Teachers may make a decision to use assessment information to diagnose students' learning problems, guide and improve future instructional methods, or just for summative evaluation to determine students' final grades at the end of the term (Gronlund & Waugh, 2009; McMillan, 2005; Popham, 2010; Reynolds, Livingston, & Willson, 2009; Grant, L., & Gareis, C., 2015).

Research asserted that making the right decisions can lead to success or failure for our students. Airasian (1994) devised a list of decisions that teachers should adopt and adapt in their classroom process. Airasian urged teachers to base their decisions on the following: What to test, how much emphasis to give to each instructional objective, what type of assessment tasks, (tests, projects, assignments) to use, how much time to allocate for each assessment task, how to prepare students for the assessments, and whether or not to use tests from textbooks, or construct their own tests. Unfortunately, giving quality assessment to students is a difficult segment of classroom instruction such that teachers often avoid this aspect of assessment strategies Hewson & Little (1998). In order to establish an effective feedback to students, it should be prompt, closely follow the event, contain encouragement, and be specific about student's achievements. It should focus on specific aspect at a time. It should be clear, and focus on the work done by the student, and not on the student (Crooks, 1988; Gibbs & Simpson, 2004; Rogers, 2001).

Zeidner (1987:352) claimed that important factors must take into consideration when planning tests include, subject matter domain assessed, test constructor or user such as (ease of test preparation, ease of scoring test, etc.), and various extraneous factors for instance (guessing, copying, bluffing) possibly affecting the psychometric properties of test scores. Teachers' involvement in the curricular unit in which the classroom assessments will be embedded is very subtle. They must decide the best way to build the assessment goals and the critical points where the assessments should be embedded. The key role of the teacher is to design and deliver effective and efficient guidelines defining the assessment development and to develop the assessment practices. Stiggins (1994) added practical types of test planning activities that teachers can use to promote their assessment procedures. Stiggins claimed that teachers can construct a two-way designed method that harmonises the objectives teachers taught with the target at which they expect students to perform. Teachers are supposed to rely on the instructional objectives to guide their test construction process. They can match the instructional objectives with assessment tasks (tests, assignments, projects).

The most important test designing process that teachers must perceive is the significance of appropriate learning objectives and outcomes, which precisely identify the students' capacities at the end of a course, a unit, a topic, a term, or a class activity. All factors involved in the success of the educational process including instructional methods and assessment procedures are driven by learning objectives. Teachers must appeal their smartness to construct specific, measurable, attainable, realistic, and student-centered instructional objectives (Airasian, 1994; Gronlund & Waugh, 2009; McMillan, 2005; Popham, 2008; Reynolds, Livingston, & Willson, 2009).

2.6 Dimensions of classroom assessment

Rowntree (1977) proposed a framework which covers the overall scope of assessment that can be viewed within five main dimensions:

1- Why assess? Determining why assessment is to be implemented and what results the assessment is aimed to produce.

2-What to assess? Deciding, realizing or otherwise coming to an awareness of what one is looking for in people being assessed.

3-How to assess? Selecting from among available means, those assessments we regard as being most truthful and fair for various sorts of valued knowledge.

4- How to interpret? Making sense of the outcomes gleaned from observations or measurement or impressions we collect through whatever means we use; explaining, appreciating, and attaching meaning to the raw 'events' of assessments.

5- How to respond? Finding appropriate ways of expressing our response to whatever has been assessed and communicating it to those concerned Rowntree (1977: 11)

These dimensions make an important contribution to the framework in which classroom assessment practices should be viewed. Their implications are a clear indication that classroom assessments play an ultimate role in the teaching and learning process. Teachers have a wide range of classroom assessment methods to employ. Their implications provide teachers with access to powerful assessment of students' achievements.

Through classroom assessments, teachers collect various forms of information in order to make informed, consistent, and appropriate judgments regarding students' learning outcomes. Teachers are the main decision makers on the forms of assessment tasks employed in schools (Romanoski, Cavanagh, Waldrip, Dorman, & Fisher, 2005). Pollard & Bourne (1994:220) summarize the principles of assessment and suggest that:

1- Assessment must be used as a continuous part of the teaching and learning process, involving pupils, wherever possible as well as teachers in identifying next steps.

2- Assessment for any purpose should serve the aim of improving students' learning by adopting a positive force on the curriculum at all levels.

3- Assessment must provide an effective means of communication with parents and other partners in the learning enterprise in a way which helps them support pupils' learning.

4-The selection of several assessment methods must be determined on the basis of the purpose for which the assessment is being undertaken. This may well mean employing different techniques for different assessment purposes.

5-Assessment must be used fairly as part of information gathering for judging the effectiveness of schools. This means taking into account contextual factors which, as well as the quality of teaching, affect the achievement of pupils.

Teachers focus on classroom assessment environments to examine the relationship between learning and skills' development by choosing smart feedback. McMillan (2008: 5) found that "Assessment of students at classroom level is very critical because effective decision making is based to some extent on the ability of teachers to understand their students and to match actions with accurate assessments."

2.7 Student learning Assessment

Throughout history, assessment has been a prime concern of teachers throughout the world to assist learning and inform instructions. The main concern is to promote the learning achievement of students through their schooling process. The educational assessment story goes back to 1880s when the United States adopted pedagogical attainment of K-12 students. Testing instruments have been used to communicate to students and their parents what content and skills are really important for the students to understand and master. Canada, the United Kingdom, and parts of Europe, Asia and Africa as well, followed this trend especially for compulsory education in the public school system. Since that time, different educational reforms have been tested with a goal to improve student performance Marzano (2006).

Student assessment can be considered as the process of identifying, gathering, analysing and interpreting data to gain information about the students' progress towards attaining planned learning outcomes (Masters, 2013). The core purpose of student assessment is to promote students' learning (Clark, 2012) and should be an integral part of the teaching and learning process (Broadfoot, 2007; Kellaghan & Greaney, 2003; Shepard, 2000).

Teachers held different views on the best practices of assessing student learning outcomes. Some educators adopted the use of traditional forms of assessments such as multiple choice tests and other forms of objective tests, others advocate for more contemporary methods to assessments such as portfolios, critical thinking, and research essays. Resnick (1982) argues that "test based reforms can be traced back to the middle of the 19th century when Massachusetts state superintendent of instruction used written examinations as a means of holding public schools accountable for their results (as cited in Miller, Linn, & Gronlund, 2009:4). McMillan (2008) acknowledged the importance of the traditional forms of assessments are at evaluating knowledge standards and targets, especially when there is much knowledge to be measured. Such procedures are used for measuring students' knowledge, understanding, and application, which are necessary skills that students must acquire in order to achieve the basic learning outcomes.

During the last two, decades alternative assessment methods were introduced into educational practice as a result of new discoveries and developing theories in the students' learning sphere. These methods, concerning student assessment, have been supported on the

basis that they produce active, reflective, and self- regulating learners. Such design and framework provided subtle ideas of what seemed important Haladyna, Downing, & Rodriguez, (2002).

Research confirms that there is enough proof indicating that students use strategies to learning depending upon what is expected of them (Stiggins, 1992; Biggs, 1996; Entwistle, 2000; Rodriguez, 2004; Shepard, 2006; Harrison, 2012; Brill, F. and Twist, L.,2013). Students use study procedures according to the learning and skills assessed. Bol and Strage (1996: 159) claim the lack of relationship between achievement goals and assessment practices could explain why "students do not develop the study skills necessary to tackle more complex and higher order kinds of instructional tasks that require problem-solving and critical thinking."

Kubiszyn and Borich (2003) confirmed that there is diversity amongst students in terms of their learning styles, language, memory, attention, aptitude, skill level, and social and behavioural skills and CBA recognizes these differences and allows the teacher more control of when and how to teach the required content to different students. CBA, therefore, provides more choices in how and when students can show mastery or competency in their work. It is evident that students show differences in terms of their learning styles, language, memory, attention, attitude, skill level, and social and behavioural skills and CBA recognizes these differences and provides more choices in how and when students can show mastery or competency in their work. Importantly, it is necessary to assist learners to demonstrate knowledge using a range of assessment procedures. In addition, this need for assessment flexibility is because many students do not perform well on timed written tasks or under exam conditions. CBA also gives the teacher more flexibility to individualize the program of instruction and if need be for the student to have the opportunity to revisit the learning task and redo the same or similar assessment task until the student achieves the required assessment standard, competency, or criteria.

Research reports show the correlation between the classroom questioning impact and the quality of student outcomes. They found that when a teacher asked higher cognitive questions and increased wait time, the cognitive sophistication of student answers increased. Changing methods of assessment in a course can provide a useful tool for modifying student procedures to learning (Brown, Bull and Pendlebury, 1997). Thus, assessment has an important effect on what and how students learn.

Previous efforts focused on understanding school assessment in worldwide revealed that successful schools generally implement assessment key practices. Gipps (1995) acknowledged that the last two or three decades have seen a 'paradigm shift' in the field of assessment. A lot of changes in the way educators perceive student learning and assessment were introduced (Zhang, Z. and J. A. Burry-Stock, 2003). Even the language of assessment has changed: today the talk is all of 'outcomes', 'competences', 'criteria' and 'attainment'. While the previous culture of testing, centered on 'constructs' and 'universes' of potential test items, typically produced scores which stood as proxies for what learners know, today the ambition is to discover what learners actually know. Different assessment practices supply students with alternative types of competencies, and attitudes towards effective learning, which can open new perspectives. Familiarity with the rationale underpinning each assessment practice gives us an accurate understanding of what teachers are trying to achieve and, given their current practice, formulate a general framework about assessment issues.

2.8 Assessment impact on classroom practices

No clear-cut compromise has yet been reached for the effectiveness of one type of assessment over another. The debate over different assessment techniques lies at the heart of the purpose of teaching and the wanted ends. Assessment reform shifts its focus from the mere use of traditional tests to more authentic modes of testing which are holistically performed by the students' active participation and teachers' adequate instructions. This shift is an attempt to keep far from the rigid and static tests and to approach more towards real-life tasks implemented in complex real-life situations Tangdhanakanond (2006).

Vandeyar and Killen (2003) argue that regardless of educational setting, high-quality assessment practices should satisfy essential principles such as validity, reliability, fairness, discrimination, and meaningfulness. Hence, if teachers have a clear comprehension of these principles; they can make better decisions from assessment results. By contrast, if teachers misunderstand these principles, their assessment practices are more likely to generate worthless information and may lead to negative changes in students' motivation. Thus, it is important to say that AoL should be carefully constructed so that it produces accurate description of learners' competencies in relation to the defined learning purposes. Therefore, it should include rigorous, equitable, valid, and reliable measures.

2.9 Classroom assessment processes

There is consensus that the assessment process must cover validity and reliability characteristics, given they play a crucial role in providing accuracy, fairness, and appropriateness of the interpretations and uses of assessment results (Cizek, 2009; Lamprianou & Athanasou, 2009; Russell & Airasian, 2012; Miller et al., 2013; McMillan, 2014; Popham, 2014). Aligning with this trend, Shepard (2000) and Pellegrino and Goldman (2017) suggest ways that classroom assessment can be improved in order to increase learning, such as the content and the quality of assessment, exploitation of assessment outcomes, and integration of assessment as a course in teacher education programs Roegiers (2005).

It has been argued that quality assessment is integrated into the instruction process to achieve accuracy, appropriateness, fairness and transparency of assessment outcomes (Gipps, 2002; Gillis, Bateman, & Clayton, 2009). Hence, validity and reliability must be taken into account within each level of the entire assessment process. The concepts of validity and reliability will be explored, followed by each stage within the classroom assessment process; the next section explores a range of theoretical frameworks concerning validity and reliability of classroom assessment methods.

2.9.1 Principles guiding assessment

Teachers should ponder about how they can develop assessment strategies that provide information to help students learn, provide evidence of a teacher's contribution to student growth, and construct reliable and valid assessments. Validity and reliability are amongst the most important precepts in assessment and evaluation. There are several forms of both of them, as each is not just a single concept, and they are connected to each other, even though they are often dealt with under separate headings. They are not, however, the only considerations, and other principles are also addressed in this unit.

2.9.1.1 Validity of assessment procedures

The best assessment procedures remain useless if the validity and reliability of the methods and instruments being used are suspect, and this applies as much to informal assessment as it does to formal means. That is, not all forms of assessment are valid, in the sense that they do not always measure and reflect what they are deemed to measure.Classroom assessments are created by teachers based on the topics and content

covered (McMillan, 2001; Reynolds, Livingston, & Willson, 2009). Yet, assessment strategies may be based on shaky principles and unclear purposes. Thus, ill-conceived forms of assessment may go awry from time to time, so some of the possible difficulties could be faced by considering the many forms of validity. Killen (2003) States that validity is a significant feature of good assessment. Four types of validity should be considered: face, content, predictive, and construct validity.

2.9.1.1.1 Face validity

Face validity is meant to measure the sort of tasks required of a particular subject domain expected of teaching. It answers the question: Does the" ... assessment look as if it will mean what it is, supposed to mean?" Wiliam (1993:5). Face validity is an assessment procedure which aims at testing the course adequately. Gipps (1994) points out that performance assessment does tend to have good face validity. Wiliam notes that for assessment to command a good measure of confidence among users, it is important that it possesses high face validity.

2.9.1.1.2 Content validity

Content validity is often described as the area to which the sample of items, tasks, or questions on a test is representative of the domain of content (Moss, Girard, et al., 2006). Moreover, Wiliam (1993:4) argues that: "content validity should be concerned not just with test questions, but also with the answers elicited, and the relationship between them". That means relating the assessments as closely as possible to the learning experiences of the student. Issues such as low motivation, assessment anxiety, and improper assessment conditions can all be threats to the valid use of classroom assessment results.

2.9.1.1.3 Constructive validity

Moss (1992: 233) points out that "the essential purpose of construct validity is to justify a particular interpretation of a test score by explaining the behaviour that the test score summaries". This means asking whether the interpretation given to the test score truly summarises the behaviour. The key issue about construct validity is whether the assumptions made from assessment scores are based on reliable evidence (Messick, 1989; Wiliam, 1993).

It is obvious that several factors can constitute a threat to the validity of classroom assessment results. This means that much of the evidence for validation should be addressed by teachers during the design of classroom assessment procedures and the development of assessment tasks (Alias, 2005; Brennan, 2006; Crocker & Algina, 2008 Jonsson, A. and G. Svingby (2007); Popham, 2014).Teachers should be adequately proficient in developing appropriate assessment procedures and tasks to assess students. It is important to note that the issues discussed here are not restricted to classroom assessment procedures alone, but can apply to conventional examinations.

For this study, pertinent questions emerged as relevant to the development and interpretation of classroom assessment in the Algerian primary school. These are:
1-how can teachers interpret classroom assessment results?
2-Does the collected classroom assessment score reflect a wide range of skills and knowledge required for effective teaching?
3-What is the proposed purpose of classroom assessment scores and do the scores have utility for this purpose?

2.9.1.1.4 Predictive validity/ Criterion-related validity

Sometimes assessment is part of teachers' prediction about the future classroom activities, especially in the case of selection, where the assessment is used to make an estimate of who is most likely to be suitable for a higher or lower ability group, or who might engage in a particular assignment. Predictive validity, sometimes called criterion-related validity is the ability of the assessment to predict some future performance as opposed to the current performance report commonly perceived as concurrent validity. Among the issues which would need to be addressed as far as the predictive / criterion-related validity of professional teacher assessment is concerned, is how to conceive and construct reliable and valid criterion measures. In this study, it would be important to know whether assessment objectives and criteria feature in teachers' assessment work.

2.9.1.2 Reliability of assessment procedures

Reliability of assessment is described as the stability of measurement (Bachman & Palmer, 1996; Brown, 2004). That is a test is reliable to the extent that whatever it measures is consistent. A test cannot be valid unless it is reliable. If a test does not measure something consistently, it cannot always be measured precisely.

Reliability is a necessary element of validity. It provides the consistency of scores from one occurrence to another and across different forms of tests. It is related to the quality of tests 'scores and to the extent to which those scores reflect the students' true abilities. Moss (2003) confirms that reliability is an essential element of test quality in which results remain consistent over time. The test reliability means its ability to lead to the same scores about the examinees 'performance even if it is repeated in different occasions it gives the same results. In contrast, a test based on poor reliability may generate different scores. Reliability can also be considered under several headings, but all of them are largely about consistency. Three types of reliability should be considered: pupil performance, test construction, reliability in marking.

2.9.1.2.1 Students' performance

Practitioners strive to determine if the child took the test again, the score would be similar over multiple testings (Brennan, 2006; McMillan & Schumacher, 1997; Popham, 2014). The goal is to create an assessment that teachers believe gives as close to an accurate estimate as possible. Reliable can support teachers' confidence that the scores are truly a measure of how well each student understands the tested content, and that teachers did indeed teach this content and therefore contributed to the students' assessed growth.

Reliability in assessment relies on the accuracy and appropriateness of teachers' descriptions of the learning. Teachers must get a clear picture of how the students are thinking and what it is that they understand or find confusing. One of the best ways teachers adopt to reach reliable insights into how students are thinking is to work with other teachers.

2.9.1.2.2 Reliability in marking

Reliability is referring to the confidence a teacher has about the test score earned is a good representation of a students' actual acquaintance of the content. Hence, it is considered a good representation of students' true score if there were no measurement error in designing a perfect test. That is, teachers should repeat them in different occasions so as to see whether they get the same results. Reliability is critical in the view of standardized tests because the main objective is to quantify the test-taker's ability for the purpose of public comparison. In contrast, the use of diverse tasks in

alternative assessment reduces the consistency in individual student performances across the different tasks.

2.9.1.2.3 Test construction

Reliability designates the stability of test performance. It is one of the most important factors when deciding upon tests and other assessment tools. A test must be created so that teachers can administer the test with minimal mistakes and can interpret the performance of students with confidence. Crocker & Algina (2008: 105) claims that reliability is the desired consistency of test scores. Popham (2014: 89) states, "In general, if you construct your own classroom tests with care, those tests will be sufficiently reliable for the decisions you will base on the test results." It is important to notice that reliability may be influenced by some factors such as; ambiguity, clarity of instruction, and tests' format and content. Therefore, it is desirable for teachers to devise tests of high reliability rate. Test design is a fluid process, and teachers will want to revise and update their assessment after each administration of a test to reach a valid and reliable assessment. Also, reliability can be enhanced by having a longer assessment, meaning teachers have several questions assessing each skill to help avoid the problem with guessing or careless errors in determining the way a student has acquired a given skill.

Apparently, poor assessment methods lead to poor learning achievements and a well-designed assessment enhances both learning and teaching. Teachers need to give much consideration to the criteria they use as they should know the extent to which their assessment activities are consistent with the instruction they provide. A further principle lies in the best sense of matching assessment to purpose. There are many considerations. Two categories that are usually addressed in this context are norm-referenced and criterion-referenced assessment. The first is founded on the notion of each person's relative place or ranking on a particular scale, the second on what someone can or cannot do.

2.9.1.3 Norm-referenced testing practices

Norm-referenced assessments, usually known standardized assessments and grading, are bodies of tests designed by experts for use in different schools and classrooms to yield some norm referenced or criterion referenced inferences; these assessments are

usually conducted, scored, and explained in a standard manner. Standardized assessment has undertaken an important role to develop the quality of education. The main objective of these assessments is to provide a norm-referenced interpretation (McMillan, 2008; Popham, 2008; Reynolds, Livingstone & Wilson, 2009). The main focus of standardized examination is to establish a common set of school standards for all students taking the examination. These assessments can be used to measure students' performance and to ensure accountability of educational systems that are focused on students' learning outcomes Glaser & Silver (1994).

According to Au (2009) standardized testing sprang from the scientific view of education in which standards alone drive the educational process. Teachers present the content via the scientific methods, and the test merely measures whether the goals of the planned content are reached. This approach splits curriculum down into units of work which can be taught in a linear mode. Standardized testing considers the content can be taught to all populations and that the test can universally provide a fair and objective comparison of individuals from different populations and different backgrounds. These large scale assessments measure what a student knows at a particular instance in time and are used for school and teacher accountability (Airasian, Engemann, and Gallagher, 2007).

High-stakes tests have been blamed for causing sickness and test anxiety in students and teachers. The curriculum is narrowed towards what the teacher believes will be tested. Opponents of standardized testing claim that holding teachers accountable for test results leads to the practice of "teaching to the test." Additionally, they contend that the focus on standardized testing encourages teachers to equip students with a limited set of skills that enhance test performance without really promoting a precise understanding of subject matter and key principles within a given domain of knowledge.

2.9.1.4 Criterion referenced vs. norm-referenced testing practices

(Popham and Husek, 1969; Bond, L. A., 1996; Brown, 2005) distinguish between criterion referenced testing practices and norm-referenced testing practices based on the type of interpretation made. They argue that distinction between criterion referenced testing practices and norm-referenced testing practices should not just be based on validity. Rather, it should be determined by analysing the purpose for which the assessment task was designed to evaluate a specific body of knowledge, and the extent

at which the assessment results can be implemented in particular area. The use of test scores is very important to generate a statement about test-takers and to assess how the assessment task was constructed. Then, teachers are founding their assessment on criterion referenced testing practices   to determine what students are able to do or fail to do if they want to measure which students have attained set standards, and align assessment tasks to the instructional objectives upon which to measure students learning.

Hence, I think it is important to administer summative assessments. I think that the use of tests and exams are an ineffective way to do this. The best method to understanding a student's knowledge is to do so when they are comfortable and do not necessarily know that they are being evaluated. This being said, some students will perform better when they know that a grade is going to be assigned. It is important that summative assessment be conducted, however, my belief is that it must be done in a way that does not intimidate the student, but fosters learning and produces an accurate representation of what the student has learned.

2.9.2 Assessment and Learning

The relationship between learning and assessment is an important foundation in assessment because "every assessment is grounded in a conception or theory about how people learn, what they know, and how knowledge and understanding progress over time" James (2008) and Gardner (2012). Wragg (2003) asserts that   an understanding of what constitutes knowledge and learning influence the assessment design and selection of assessment items that are considered appropriate to assess students' learning competencies. "Regular, reliable and timely assessment is key to improving learning and enhancing the quality of education" UNESCO (2005).

2.10 The purpose of assessment

The purpose of assessing students impacts the ways in which assessment is carried out and how students perceive it. In this literature review, the researcher tried to describe the different facets associated with assessment purposes and practices, in order to reach sound understanding of the variety of possible assessment paradigms which may enable students to take their next educational steps with confidence. Accordingly, to implement assessment skills, teachers are called to take into account assessment purposes. There is general agreement on a diversity of common functions in conducting classroom assessment including:

• Instructional purposes (i.e., to adjust instruction to student level) (Chappuis et al., 2012; Russell & Airasian, 2012; McMillan, 2014; Popham, 2014);

• Placement purposes (i.e., to put students in different levels) (Hughes, 1989; Bachman & Palmer, 2010; Shute & Kim, 2014);

• Evaluation purposes (i.e., to determine progress in learning) (Chappuis et al., 2012; Russell & Airasian, 2012; McMillan, 2014; Popham, 2014); and

• Accountability purposes (i.e., to give information to administrators) (Russell & Airasian, 2012; Popham, 2014).

The main goal of assessment is to decide whether or not learners have gained profit from instruction Airasain (1994). Stiggins & Conklin (1992: 179) contend that, an assessment process fits in a range of classroom decision making contexts and serves as a means of conveying information to learners and teachers necessary to take decisions that include:

• Diagnoses of the strengths and weaknesses of individual learners.

• Diagnoses of class and group needs.

• Grouping learners for instruction within or across classes.

• Identifying and selecting learners who are in need of special services.

• Assigning grades on report cards.

• Evaluating the effectiveness of their instructional effort.

• Communicating instructional objectives or achievement expectations.

• Communicating social or inter- personal expectations.

• Controlling learner behaviours and motivation, and

• Enhancing test-taking skills.

Teachers are supposed to use assessment to conduct adequate decision-making, especially with regard to the identification, remediation, and ongoing feedback to students with learning troubles. From the foregoing observations, the power of classroom assessment primarily resides in formative practices that allow adaptation of teaching and learning activities to learner needs, but appropriate forms of summative assessment can also be designed to support the teaching and learning process Stiggins (1992). The prime purpose of learners' assessment is to support this learning, (Tomlinson, 2014; Black and Wiliam, 2004). Hence, it is necessary for teachers to adequately perceive the importance of assessment processes. Tanner and Jones (2003) assert that assessment is used for three main aims: managerial aims, communicative aims, and pedagogical aims.

- Managerial aims include holding schools accountable for pupil progress, selecting pupils to benefit from limited resources, and controlling curriculum by emphasizing what should be taught.

- Communicative aims involve providing parents' information about how their children perform in relation to standards; providing information to others about pupils' knowledge and skills, and informing teachers what parts of the curriculum are more valuable to study.

- Pedagogical aims include: evaluating the success of your teaching, analysing pupil learning and looking for misconceptions, feedback for future planning, motivating students and holding them accountable, supporting learning by identifying what individual learners need to improve, allowing pupils to see their success, and encouraging them to self-assess achievements and regulate learning strategies.

In a similar vein, Butt (2010: 3) identifies four goals of assessment:

- First, to provide feedback to teachers and students about each child's progress in order to support their future learning (a formative role).

- Second, to produce information about the level of student achievement (a summative role).

- Third, to offer a means of selecting students for further courses and/or employment (a certification role).

- Fourth, to help judge the effectiveness of the education system (an evaluative role).

Assessment can be used to support students' learning improvement and its findings can be applied to establish educational goals and targets. Butt (2010: 1) affirms that: " the impacts of different assessment practices on learning can be positive, negative or benign – serving either to encourage or demotivate the learner".

2.11 The challenges of researching teachers' beliefs

There is a consensus in the existing literature on the fact that teachers' beliefs are hard to research Pajares (1992) and that the area of teachers' beliefs is ambiguous and inconclusive (Allen, 2002 ;Pickering, 2005; Rueda and Garcia, 1994). Researchers

started from the assumption that beliefs are abstract and unobservable in nature, but also because they tend to be associated with other constructs (Pajares, 1992; Schmidt and Kennedy, 1990; Sims, 2003), most importantly of which is knowledge (Gabillon, 2005; Bernat and Gvozdenko, 2005).

In the past, research in the educational field used to study teachers' behaviours in an endeavour to comprehend what happens in their classrooms. It was assumed at that time that an understanding of classroom practices would help identify constraints and limitations for effective teaching and assessment. It was argued that a better understanding of teachers' practices can be attained by an understanding of the beliefs guiding those practices (Pajares, 1992; Soodak, Podell, & Lehman, 1998; Fang, 1996; Waters-Adams,2006).

The guidelines of the present study are confined to probing teachers' personal theories, beliefs and perceptions, and to give interpretations to their assessment' beliefs and understanding. Kagan (1992) posited that teachers are often not conscious of their beliefs. This, I believe, calls for a specific paradigm within the qualitative-interpretive approach, and the one I found of particular use for this dissertation was "constructivism" (Boudourides, 2003; Cronjé , 2006; Fosnot & Perry 2005; Tobin, 1993) . The latter subsumes answers about: a) the ontological nature of human reality, b) the epistemological theory and sources of knowledge , c) the methodological process of researching knowledge (O'Leary, 2014; Denzin and Lincoln, 2005). In this sense, teachers' beliefs are viewed as individualized theories devised by teachers in the process of their day-to-day personal and professional lives. These beliefs are grasped by the teachers as realities and influence their decisions

2.12 Teachers' beliefs and assessment practices

Teachers' conceptions and beliefs towards assessment have been studied from various perspectives and by many researchers(Brown,2002; Cizek, Fitzgerald, & Rachor, 1995; Davis & Neitzel, 2011; Sikka, Nath, & Cohen, 2007). Researchers believe that investigating teachers' perceptions of assessment is vital in the sense that it provides an indication of how different forms of assessment are being applied or misapplied and what could be done to improve the situation. Besides, it is worth noting the fact that perceptions affect behavior (Atweh, Bleicker & Cooper, 1998; Richardson, 1996; Patrick & Pintrich, 2001; Liaw , 2008). Research denotes that the way teachers believe

is surrounded with ambiguity and inconclusiveness (Dwyer, D.C., Ringstaff, C., & Sandholtz, J. H., 1990; Pajares, 1992; Ertmer, P. A., 2005; Speer, N. M.,2008).There is no clear-cut agreement about the definite nature of teachers' beliefs construct (Bernat & Gvozdenko,2005; Toualbi-Thaâlibi,2006 ; Bellalem, 2014).

The potential negative consequences of assessment practices suggest that there are potentially a variety of beliefs that teachers may hold about assessment, that in conjunction with other beliefs and contextual influences, may influence the practices they exercise in the classroom. Certainly, these beliefs will clarify how teachers interpret information about new approaches to assessment and frame their instructions and lesson planning Fives & Buehl (2012). It is with these concerns in mind that we undertook this investigation of the empirical research to depict teachers' beliefs about classroom assessment.

There is a consensus that teachers' instructions and decisions in their classrooms were led by a system of beliefs, used to refine these decisions before being put into practice. Hence, a better comprehension of teachers' practices can be accomplished through a clear understanding of the beliefs underlying those practices (Pajares, 1992; Biddle, S. 2006; Ballone and Czerniak, 2001; Richards and Lockhart, 1996). Fives (2003) claim that the level of teachers' beliefs can be seen as determiners of the success or failure to execute and perform actions to attain certain objectives. Matese et al. (2002: 3) declare that teachers see 'innovation through the lens of their existing knowledge and beliefs'. Besides, Ballone and Czerniak (2001:7) state that 'the teacher is the critical change agent in paving the way to educational reform and that teacher beliefs are precursors to change'.

In this study, belief is conceived as an element of 'cognition,' in line with Freeman, (2002), Andrews (2001) and Borg (2003). Borg and Burns define research in cognition as "the study of what teachers know, think, and believe and how these relate to what teachers do" (2008:457). Teachers' beliefs can be interpreted as a fixed standpoint shaped by teachers' personal and professional experience that is actively influencing their practices, instructions and decisions (Anderson, 1998; Farrell and Lim, 2005; Olafson & Schraw 2006). The issue of teachers' beliefs and innovation is of particular importance to the present study since the latter explores the beliefs of Algerian teachers about curriculum innovation usually known as the second generation of school reform and their impact on classroom assessment practices.

2.12.1 Exploring teachers' beliefs about assessment

This study started from the premises that a better understanding of teachers' practices can be achieved by an understanding of the beliefs underlying those practices. Farrell and Lim (2005: 1) claim that teachers' classroom instructions and decisions do not happen at random, but are guided by systems of beliefs which 'greatly impact on their instructional decisions in the classroom.' Research conducted in the field suggests that teachers' assessment instructions take, in some respect, different forms in terms of evaluating students' learning. Teachers' beliefs are known to be diverse, heterogeneous, and closely interrelated (Wilkins, (2008; Viswanathan, 2016; Bernat and Gvozdenko, 2005; Brownlee, 2003; Chan, 2004; Anderson, 1998).

Research in teacher's beliefs tried to tackle issues correlated with the classroom practices. Understanding classroom practices would help identify constraints for adequate teaching. Pajares (1992) and Murphy (2000) describe teachers' beliefs and attempt to correlate them to classroom instructions in order to promote teachers' efficient teaching and assessment. According to Oliver and Koballa (1992), teachers gave differing perspectives; some associated "belief" with other psychological constructs such as knowledge, values, and attitudes. Others viewed "belief" as a process that influences their behaviours, attitudes, and practices.

Teacher beliefs can be conceptualized within the dimensional framework about classroom assessment practices. Teachers' classroom conceptions are determined by their knowledge, beliefs, intents and the assessment characteristics embedded in practice related to teaching and assessment process. Teachers' self-motivation regarding classroom practices play a focal role in the learning process and incorporates a broad range of issues which affect feedback, tests and grading practices on individual students. Furthermore, teacher belief systems formed an integral part of informing their general teaching practices.

> Teachers are likely to hold beliefs about assessment on students before Assessment (provide a focus of learning), knowledge about assessment effects on students during assessments (provide a sense of accomplishment, challenge, failure, or inadequacy), and knowledge about assessment effects on students after assessments (as fair, meaningful, useful providing information for continuing development or lack of it).Teachers may also have beliefs about the effects of assessment on

teacher themselves, such as requiring instructions on particular topics or problems or providing or not providing useful information for instruction Title (1994 : 152).

McMillan and Nash (2000) conducted a discussion with teachers regarding their beliefs, values and purpose of classroom assessments as well as their grading practices. Facts revealed that teacher beliefs and values were not directly linked with measurement principles. (Rubie-Davies, Flint, and McDonald, 2012) argued that teacher beliefs have been found to play a pivotal role in influencing their thoughts and behaviours that contribute to student learning progress and support them to take next steps with certainty. McMillan (2005) and Popham (2008) argue that understanding teacher beliefs can lead to better ways of understanding their classroom practices

Regardless of this confusion and misconceptions, teachers' attitudes and beliefs are essential for understanding and promoting the educational process, including assessment practices that teachers adopt. Thus, teachers' conceptualizations seem to affect their assessment instructions. Such practices are not constant, but keep on changing, making it pertinent to study them on continuous basis (McMillan, 2008; Popham, 2008). How teachers conceptualize their work may influence and shape decisions, behaviours and practices they display in their daily classroom activities (Boog, 2003; Mansour, 2013). Research reveals that teachers can be classified into three main categories, with respect to their belief about classroom assessments.

Studies have raised the issue of assessment through a framework which exposes the underlying moral and ethics in grading. Zoeckler (2007) explored assessment practices while gauging both achievement and non-achievement factors. He claimed that teachers' assessment and feedback to students is influenced by teachers' values and beliefs. The evaluations of students' competencies should be ethical, fair, helpful, and accurate. The teachers' role should align with the theoretical framework which considers assessment processes in terms of truth, worthwhileness, trust, and intellectual and moral attentiveness. Teachers continue to struggle with issues of fairness as they assess students' skills and abilities.

2.12.1.1 Realism

The first group represents the realist teachers who deliberately focus on paper and pencil types of assessments where learners are expected to recognize rather than generate their own answers (Segers & Dochy, 2001; Windschitl, 1999). These types of assessments

prioritize the improvement of the cognitive side of instruction, i.e. the skills and knowledge that students are expected to develop within a short period of time. Their conceptions are based on norm-referenced testing.In norm referenced testing students' mastery of core knowledge and skills of the curriculum and is evaluated relative to the performance of others Nitko (2007). Teachers tend to rely on objective tests that can be scored used to compare students.

2.12.1.2Contextualism

The second group of teachers adopted a context -based theory. The importance of contexts is widely recognized, and its implications is taken into consideration. Alternative classroom assessments are implemented such as student portfolios, group work assessments and competency-based assessments. Thus, adapt their teaching strategies for coping with their daily teaching and assessment challenges, in order to shape learners' learning environment, their motivation and their competencies. They favour the increased use of performance testing that seems adequate for testing complex mental abilities like problem solving skills (Haladyna, Downing & Rodriguez, 2002). Contextual teachers advocate the use of criterion based testing evaluation to determine what students know and don't know based on a set criterion (Tzuriel, 2000)

2.12.1.3 Relativism

The third group of teachers adopted the developmental theory. They believe that better instructions are relative to relevant classroom environment. The degree of learning's success varies according to the students' individual development. Students have opportunities to learn and be guided and assessed in different ways to specify the learning strategy that is most appropriate for each child's unique developmental level (Schunk, 2008; Siegeler, Deloache, & Eisenberg, 2006; Steinberg, 2008). Multiple assessment practices are introduced to accommodate students' diverse needs. (Hargreaves, Earl, Moore, & Manning, 2001).

2.13 Worldwide surveys on classroom assessment

Teachers are the backbone of any educational system due to the sensitive role they play in assessing and guiding pupils. Teachers need to have basic understanding of how to collect, analyse and interpret assessment results to make informed decisions about

students' learning progress. (McMillan, Myran & Workman,2002) claimed that assessment knowledge is essential as it can help teachers understand how they designate classroom assessment practices for evaluating students' skills.

In reviewing the literature on perceptions and beliefs affecting teachers' classroom assessment practices, I found some researchable issues, especially on assessment beliefs at the primary school level, that have not been covered by a number of research projects conducted on this topic in the Algerian context.

Teachers' beliefs and perceptions are recognized as the best indicators of the judgments they make during the course of everyday life Stoffels (2001). Educational researchers tried to understand the belief systems and its impact on the nature of assessment. A growing body of literature (Sugrue, 1997; Tillema & Orland-Barak, 2006; Brown, 2004; Harris & Brown, 2009) claim that the beliefs and perceptions that teachers hold impact their assessment performance in the classroom. Further, these belief systems are an essential part of improving teaching and assessment effectiveness Korthagen (2004). Several empirical studies on classroom assessment indicate that teachers hold different views and understanding of it (Ellioit, 1999; Akyeampong, Pryor and Ampiah, 2006; Vandeyar and Killen, 2007; Brown and Hirschfeld, 2008; Harris, 2009; Sethusha, 2012). It should be noted that methods of assessment are determined by beliefs and these beliefs have led to the evolution of assessment worldwide. Gipps (1994) and Lynch (2001) mentions that assessment has undergone a paradigm shift from psychometric to a broader model of educational assessment that reflects teacher's beliefs, practices, and needs, that is from testing and examination towards assessment for learning practices. Researchers all over the world have been conducting field studies to address the importance, nature and scope of teachers' classroom assessment assumptions and practices.

An empirical study carried by (Akyeampong, Pryor and Ampiah, 2006: 162) to explore Ghanaian teachers' understandings of teaching and assessment in primary school, indicates that assessment is an important component in promoting effective learning. These scholars explored teachers' perceptions of teaching and assessment. The teachers they sampled showed a consistent understanding of how learning is built up through social interaction and interrogation of ideas. Constructivist learning was therefore recognizable to the teachers De Vries (2004) . Teachers revealed that they often relied on pupils' facial expressions to decide how well the lesson was going and followed up by

questions to confirm any suspicion of lack of understanding. This kind of assessment determined the way some of them managed or visualized effective classroom learning. Of importance was the use made of informal assessment information to appraise pupils' progress and understand learners' needs. Teachers were urged to make observations on which to base the marks that were entered on the official continuous assessment sheets required by government policy. The attitude of these teachers towards official continuous assessment was not very positive. Their arguments were based on the fact that officials and supervisors generally neglect any systematic formative assessment during teaching and learning in the classroom (Akyeampong, Pryor and Ampiah, 2006:169).

Ellioit (1999) carried on a case study research to investigate assessment practices of four school teachers in one local education authority in London, and the driving forces which have shaped their skills. The study examined the current understanding of formative assessment from the social-constructivist prospect on learning. Results indicate that teachers' assessment practices include a mixture of summative and formative activities. Also, results indicate that many teachers rely to a great extent on their own assessment and ideas from observing children in their classrooms. They rely on their assessment expertise and cleverness.

These results suggest that while some teachers are making use of various strategies for the purpose of assessing a child's achievement, half of the teachers never use them at all for this purpose. The Year One teacher claimed that they had not received the in-service training necessary to use the strategies and technics for assessing. Only three teachers exhibited a clear mastery of assessment. Analysis of questionnaires and case study data from all four schools provided information for the development of a model of formative assessment and towards understanding of the influences most important in improving formative assessment skills. This research sample provides a description of how the practices of teachers came to be. It would direct future research into the ways and means of improving assessment practices.

Sethusha (2012) investigated the obstacles affecting teachers' classroom assessment practices in South Africa. A case study design was adopted to explore and provide a comprehensive account of teachers' understanding, experiences and practices of classroom assessment, and the challenges they encounter. The study covered four primary school teachers from four different schools in North West Province, SouthAfrica. It explored teachers' individual conceptions, beliefs and the context. The

study revealed that teachers' understanding and practices of classroom assessment are shaped by their social and educational context. Thus, influence potent assessment practices.

Evidence showed that teachers seemed to conduct assessment after every lesson. They followed up on what was taught through worksheets and assessed the work. The significance of this practice relates to the findings of Raveaud (2004) that every-day assessment practices are more relevant to children's school experiences than evaluation at the end of the year, and that regular assessment in the classroom constitutes a spectrum through which one can examine teachers' beliefs and values.

Teachers understood assessment as blocking their own initiatives. They felt they had to assess according to policy prescriptions; for example, the policy prescribed how many assessment tasks had to be conducted and recorded. They assessed because they had to adhere to policy requirements, even when they felt this was against their beliefs. Teachers in this study tended to use traditional summative examination, arguing that this reflected the overall learner performance. I suggest that this is because they had as students been exposed to this type of assessment, which implies that their background and personal experiences were reflected in their assessment instructions. Also, teachers used a mixture of assessment types for different purposes, some of which were more aligned with their personal beliefs about best assessment practice than with policy requirements. Teachers indicated that their students were their first priority, which led them to reject or ignore mandated assessment practices that they considered inaccurate. The data gleaned from a small sample of thirty-two teachers from sixteen culturally diverse environments revealed issues of assessment challenges consistent with previous studies with teachers in different primary schools, and in different learning areas.

Similarly, Al-Sadaaw (2007) has investigated the assessment effects on Saudi primary schools. Six teachers were randomly chosen to survey their attitudes and practices towards assessment of students' performance. Analysis' results showed that teachers reacted well to the experimental program and reported they had received professional development supporting formative assessments. Teachers reported some disadvantages that may impede learning achievements. They reported that assessment reform was time-consuming and required extra work.

The findings revealed that the main tendency catered from comparing the new and the old methods of assessment is favourable towards the new method. Teachers stated that the traditional method of assessment tends to limit the development of students' abilities

and competencies. But, with the advent of the new assessment strategies, they reported that students become involved with their own learning when they are offered the opportunity to be active and interactive learners. Cooperative learning urged students to become responsible for their own potential learning. In addition, the reform methodology of assessment encouraged students, and their teachers, to use critical thinking skills.

Hargreaves (2001) Analyzed the roles of assessment in Egyptian primary education. This case study discussed the relevance, purposes and impacts of assessment practices on individual's learning achievements. It distinguishes three official purposes for assessment: for the certification and selection of individuals; for accountability and system improvement; for the enhancement of the individual's learning skills. The researcher tried to clarify how assessment is perceived and experienced by nineteen teachers in primary school level. This research shows examinations for certification and selection are of prime interest for teachers, students   and parents. Such evidence could be associated with pressure and anxiety restricting teachers' efforts to achieve assessment and teaching innovations at school. The implications gleaned from this research indicate that the improvement of assessment process depends on pupils' motivation and teachers' assessment skills.

Kurebwa (2012) led a field study in twelve Zimbabwe's primary schools in an attempt to describe teachers' competencies and perceptions about classroom assessment practices. Results affirm that teachers' beliefs and conceptions generated misconceptions and limitation with regards to assessment methods and instructions. These identified limitations include the use of poorly focused questions, a predominant of questions that require short answers involving factual knowledge, and inadequacy of procedures intended to develop cognitive skills. Besides, some teachers' main concern is linked to examinations and as a result, fail to improve their pupils' skills and competencies necessary to attain full potential learning.

Evidence unveiled that teacher' assessment practices are guided by their conceptions of assessment. Besides, they generally encounter assessment problems such as scarcity of materials and facilities, work overload, lack of competencies, lack of variety in assessment and the tendency to follow demands by public examinations in carrying out assessment. The study further indicated that teachers were not skilled enough to deal with classroom assessment. Most Teachers lacked expertise. They attributed it to inadequate assessment training. Moreover, findings reported that schools used mainly

tests, homework and classroom exercises. Unfortunately, schools were failing to use a range of assessment techniques in order to capture as much information as possible on the pupil's attainment.

Mavrommatis (1996) has undertaken a field research to explore and understand assessment in Greek primary classrooms and its potential impact on teaching and learning. The findings confirmed that Greek teachers were not fully applying the assessment reforms. The frequent changes of the assessment system coupled with a lack of assessment training, a long experience in traditional pedagogy, pragmatic constraints such as class size, and shortage of time, eventually confused many teachers and caused undesirable impacts on children's learning. The target teachers were interested in outcomes, instead of processes, they were conducting a whole class teaching, and they were inhibiting children's creativity. Overall, teachers were assessing unsystematically, spontaneously and without focusing on objectives. The different assessment styles indicate teacher practices were derived from their habit and ideology rather than from the official directives.

Vey (2005) investigated the relationship between assessment and learning, in the Australian context, to determine the way classroom assessment is conducted with respect to the shift of educational values from content based towards a more goal-orientated process. This study started from the premise that assessment should support a pedagogic process which helps to develop in students a heightened sense of developing critical thinking which prompts them to acquire efficient learning skills.

Results from the study demonstrate significant advantages that can be gained when assessment is not limited to the evaluating of students' product but is based on instructions enabling critical negotiation. For instance, students developed a sense of ownership of their learning task, felt motivated to explore conflicting issues, and, interestingly, valued the assessment process and looked forward to learning about the quality of their performance. That is, when students are empowered to learn by critically linking and problem-solving forms, the assessment practice becomes a significant constituent in their learning procedures.

The findings of this study support the claim that assessment is more than an exercise in measuring what is easy; it is a process of improving and supporting students to adopt critical thinking procedures. Thus, teachers' beliefs and understanding processes deeply impact assessment and learning as a potential stage in the assessment process. Lynette

Vey (2005) concluded that assessment in its present form is incongruous. The emphasis on external, standardized assessment has intensified the domination of what gets assessed is what gets taught; to gather data and return results. This process has excluded students from assessment practices and fails to recognize the value of the process of learning in attempting to achieve learning goals.

Brown and Gao (2015) investigated Chinese teachers' conceptions of assessment to build a clear understanding of how they perceive the purposes and functions of assessment. This research synthesizes eight interview and survey studies, which have studied how various samples of practicing teachers in China have defined the nature and objectives of assessment. Six major constructs were recognized, ranging from the positively perceived ideas that assessment develops the personal qualities and educational abilities of students to the more negatively interpreted purpose of assessment. This framework provides beneficial insights to policy-makers in order to mitigate negative consequences associated with high-stakes examination systems.

Teachers' perceptions about assessment matters interpret their classroom practices. (Chen, Brown, Hattie, & Millward, 2012) stated that Chinese teachers do not believe that high-stakes examinations domination constitute excellent assessment practices. There is a tendency to adjust these seemingly reductive practices to how teachers implement, interpret and respond to assessment issues. Evidence suggests that there will be a considerable challenge for Chinese teachers to implement assessment for learning reform that avoids using tests or examinations; assessment that does not easily contribute to accountability purposes will likely not be considered as contributing to improvement. The study into Chinese teachers' perceptions of assessment provides a source of understanding how assessment is conceived among teachers in China. The results further focus on the usefulness of implementing an assessment for learning in the China context.

Regardless the policy environments in which assessment is used in different contexts, it would appear that there is breadth in teachers' conceptions of assessment. Depending on times and locations, teachers can reveal a range of conceptions and might agree with opposing conceptions at the same time. Furthermore, since teachers are obliged to use assessment in any way they might not choose, the effect of their conceptions on assessment and teaching practices is intricate and could lead to misuse of classroom instructions.

Overall, the literature review exhibited so far asserts that there are possibly various perceptions and beliefs facing teachers' classroom assessment practices, that teachers

deal with these in their own different ways, and that this has major influences on effective learning quality. The review has also identified meaningful dimensions of teachers' assessment practices and their impact on students' learning. It is obvious from the background and literature review that assessment is a basic component of teaching and learning and that assessment plays a significant role in strengthening students' learning. From the literature reviewed, it is also evident that the implementation of any new assessment policy, tool or practice, whether at the national or local school level, must cater for the multifarious nature of teachers' perceptions, opinions, and ideas of assessment. My research, therefore, attempted to explore and investigate the teachers' beliefs and attitudes which could influence, positively or negatively, classroom assessment practices.

2.14 Requirements for implementing competency-based assessment

Teachers' beliefs and understandings about the process of implementing assessment practices do appear to shape and reflect the nature of their instructional decisions. Teachers' theoretical beliefs have been viewed with differing perspectives because of its complexity. The ongoing revision of learning, assessment and teaching concepts underlying educational reform in primary school places profound demands on teachers. (Loucif 2007; Tawil, 2005 – 2006; Adel, 2005). The second generation restructured methodologies call for new engaging roles for teachers that are professionally demanding to master the concepts they explore for their students. This complex role stretches from the development of assessment tasks to achieve students' learning standards to the application of skilful knowledge to interpret students' achievements. The teachers' professional development is recognized as a requisite component to enhance the quality of teaching, learning and assessment (Olson &Craig, 2001; Runhaar, P. R., 2008; Desimone, L. M., 2009).

> "Equity in education is fundamentally about ensuring every student has a quality teacher, well educated in the particular subject area and well trained to teach it " Ingvarson & Wright (1999: 3), and "Nothing is more central to student learning than the quality of the teacher " Galluzzo (2005: 142).

Teachers' proficiency, in implementing competency-based assessment based on social-constructivist approaches to teaching and learning, is an essential ingredient of

primary school teachers' professional evolution (Desimone, 2009; Elliott, 2015; Avalos, 2011). Following the examination of the constructivist perspective on teaching and learning, Graue (1993:295) stresses the significant role of teachers in the development of instructional assessment: If we see assessment as a learning opportunity for teachers – learning about their own pedagogy as well as their students'growth – teachers must have a say in the forms and functions of assessment. Regretfully, teachers cannot do this on their own. Nothing has prepared them to make the kinds of shifts called for in either the instructional or assessment reforms. Professional development at the preservice and inservice levels is necessary to support teachers if they are to meet these challenges.

Teacher knowledge and beliefs framed the assessment characteristics and dimensions. Teachers devise some theories, strategies and experiences about their roles and responsibilities regarding classroom assessment practices to promote instruction and quality learning. However, discrepancies among teachers emerged when translating theory into practice (Mangano and Allen, 1986; Lipa& Harlin (1993). Regardless of the professional requirement and the pressure of the new educational reforms, teachers exhibited their reluctance to change and continue to struggle against the new policies on the basis that they conflict with their values, assumptions and beliefs. The source of such conflict arose from:

> "assessment policy represents a radical departure from the philosophy of assessment and its role in relation to learning. There is a shift from an exclusively norm referenced summative form of assessment in a content-based education system to criterion-referenced formative assessment."
> Vandeyar (2005:462)

2.14.1 Professional development

Professional development is considered a vital factor in the education reform to promote teachers' competency based assessment in providing students with desired outcomes. For competency-based assessment to be effective, particularly assessment methodologies based on the second generation of educational reforms, teachers' expectations must change to align with students' outcomes and instruction methods. Effective teaching and assessment practices are based on competencies and professional standards. Teachers' proficiency in assessment practices is commonly

held as a requisite skill for improving the quality of teaching and learning. Volante and Fazio (2007) argue that teachers' assessment skills foster the students' learning quality. Zhang (2003) recommended seven content areas in which teachers need to develop assessment skills:

1. Basic concepts and terminology of assessment: teachers understand and distinguish between assessment concepts: traditional or alternative assessments, formative or summative assessments.

2. Uses of assessment: teachers use assessment for different purposes; monitoring students'progress, evaluating instruction, diagnosing problem areas.

3. Assessment planning and development: when planning assessment, teachers take into account student ability, assessment targets, and choose appropriate assessment methods.

4. Interpretation of assessment: to interpret standardized test results, teachers use statistical concepts including variability, correlation, percentiles, and principles of combining scores for grading.

5. Evaluation and improvement of assessment: teachers use assessment tools to determine the validity and reliability of a test.

6. Feedback and grading: for grading purposes, teachers decide the grading model to be used; performance components to be included in grades; and the weighting each component receives.

7. Ethics of assessment: teachers manage usage of assessment results responsibly.

Kane et al.(1997) state that teachers must be able to improve their students' abilities and skills to construct their knowledge, think critically, and move beyond one answer to a problem or project. Suduc et al. (2015) recommend that teachers create a classroom environment in which students can be actively involved in making meaning of the information within a relevant, real-life context, and employ strategies which encourage active questioning and identification of issues and answers. Teachers should support students to challenge the information presented and discuss its relevance. However, even though identifying essential skills and knowledge necessary for teachers to implement performance assessment is important, these alone are insufficient to secure that teachers improve classroom assessment practice.

2.14.2 Relating assessment practices to teacher characteristics

Student assessment is a basic component of teaching and learning.(Reynolds, Livingston, & Willson, 2009; McMillan, 2008; Nitko, 2001) state that classroom

assessment plays an important role in schools and as teachers spend a lot of their time involved in assessment related activities they ought to master some basic assessment competencies. Hence, it is very important to understand their teaching practices particularly, how they assess and evaluate student learning outcomes.

Teachers try to improve their assessment practices and make assessment decisions and to overcome constraints as they attempt to achieve their aspirations across a wide range of teaching practices mainly because the whole process is characterized by the friction between teachers' beliefs and perceptions about assessments and the values they bring along, as well as other external forces that they have to consider along the way McMillan (2003). Nevertheless, Teachers adapt their expertise to work within the challenging environment of classrooms and pupils' overcrowding for purposes of bringing their teaching and assessment practices for students' learning benefit.

Zhan and Burry-Stock (2003) stated that assessment is a process that entails a lot of activities. As teachers have different teaching responsibilities, their involvement and use of assessment practices are more likely to differ. Adams and Hsu (1998) claimed that teachers with varying characteristics such as teaching level and subject taught may have different explanations for varying results in assessment practices. Based on this assumption, Zhan and Burry-Stock conducted a study to examine a range of classroom assessment practices across teaching levels and content areas. They found that the higher the grade levels the more teachers used an objective type of items and teachers with assessment training had higher perceived skills in assessment practices.

2.15 Teachers' assessment impediments

Substantial criticism and problems associated with classroom assessment practices continue to prevail in schools. Research revealed that teachers show their dissatisfaction about the type of assessment training they receive during their pre-service training. (Stiggings 1991, Stiggings & Bridgeford, 1985) indicate that the assessment training teachers received focused on methods and techniques relevant for large scale test administration and score interpretations, and did not expose them to assessment techniques needed in classroom settings. Thus, a reappraisal of the role of assessment issues is critical to fit the teachers' needs.Campbell & Evans (2000) claimed that teachers' failure to attend issues of consistent scoring and content-related evidence of validity to assess students' learning is directly connected to misconception and instruction inadequacy.Recommendations urged teachers to incorporate the suitable

tools into classroom practices and adhere to required assessment principles and to build classroom environments that promote the learners' skills when they assess students Stiggings (2005).

2.16 Education reform policy in Algeria

All the Algerian Constitution from 1963 until 2016, and the charters and reference texts which induce educational policy, consider education as the basic factor essential to all economic and social change. The first regulation in this area, specifying the missions, purposes and objectives of the education system, was Ordinance No. 76-35 of 16 April 1976. Similarly, the new law n ° 08-04 of January 2008 laying down the National Education Guidance Law stipulates that the Algerian school aims to train citizens with indisputable national benchmarks deeply attached to the values of the Algerian people who are capable to understand the world around them, to positively interact with the community in which they live and able to open up to universal civilization. To this end, education aims to:

- To provide students with knowledge and skills and prepare them to reach high standards in different disciplines.

- To train students for responsible citizenship and prepare them to implement the norms and values of society and moral responsibility.

- To provide students with skills and knowledge needed to be competitive in a global economy.

- To involve students in different segments of learning not only the cognitive process but including behaviours, personality traits and manual cleverness.

The curriculum was designed to suit norms, needs and practices of the Algerian people, so the society contributed to the instructional content. Major changes were imposed to improve standards of the new educational policy by introducing CBA. This revised policy encompassed global perspectives to improve national literacy levels. In order to achieve this end, teachers received vigorous training that prepared them for new responsibilities to take care of all aspects of the educational context. The teacher training program was more focused on primary education and teachers were trained on

how to teach all subjects in primary schools. The stakeholders' priority was to enhance the quality of education by increasing the teachers' level of proficiency.

2.16.1 The educational reform process

The National Commission for the Reform of the Education System was set up on 13 May 2000 by the President of the Republic; and the People's National Assembly voted to reform the education system in July 2002. The revision of curricula and textbooks was initiated in 2002. The National Program Commission has been entrusted with the task of preparing a methodological reference document, a working tool for the developers and validating the draft programs before their presentation to the Minister for Education. The Specialized Disciplinary Groups, based on the methodological reference document, prepared draft programs to be submitted for validation by the National Program Commission. The Commission for the Accreditation of Textbooks and Other Teaching Materials evaluated the schoolbook as well as any extra-curricular teaching materials before it was put into practice in schools. From a pedagogical point of view, the general methodological reference system places pupils at the center of educational relations. It considers the pupil as an active element in the class, and not a passive element that only receives, learns and recites.

The competency-based approach (CBA), derived from constructivism, is based on the logic of student-centred learning and student responses to problem situations. The main thing is not only to give knowledge, but also, and above all, to use his abilities in everyday situations that apply to his life and help him learn for himself. This approach is essentially characterized by its integration and its capacity to create a bridge between knowledge on the one hand and skills and behaviour on the other. The programming and implementation of the programs started simultaneously in the first primary year and the first medium year from September 2003 to the end of the cycle to the implementation of the fourth average year in September 2006 and the fifth year Primary education in September 2007. (MEN and UNESCO, 2005 and 2006).

The 2008 guidance law stipulates that the school performs the functions of instruction, socialization and qualification. The school's mission is to ensure that all pupils receive quality education that fosters the full, harmonious and balanced development of their personality and gives them the opportunity to acquire a good level of general knowledge and sufficient theoretical and practical knowledge to integrate

into the knowledge society. In this capacity, it shall in particular:

• To ensure that students acquire knowledge in various disciplinary fields and mastery of the intellectual and methodological tools of knowledge promoting learning and preparing for active living.

• To enrich the general culture of pupils by deepening their scientific, literary and artistic learning and adapting them permanently to social, cultural, technological and professional developments.

•To develop students' intellectual, psychological and physical capacities as well as their communication skills and the use of different forms of expression: language, art, symbolism and body.

• To provide cultural training in the fields of arts, literature and cultural heritage.

• provide students with relevant, strong and sustainable skills that can be used effectively in genuine communication and problem-solving situations that make them able to learning difficulties, take an active part in social, cultural, and economic spheres and adapt to the globalization quick change.

• To allow the mastery of at least two foreign languages as an opening to the world and means of access to documentation and exchanges with foreign cultures and civilizations.

•To integrate new information and communication technologies into the student's environment, teaching objectives and methods, and ensure that students are able to use them effectively from the earliest stage of schooling.

•To provide opportunities for all students to engage in sport, cultural, artistic activities, and to participate in school and community life.

Students at this level study a number of subjects such as Arabic grammar, French, science, civic education, art, religious education, moral education, music and physical education. (Directive law of Education, 2008: article 44). After completing five years of elementary education pupils take a national standardized examination (Primary Education Certificate Examination). This standardized examination was originally a selection test but has been developed into a criterion-referenced test meant to measure their competency level before they move to middle school. To show overall performance, students are awarded grades with merit as the highest grade that studentscan obtain with

a roll of honour certificate. A high number of students do not do very well during this important standardized examination.

Primary Education Certificate Examination (PECE) assesses achievement of students who have completed the five years of the nine years basic education program. The examination and curriculum emphasize general understanding and application of higher order thinking skills such as the development of inquiry, decision making, reasoning, creativity, problem solving, process skills, as well as the acquisition of hands on experiences.

2.17 Assessment policy environment in the Algerian context

The introduction of CBA has drawn attention to significant changes in the way assessment was perceived. First, the objectives and standards that govern assessment are clearly stated, helping both learners and teachers to use them as incentive tools to improve learning. Besides, teachers gain a conscientious knowledge of the manner of students' learning strategies. This form of assessment, therefore, is concerned not only with what is known but how it is known. The introduction of competency based assessment policy framework brings Algeria in line with international trends in the changing practice of assessment.

The role and purposes of assessment are being reviewed in many countries worldwide, and also in Algeria. The two most official documents on assessment issues, namely the Ministerial Circular No. 128/2006 concerning the assessment of pupils' achievements in primary education, underpinned by a new Circular No. 193/15 are indicators of the changing orientation of policy towards assessment. The Office for Evaluation, Guidance and Communications (la Direction d' évaluation de l'orientation et de la communication, 2006) both focus strongly on the role of assessment in increasing and improving students' learning outcomes. Accordingly, teachers are invited to monitor and assess the students' learning by using different strategies:

- Daily observation by intensifying oral and written questions of short-term interrogations.
- Focus on practical activities and individual performance.
- Home works and projects that must be set up as an extension of learning that are in the section, and determines their number by the educational team according to the objectives of the article and the pace of student learning, as these functions in the
- appropriate section to fix the learning shortcomings.

Educational Reform and Pedagogical Innovation in Algeria (Réforme de L'education et Innovation Pédagogique en Algerie, 2006) has been devised by UNESCO Support Program to the reform of the education system 2006 (Programme d'appui de l'UNESCO à la réforme du système éducatif) generally known as (PARE):

> "Assessment of students' achievement is a basic issue in the development of an education system. Not only does it act as an indicator: "Tell me how you evaluate, I will tell you how you instruct", but it also has a power of influence on educational practices: "You will train according to how students will be assessed" Gerard (2006: 85) translated from French.

To achieve the new expectations and goals, teachers must be competent with assessment methods. Promoting the educational process can only be achieved by applying quality assessment strategies. To ensure effective teaching and learning, efficient assessment use must be implemented into classroom practices. There is a clear evidence that a lot needs to be done to learn more about classroom assessment for teachers in Algeria. Educators must find ways of improving practices in an attempt to meet the expectations by emphasizing the use of effective assessment procedures that have the potential to provide all learners with equal opportunities to reach their educational potentials.

2.18 Teachers' classroom assessment practices in Algeria

It is now over a decade since Algeria implemented the educational reforms which emphasize the need for quality education for its sustainable development. Regardless of these, there is no clear indication that enough is being done to address teachers' classroom assessment practices so that they can be aligned with the stipulated reforms. Generally, the Algerian primary school teachers still continue to rely heavily on the use of multiple choice types of tests and other forms of traditional assessment to assess students' learning, paying minor attention to other forms of assessment such as formative assessment or assessment for learning, generally known as alternative assessments (Bachman, 2002; Huerta-Macias, 2002).

Alternative assessments concentrate on the processes and rationales of instruction. There is no single correct answer, instead, students are guided to devise, thorough, and justifiable responses; performances, and products. Alternative assessments allow students to construct original responses and require learners to deal with a significant number of tasks rather than respond to a sequence of trivial duties.

The primary school teachers' methods were studied (see chapter 4) to determine the extent to which assessment practices make use of items that adequately measure the six levels of Bloom's cognitive behaviours Bloom (1956) in order to enhance the quality of students' learning. Evidence revealed significant divergences between how teachers perceived the teaching-learning process and the level to which their classroom assessment practices are efficient to provide learners with adequate skills for the development of cognitive behaviours. Most of the teachers showed little knowledge and competencies concerning recommended assessment techniques.

The most visible types of assessments within the Algerian educational system were for many years summative, measuring the students' achievement through testing and examination which allow students to access a new level of education. This fact lasted until the launching of the educational reform in 2003 which aimed at improving the quality of the teaching materials in the Algerian primary schools. Indeed, there is an appeal to stress the importance of formative assessment and to call attention for its neglect for many years.

2.19 Assessment problems in the Algerian school

The development of teachers 'abilities to use competency based assessment in the classroom is affected by factors including the nature of teaching itself, teacher unfamiliarity with competency-based assessment, and the implementation of the second generation programs. Issues emanating from these factors arise at all levels of program development and research, from informing education policy; to planning and executing a classroom-based assessment project Graham, (2005). Moreover, these factors are interactive and exhibit different influences on a given program in different situations.

Competency-based assessment strategies seem to be established in the new curriculum, but it is not clear that teachers can easily and quickly learn to adapt the new strategy to instructional needs. The researchers observed that assessment strategies that primary school teachers are forced to use, found little change in instructional strategies. Thus, some barriers, which impeded teachers' classroom assessment, were identified:
1-Teachers had insufficient content knowledge to implement the competency-based assessment approaches to the student tests.

2-a lack of deep understanding of the subject matter.

3-a lack understanding of the methodology so as to impart procedural knowledge to students so they could learn from problem-solving.

4-Teachers failed to develop appropriate teaching practices and adjust their traditional beliefs and understanding.

2.20 Conclusion

Researchers agreed that assessment is a key element in the educational process. It represents the third pillar of the teaching-learning process beside the courses conception and classroom practices. Assessment enables teachers to make informed decisions regarding graduation, selection and placement of students to higher educational levels. Teachers' proficiency in classroom assessment practices is highly documented (Zhang, 2003; Gelbal, 2007 ; Popham, 2009).Thus, teachers are assumed responsible for students learning. In this respect, they should harmonise their teaching practices and make them pertinent for improving the assessment strategies that can lead to a better interpretation of the students' Needs and push them to acquire learning.

The literature review about classroom assessment plays a major role in shaping and informing necessary decision making in education. MacMillan and Nash (2000) argued that the teachers' beliefs and values play a decisive role in guiding students' achievements in relation to curricular objectives and overall learning goals. The assessment criteria are supposed to describe the objectives and performance levels that are needed for each grade level. The main idea is centred around the performance standards differentiated by cognitive demands, in line with the Bloom's taxonomy defined by Anderson & Krathwohl (2001).

The Department of National Education requires teachers to use different assessment activities for promotion learning purposes for example: portfolios, class works, home works, assignments, tests and projects, (Ministerial Circular No. 128/2006 and Circular No. 193/15). However, regardless of this role, educators continue to disregard teachers' classroom assessment practices. Evidence showed that teachers are not doing much efforts to comply with acceptable assessment conventions or standards which may have major implications on the quality of teaching and learning and may ultimately prevent many students from attaining their educational goals.

Assessment is not a separated component from the curriculum nor from instruction. It is integrated into teaching and learning for the sake of judging students' performance, to inform the teaching, and to improve the learning. That is to say that planning,

instructions and assessment complement each other in a harmonious entity to generate effective learning outcomes.

The second chapter exhibited the need for assessment as a classroom activity to enhance the students' learning achievements. It makes it clear that assessment is an integral part of the instruction that informs and guides both teachers and learners to construct an adequate learning environment. The classroom practices that result from the learners sharing problems and solutions are, in fact, an assessment event. This chapter detailed that assessment, being for or of learning, is used to serve different and valuable purposes, because it is the purpose which determines how assessment strategies are planned and applied. The need for gathering and understanding learners' feedback places teachers in a mode of inquiry, and therefore, the ideal assessment of learners' performance takes place through different comfortable ways by which teachers can simultaneously monitor and improve the teaching-learning process.

Teachers need to be skilful enough to support learners develop their thoughts and competencies to actively participate in the success of the planned course. Teachers who assess the learners' informal or formal knowledge are better positioned to build up the instructional activities and relate them to the process of assessment. But without understanding teachers' conceptions and beliefs about the sensitive position of classroom assessment within the teaching and learning process, teachers will continue to have limited knowledge about the future challenges they may face, as they use essential classroom assessment practices to assess the students' achievements,

This chapter focused on the importance of assessment as a daily classroom practice that includes different methods and strategies. It is tied to instruction and is always intended to define the different needs of learners. Therefore teachers need to plan, rethink, and reflect on their assessment strategies so as to enhance both the teaching and the learning practices.

3.1 Introduction

The present thesis is a qualitative study which aimed to investigate the beliefs and attitudes of primary school teachers about assessment innovation in Algeria. The chief questions it sought to answer were: 1- How do primary school teachers perceive classroom assessment? 2- Do teachers' perceptions influence their assessment practices?

This chapter is a reflective account of the steps I undertook as a researcher towards investigating teachers' perceptions towards assessment and its impact on classroom practices. It delineates the ongoing research and justifies the ontological, epistemological and methodological perspectives that were employed to probe teachers' perception and understanding of classroom assessment in Algeria. This chapter starts with a general description to illustrate the theoretical structure that underpinned the study leading to an explanation of the case study design chosen for the current field research as a proper method to approach the topic under discussion. An overview of the research design included sample respondents' teachers, methods of data collection procedures and tools for analysis is documented.

I briefly outlined the basic notions informing the qualitative framework to describe the main concepts and issues in relation to the current research. The corpus probes the teachers' attitudes, skills and use of assessment and its impact on their everyday classroom instructions. It attempts to shed lights on the multi-facets of assessment used by the selected informants, their conception, behaviour and practices. The researcher subsequently presented and justified the case study approach, rationale for the qualitative case study and general and specific sample selection of criteria used. The most conventional methods of data collection plan are discussed to provide the readers with accurate information about the topics covered in the interviews. Collected data have been categorized in order to easily deal with data analysis. Each method is examined in details, focusing on how they work in practice, when their use is appropriate and what they can offer to teachers' classroom assessment.

The methodological aspects adopted in this chapter included methods of data collection, data analysis procedures, and interpretation of the entire corpus. The researcher attempted to illustrate the research strategies and methodological issues followed in the current study in order to supply the reader with reasons why these strategies and methodology have been chosen. This was followed by ethical issues and

limitations encountered during the conduct of research. The summary of research methodology synthesizes the overall research study and explains how data gathered were processed, analysed and interpreted.

3.2 The research paradigm

A paradigm is defined as a worldview which determines how the research should be designed, the principals governing the study, and the approaches used in the interpretation of the data. It is a set of ideas and concepts which provide the structure for understanding a particular issue. Patton (2002: 69) claims that a paradigm is "a way of thinking about and making sense of the complexities of the real world." Ritzer (2001 :60) states that:

> "A paradigm is a fundamental image of the subject matter within a science. It serves to define what should be studied, what questions should be asked, and what rules should be followed in interpreting the answers obtained. The paradigm is the broadest unit of consensus within a science and serves to differentiate   one scientific community (or sub-community) from another.It subsumes,defines and interrelates the exemplars, theories, and methods and tools that exist within it."

Bogdan & Biklen (2007:24) add that a paradigm is considered as "logically related assumptions, concepts or propositions that orient thinking and research." Methodological adoption is not only guided by the research questions but also by beliefs on how the world should be studied and understood Denzin & Lincoln (2005). In the educational field, the term paradigm is referred to specify a researcher's worldview. Mackenzie & Knipe, (2006:26) contend that :" This worldview is the perspective, or thinking, or school of thought, or set of shared beliefs, that informs the meaning or interpretation of research data."

The starting point in my quest for exploring the teachers' assessment beliefs was to determine where to settle my research. I had to decide which of the two research paradigms, qualitative or quantitative, could give adequate answers to my research questions. Both methods are tools used to reach the same purpose with different techniques and procedures (Corbin and Strauss, 2008; Gorard, 2001; Maxwell, 2013; Creswell, 2009). Qualitative research tends to investigate human choice and behaviour as it occurs naturally in all of its detail. It provides ample data about real-life people

and situations (De Vaus, 2014; Leedy and Ormrod, 2014). Qualitative research tries to understand multiple facets and levels of reality such as persons' lived experiences, behaviours, emotions and feelings (Atieno, 2009; Hammarberg et al., 2016) and how these dimensions come together holistically to describe the organizational functioning and social movements of the group under study.

In contrast, quantitative research is considered as a regular process in which measuring and numerical data are used to collect information about a given phenomenon to get clear-cut, reliable results, factually reflecting the situation under study (Gorard, 2001; Connolly, 2007; Shank and Brown, 2007; Cohen and Morrison, 2011). Quantitative research is conclusive in its purpose, as it deals with numbers and anything that is measurable in a systematic way to quantify variables through a defined process to reach results representing a larger population. Bryman (2012) argues that quantitative research approach is the research that places emphasis on numbers and figures in the collection and analysis of data.

Various attempts were undertaken to carry on research on teachers' beliefs within the quantitative approach often using questionnaires as methods of data collection (Quillen, 2004; Fives and Buehl, 2005; Chan, 2004). While I recognize that the study of beliefs can be conducted within a quantitative research paradigm, I argue, however, that different results may be obtained when studied within a qualitative research paradigm. Johnson (2008) claimed that quantitative research can be useful in terms of providing generalized descriptions of certain aspects of human behaviour. But I consider that it would not be efficient enough when investigating human constructs in an in-depth way. It is argued that researching teachers' thinking and perceptions is not easily manageable to quantitative measurement, and hence it suggested that a qualitative approach would be more appropriate to study this construct Pajares (1992).

While such a distinction has often dominated discourse on research, I took the position of other trends, mostly in educational research, which argues that the relationship of qualitative with quantitative can best be seen as complementary rather than competitive. Becker (1996) points out that there are more similarities between qualitative and quantitative methods to consider than there are differences. Other researchers such as Johnson and Onwuegbuzie (2004) adopted a "mixed method research" stance in an attempt to put an end to what is known as "paradigm war"(Robson, 2002 ; Tashakkori & Teddlie, 2003; Mingers, 2004; Buchanan & Bryman, 2007; Johnson& Christensen 2008).

The rationale for the selection of an appropriate paradigm is therefore determined by ontological and epistemological beliefs (Schwandt, 2000; Schraw &Olafson,2008; Kelly, 2013). As a whole, ontological, epistemology and methodology are referred to as a research paradigm, a framework or set of beliefs that influence decision-making and action Denzin & Lincoln (2000). According to TerreBlanche and Durrheim (1999), a research paradigm is a comprehensive system covering interrelated practice and thinking that determine the nature of a study along three main facets: ontology, epistemology and methodology.

3.2.1 Ontological foundations

The term ontology is mainly related to the investigation of social issues and human reality Burns (2000). In contrast with the positivists' view that there exists only one single reality that can be seen, known and measured, the interpretivist social research started from the assumption that reality represents an interpretive mechanism that processes human experience and constructs meanings for individuals Sarantakos (2012). Glesne (1999) argues that social reality is supposed to be constructed through participants' perceptions of the social setting. Reason (2003:262) reported this standpoint and stated that "our reality is a product of the dance between our individual and collective mind". McLaren (2003) argues that people think differently on what they see and experience. Hence, when people are engaged in daily discussions, they exchange their experiences and understandings-their subjective view of knowledge, possibly creating new understandings.

Following the ontological view that knowledge is co-generated by individuals within a specific socio-cultural context, informed the research design of the current field study. The present dissertation is constructed on the view that the world is a function of personal interactions and perceptions, which are subject to interpretation, rather than absolute measurement Merriam (1998). The study is underpinned by a constructivist ontology which sees reality as a social, and multiple construction Guba (2005). It recognises that the findings presented in this research cannot be a direct representation of an external, objective reality, but rather that they have been constructed through an intersubjective process, with myself and the participants in interviews and discussions-linked to my field research.

3.2.2 Epistemological perspectives/ foundations

Epistemology is a result of a researcher's ontological position and refers to his assumption about the best ways of acquiring different forms of knowledge. The constructivists stated that knowledge is produced by the individuals within a particular social context Silverman (2015). Socio-cultural beliefs highlight people's activities as the prime focus of research. What the researcher believes about the nature of reality will affect how he/she defines the questions he/she is seeking to investigate:

> "The ways of thinking and acting incorporate an interrelated set of beliefs and assumptions providing rules and maxims which operate both as instructions about how events and situations are to be interpreted and as prescriptions about how to proceed if one's practice is to be interpreted by others..." Carr (1986:178).

In the same strain Wertsch (1993: 8) noticed that: "When action is given analytic priority, human beings are being viewed as coming into contact with, and creating, their surroundings as well as themselves through the actions in which they engage." The ontological and epistemological foundations create a holistic view of how to tackle the different sections of the present study. Denscombe (2010:5) states that " research strategies are neither 'good' nor 'bad', nor are they 'right' or 'wrong'. It is only in relation to how they are used that they take on the mantle of being good or bad, right or wrong."

My personal stance on educational research is founded on a constructivist epistemology which recognises the "multiple, holistic, competing, and often conflictual realities of multiple stakeholders and research participants" (Lincoln 1990:73), and that human behaviour can be complex, individual and influenced by personal choice Cohen, Manion & Morrison(2011). I position myself as a researcher within the interpretive social theory and within the constructive-interpretive paradigm Denzin & Lincoln (2008) in an attempt to understand the teachers' beliefs and understanding of classroom assessment and feedback practices. It is important to recognise that accounts to be expressed are "temporary, time- and place-bound knowledge" (Lincoln, 1990:77), and that findings represent a snapshot in time rather than furnishing an accurate picture of teachers' conceptual issues.

I aim to represent the "subjective meanings" of participants Pring (2000:98), but also to involve reflexive analysis to tackle the nature of the relationships between

perception and practice, in order to acknowledge the teachers' beliefs and values which I bring to the ongoing study, and which will surely enrich my understanding. My own experiences as a former teacher and later on as an inspector to the profession may have positioned me in alignment with some participants. Taking this into consideration, I have to keep far from the influence of my past experiences to achieve objectivity and to align with Heidegger's theory that, "through authentic reflection, we might become aware of many of our assumptions" (Byrne 2001:830).

3.3 The paradigm guiding the current study

This research explores teachers' understandings about the correct application of competency-based assessment in primary schools in Algeria. The study adopts an interpretivist paradigm to explore the socially-constructed nature of reality that forms these teachers' understanding of assessment practices. The interpretive research paradigm started from the assumption that human experience is not determined by a series of criteria. Instead, many realities and many interpretations of a single social event are involved in building human knowledge.

The interpretivists consider that "reality is a human construct" (Wellington, 2000:16), and through investigating, elaborating and sharing the "multiple socially constructed realities" (Imel, Kerka, & Wannakot, 2002:3) the researcher generates insights into their constructed situations (Wellington, 2000). Crotty (1998) claims that interpretivism combines with constructivism in seeking to promote socially-constructed knowledge in order to provide an insightful interpretation of people's experiences. Knowledge is built through the meanings attached to a phenomenon studied; researchers interact with the participants of study to obtain data and inquiry changes both the researcher and the participants (Coll & Chapman , 2000; Cousins, 2002). Schwandt, (1994:118) argues that:" These persuasions share the goal of understanding the complex world of lived experiences from the point of view of those who live in it ." Interpretive research is fundamentally concerned with meaning and it endeavours to understand social members' descriptions and understanding of situations (Henning, Rensburg & Smit, 2004: 20). Central to this view, Smith and Ragan (2005) posit that there is not a single reality to be discovered, but that each individual constructs a personal reality. Congruous with the ontological premise that knowledge is constructed through social interactions within a specific setting, this study is conducted by this interpretive ontological stance.

The present dissertation adopts an interpretive paradigm to explore the socially-constructed attributes of reality that forms primary school teachers' assumptions about assessment. It seeks to explore and explain different facets of teachers' beliefs about assessment and highlights the relationships between their perceptions and classroom practices. The reality represents an interpretive device that processes experience and makes such experiences meaningful for individuals (Sarantakos, 2012; Merriam, 2009). Thus, this study contributes to the understanding of how teachers conceive assessment, and how these beliefs can be reflected in their practice.

The interpretive research paradigm in this study would be used to explore the teachers' perceptions and attitudes about classroom assessment experiences. Through interviews, rich descriptions of the assessment problems facing primary school teachers were generated. These descriptions provided data from which perceptions regarding the teachers' assessment problems could be used to inform professional policy as well as on-going skills development of the professionals. Merriam (2009: 8-9) stated that:

> "Interpretive research, which is where qualitative research is most often located, assumes that reality is socially constructed.Researchers do not"find" knowledge; they construct it."

Consistent with the ontological hypothesis that knowledge is built through social interactions within a specific setting, this study is guided by this interpretive ontological view. So, qualitative methodology was an appropriate way to achieve the research objectives. The researcher has immersed within the participants' context and gets close to the people, situation and phenomenon under study. Patton (2002) claimed that the researcher's personal experience and insights are an important part of the inquiry and critical to understanding the questions: how did teachers conceptualise classroom assessment to help students work out; how did they monitor and evaluate what they did within the learning process.

Nunan (1992:6)claims that research can be conducted within eight possible paradigms, two of which are pure forms and the other six are mixed forms. The paradigm adopted to deal with a given issue determines our framed vision and the way which we construe, what we observe and how we solve emerging problems Gipps (2002). This field research is established within a constructivist/ interpretivist paradigm. The latter is described as the 'one which utilises a non-experimental method,

yields qualitative data, and provides an interpretive analysis of the data' Nunan (1992: 4). Table 3.1 summarizes the research paradigms as proposed by Nunan (1992).

Table 3.1	Possible research paradigm adapted from (Nunan, 1992:6)	
Form	Paradigm	Characteristics
Pure Forms	**Paradigm1** Exploratory-interpretive	Non-experimental design – Qualitative data – Interpretive analysis
	Paradigm2 Analytical-nomological	Experemental design- Quantitative data –Statistical data
Mixed forms	**Paradigm3** Expimental-qualitative-interpretive	Experimental design- Quanlitative data –interpretive analysis
	Paradigm4 Experimental-qualitative-statistical	Experimental design- Quanlitative data –Statitical analysis
	Paradigm5 Exploratory-qualitative-statitical	Non-experimental design- Quanlitative data –Statitical analysis
	Paradigm6 Exploratory-quatitative-statitical	Non-experimental design- Quantitative data –Statitical analysis
	Paradigm7 Exploratory-quatitative-interpretive	Non-experimental design- Quantitative data –Interpretive analysis
	Paradigm8 Experimental-quantitative-interpretive	Experimental design- Quantitative data –Interpretive analysis

This dissertation adopted an interpretive - exploratory research paradigm which is one of the most widely practiced approaches in social sciences (Lazaraton, 2005;

Murtonen, 2005). It is used to explain phenomena on interpretive based methods in order to explore and understand individuals and groups social problems Creswell (2014). Denzin & Lincoln (2000:3) argue that "qualitative researchers study things in their natural settings, attempting to make sense of or to interpret phenomena in terms of the meanings people bring to them."

Research acknowledges the significance of subjective human creation and is built upon the premise of social construction Baxter & Jack (2008). The approach enables the collaboration between the researcher and the target informants and allows the participants to talk freely about a given issue to obtain data Crabtree & Miller (1999) in Baxter & Jack(2008). This tied with the focus of the research as its purpose was to gain a deep level of understanding of the perceptions of a specific group of teachers facing   assessment implementation problems in the Algerian primary schools.

3.3.1 The rationale of the interpretivist research paradigm

The interpretivist model formed the suitable research design for my study. From an ontological view, teachers would offer multiple, equally valid descriptions and explanations of classroom assessment and feedback. Epistemologically the target group of teachers and the context are detailed as the 'knowing' subjects. Methodologically the researcher / participant intercommunication in the research is of value and subjective. Creswell (2009:8) affirms that individuals seek "understanding of the world through development of subjective meaning of their experiences which are varied and multiple". Hence, this was considered the best fit for my inquiry.

The interpretivist view is based on the assumption that there are multiple interpretations of any event, as experienced by participants, and all contribute to the comprehension of such event Stake (2010). This was obvious in collecting data for this study: each teacher held his own beliefs and understanding of assessment, feedback and implementation, based on their own learning experience, level of education, and setting. Thus, the interpretive concept of understanding, implication and engagement Guba & Lincoln (1994) would help me in perceiving their beliefs, actions and performance in classrooms.

3.4 Research methodology

Research methodology is a devised outline used to shed some lights on how the study is to be conducted. It is framed within a research paradigm Henning et al. (2004:12) viewed

through a particular mental process and constructed using selective approaches and techniques. It exhibits how all of the main parts of the research study work together in an attempt to deliver data, analysis and findings that suit the research purpose and answer the research questions. Myers (2009) posits that research methodology is a process of investigation which moves from the underlying premises to research design, and data collection

3.4.1 The Qualitative research methodology

This dissertation used a qualitative research approach within the interpretivist paradigm Denzin & Lincoln (2005) mainly because of the potential of this approach in deeply investigating the phenomenon in its real context. Creswell (2009) asserts that qualitative research is interpretive in principle. The qualitative research fulfilled the purpose of the proposed study, which was to gain and to provide a rich complex, textual description of how teachers were experiencing assessment in primary schools. It is suited for an interpretive research paradigm with its emphasis on experience and interpretation. The purpose of this paradigm is to explore and explain the way people interpret and deal with everyday setting matters Wimmer & Dominic (2013). Such view requires deep mental involvement in the informants' setting to unveil, through ongoing interaction, interviews and observations, the participants' beliefs, viewpoints and meanings Marshall & Rossman (2014). According to Burns (2000) qualitative research and teaching practices have strong connections. This connection might stimulate teachers to involve in the research process and use the results to make new decisions. This made the researcher more decisive in using a qualitative methodology. Denzin and Lincoln's (1994:2) state that :

> "Qualitative research is multi method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials ... that describe routine and problematic moments and meanings in individuals' lives. Accordingly, qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject matter at hand."

People make sense of the world when they are deeply involved in discussion and reflexive practices.Guba and Lincoln (1994) claimed that qualitative data are a person's own experiences to better understand the events and subject matters under investigation. They recognised that qualitative research reports are rich in details and insights and help us better capture and understand the participants' perceptions and perspectives. Following this line of thought, the qualitative research method was adopted in this study in an attempt to understand teachers' perceptions and attitudes on assessments in primary schools.

By situating this research within the interpretive-exploratory paradigm and emphasising qualitative inquiry, this study endeavours to complement the existing literature on assessment and feedback in the primary classroom using different methods, notably survey, interviews, document analysis and observation of teachers' classroom assessment strategies as key data collection methods to examine teachers' beliefs and attitudes towards classroom assessment and feedback and its impact on students' learning outcomes. This put emphasis on understanding and interpreting teachers' own beliefs and conceptions of classroom assessment, and provided the most appropriate approach in gaining an in-depth "thick description" of the participant teachers, these teachers being the people most knowledgeable about the phenomena Stake (1995:102).

3.4.2 The rationale Qualitative research methodology

My selection of a qualitative research method has allowed me to explain my research questions from a different perspective and to explore the problematic of teachers' beliefs about assessment issues in a more in-depth way, generally known to be hidden and intangible. My choice of qualitative enquiry was primarily triggered by the nature of the phenomenon under investigation, which is the participants' beliefs, understanding and use of assessment. I tried to stretch the work on the complexities of teachers' beliefs and their influences on students' learning by providing the perspective of teachers' educational experiences and influences of their school setting, collegial assistance and assessment resources. The understanding and conception of individual teachers in their specific context provide opportunities for content related evidence to emerge Crooks, Kane & Cohen (1996). Data collection methods like interviews and observation helped me explore the beliefs/practices connection at a deeper level and

allowed flexibility to probe the depth of teachers' complex, embedded and implicit beliefs on classroom assessment and feedback.

   The rationale for the choice of the qualitative research method was that it would be used to examine teachers' beliefs and experiences of classroom assessment and through interviews, rich descriptions of their assessment practices were generated. These descriptions provided data from which perceptions regarding teachers' assessment could be used to inform education policy about the implementation of competency based assessment.The boundaries of the present study are confined to gauging teachers' personal theories, beliefs and perceptions, and to give interpretations of their perceptions about the assessment practices. To reach this end, a qualitative-interpretive approach seems adequate for this dissertation.

   Besides, the use of qualitative case study is crucial whenever the researcher aims at focusing on a specific educational phenomenon and tries to gain theoretical knowledge and practical insights from analyzing that case, such as teachers' assessment perceptions in primary school context. As Freebody (2003: 81) mentions, "Researchers in a variety of professional and practical domains use case studies as a way of conducting and disseminating research to impact upon practice, and to refine the ways in which practice is theorized".

3.5   Case study design

   Case study design is a well-recognised tool in many social science studies Zaidah (2003). It is used to reach in-depth explanations of a social behaviour and becomes more prominent when dealing with issues regarding education matters (Gulsecen & Kubat, 2006) to investigate the efficacy of educational programmes and initiatives to produce a desired or intended result. One of the reasons behind the recognition of case study as a research method is that researchers were becoming more aware of the limitations of quantitative methods in yielding holistic and in-depth explanations of the social and behavioural data that need to be uncovered. Gillham (2000a:1) states that a case study answers specific research questions which explore a variety of different evidences from the case settings to arrive at the best potential answers to the research question(s). Tellis (1997) claims that a case study helps to describe the process and result of a given phenomenon through observation, reconstruction and analysis from the participant's perspectives. Yin (2003) affirms that case study design was

particularly appropriate for a researcher to closely examine educational practices because it contributes to understand significant concerns linked to the educational area. Morris & Wood (1991) assert that case studies are more appropriate for the understanding of a particular situation. The purpose of the case study is to focus on the selected phenomenon to gain deep understanding regardless of the number of sites, participants and documents for the study McMillan & Schumacher (1993). Accordingly, a case study is an in-depth process for investigating and explaining a given topic, using multiple sources of evidence to show how something happens in a real life situation. A case study is a flexible research design Mills, et al.(2017) producing comprehensive knowledge of a wide array of human social issues:

> " the case study researcher typically observes the characteristics of an individual unit - a child, a clique, a class, a school or a community. The purpose of such observation is to probe deeply and to analyse intensively the multifarious phenomena that constitute the life cycle of the unit with a view to establishing generalisations about the wider population to which that unit belongs." Cohen and Manion (1989: 124-5)

Case study design is used in research contexts to investigate holistic and significant features of actual life situations or events. In a case study, data analysis requires three main strategies. Yin (2003) argues that these strategies are closely related to theoretical propositions, rival explanations and case descriptions. The latter was adopted to describe the strategies of the case study in order to develop a detailed framework for designing teachers' assessment assumptions and attitudes .

3.5.1 The rationale for case study design

Several "preconditions" helped the researcher decide on the suitability of using a case study Kenny & Grotelueschen (1980). First, because the wanted objectives focus on humanistic issues as opposed to behavioural outcomes or individual differences. Second, because the information from classroom teachers is not subject to truth or falsity but is subject to investigation on the grounds of credibility. In fact, the aim of a case study is not to find the 'correct' or 'true' interpretation of the facts, but rather to eliminate erroneous conclusions so that one is left with the most compelling, interpretation (Bromley, 1986). Third, it focused on fieldwork with a clear purpose of understanding the perceptions and perspectives, by observing participants doing their

ordinary business in specific settings. Fourth, because of the uniqueness of the situation. At the time of this study, no such research programme was undertaken to develop a better comprehension of the dynamics of classroom assessment in Algeria. These preconditions are congruent with the four characteristics of case study, namely: particularistic, descriptive, holistic, and inductive.

This case study explores an important current concern in Algeria namely primary teachers' perceptions and understanding about the current implementation of competency-based assessment in primary schools. Qualitative case study is an appropriate approach to answer 'why' and 'how' questions which are good for exploratory study (Yin, 2003; Nunan, 1992). Accordingly, a case study is used to investigate a phenomenon in which the intervention being evaluated has no clear, single set of outcomes. In the ongoing study, the researcher aimed to answer 'how' questions, which are frequently asked for case study and exploratory research.

3.5.2 Research questions

The present study comprises a description of teachers' beliefs about their assessment knowledge and its impact on students' achievements. Within the broad definition of cognition, I have settled my research questions by using a model of belief based on the concepts developed by Pajares (1992). The main goal was to explore how elementary school teachers in Algeria understand classroom assessment. With the focus on exploring teachers' conception of assessment, the main research question is: How do primary school teachers in Algeria perceive classroom assessment? The use of a "how" question to interrogate data is consistent with case study design Yin (2003), and exploratory case study in particular Yin (2009). The study focused specifically on how teachers think about the assessment notions in relation to planning, teaching and assessing the primary school learning outcomes. Hence, the following specific questions guide the data collection stemming from the main research question:

1- What beliefs do teachers espouse about the value of classroom assessment practices? How do teachers define the role of assessment in the teaching-learning process?

2- How do teachers practise assessment?

3-What is the relationship between teachers' beliefs and assessment practices?

4-What kinds of assessment methods and tools do teachers use to assess their students?

4-To what extent do teachers' perceptions influence their assessment practices?

5-To what extent do teachers manage challenges-related to classroom assessment?

6- To what extent do assessment related knowledge and beliefs underpin classroom assessment?

These questions have been addressed to twenty participant teachers, using observations and stimulated interviews to analyse their assessment practices and explore their justifications, and showing areas of tension between the two. Together, these methods will draw out both what teachers say about classroom assessment, their "espoused theories" (Argyris and Schon 1974:viii) and what actually occurs in classrooms when they say they are 'assessing learnings.'The ultimate aim here is to access teachers' perceptions and understanding about assessment. Hence, these questions should reveal their beliefs, attitudes and knowledge about the use of classroom assessment. To answer the above questions, this research uses a large-scale survey, interview, document and observation methods with a deliberate aim to describe all predicted variables among the target teachers.

The first sub-question seeks to identify and present the range of different beliefs held as they are articulated by the participants themselves. These beliefs are expected to be diverse Schmidt and Kennedy (1990). The second sub-question aims at probing the various methods and strategies do teachers apply to assess their students? The third sub-question seeks to describe the impact of teachers' perceptions of the classroom assessment practices and come to conclusions on teachers' beliefs in view of the findings. The fourth sub-question studies the impact of teachers' assessment beliefs on students' learning quality. The interpretations of these beliefs lead the researcher to put forward some recommendations for teachers and policy-makers to reflect upon towards improving the educational climate in Algeria.

3.5.3 The case selection

Case studies are usually linked to qualitative research (Simons, 2009; Stewart, 2014) and can be multiple or single-case designs Yin (2003). A multiple case design requires a set of cases that have related or differing characteristics. A single-case design spotlights one case because it represents a critical case in testing a well-formulated theory, or that the case represents a typical case. This investigation of teachers' conceptions and understanding of competency based assessment is a single case study design because it is suitable for evoking teachers' beliefs and comprehensions about assessment and it's effect on quality learning. Neuman and McCormick (1995) claim that single-case research designs are becoming popular and acceptable to conduct

classroom-based research. A single-case study is determined as a pertinent method for data gathering that focuses on the research project. According to Tellis (1997), a case study is a suitable method when a holistic research issue is required. Furthermore, Kazdin (2011) affirms that a single case design requires a careful investigation to minimize the chances of misrepresentation and to broaden opportunities to access data.

This single critical case study investigates the views of a group of teachers (n = 20) from ten primary schools in Sidi Bel Abbes region, west Algiers. The target teachers were identified as a critical case due to their close proximity to the curriculum development and educational reforms with different levels of assessment training and workshops on how to teach and assess, using competency based strategies. Teachers had difficulties to manage assessment reforms. Therefore, studying the participants should reveal how teachers with varied levels of assessment training and workshops perceive and understand competency-based assessment as an intrinsic component to provide students with suitable feedback.

3.5.3 Rationale for qualitative case study selection

Assessment is a multidimensional social phenomenon that can be comprehended by exercising an intensive study of the various facets of classroom assessment of the contemporary education reform in which CBA has been adopted as a recommended model for instruction in primary schools. To acquire information that is accurate and interpretable on teachers' assessment perception and its impact on quality learning, a case study approach and analysis utilising descriptive data from multiple sources holds the potential to provide important insights into the ways that teachers understand the new assessment trends.

A case study was considered for it emphasizes contextual analysis to explain details and conceptualization that is possible when only one or a small number of focal cases are analyzed. It was for this reason that the case study was considered the most appropriate because the researcher was able to go deeper and probe the assessment problems facing teachers, with varying degree, to assess students' competencies and skills. The qualitative case study approach was selected for the following reason:
- It allows the researcher to scrutinize the selected issue to gain detailed and in-depth information.
- retaining a holistic and meaningful account of real life events to understand the complexity of classroom assessment.

- It is believed to provide the researcher with much information about the respective matters under investigation.

- It provides the researcher with an opportunity to experience and understand how teachers comprehend and apply assessment strategies.

3.6 Research process

Scheibe has indicated that "there is no way of describing what a person really believes, for expressions of belief are always gathered under circumstances that may deflect or distort" (1970:59). This candid account summaries the unavoidable fact that researchers can only investigate individuals' external manifestation of perceptions. Kagan(1990:459) advocates multi-method approaches "not simply because they allow triangulation of data but because they are more likely to capture the complex, multifaceted aspects of teaching and learning." Following the line of thought, my research design adopted different methods in order to explore how teachers' beliefs relate to practice rather than seeking to pinpoint and fix each participant's 'position' in relation to classroom assessment. In the first stage of the research, contextualisation is present in the method of data collection and analysis: interviews are preceded by observations so that participants and researchers can discuss precise items-related to assessment contexts, and the interviews are coded on a teacher by teacher basis. In the second stage, the case study covers contextual details and analyse cases as individuals in order to reach a more holistic picture.

The current research study adopted the qualitative case study design to approach the phenomenon under investigation, to gain an in-depth understanding, collect copious data and elicit pertinent information dealing with the main research question: How do primary school teachers in Algeria perceive competency-based assessment? A four-phases research design was implemented to gather data through surveys, interviews, documents and observations. Phase one emphasizes the teachers' conceptions and understanding about the implementation of the assessment systems expectations through an examination of the curriculum documents. Phase two documents these teachers' demographic data to understand the types of qualifications and experiences of the case study participants using survey data. Phase three explores teachers' interpretation of competency based assessment through face to face interviews. Phase four uses observation to analyze the teachers' smartness and flexibility to adopt and adapt different assessment strategies to help students generate quality learning.

Each teacher was observed teaching three lessons and then interviewed. The study offered an opportunity to interview twenty teachers about their beliefs about classroom assessment on three occasions. Each interview was preceded by a lesson observation, allowing some links between practice and espoused beliefs to be made. These interviews were designed to provide data that contribute directly to the analysis of teachers' beliefs and attitude about assessment and its impact on students' quality learning and provided data to answer principal question one of my research questions.

3.6.1 Description of the sampling protocol

Case study approach requires official procedures for choosing potential informants to avoid missing valuable data Santos, Powell& Hinks (2001) and to address research ethical requirements (Eikeland, O., 2006; Hammack, F., 1997; Holian, R., & Brooks, R., 2004) . Accordingly, the first stage of protocol to access participants was to establish contact with the Provincial Division of Education to allow the target primary schools in Sidi Bel Abbes to be contacted. Secondly, the head teachers of these schools were then requested to provide biodata identifying teachers with different teaching experience under CBE, to join the current study in order to secure a total of 20 participants. Creswell (2008) and Thomson, S. B. (2011) suggested that 20 to 30 participants for in-depth interviews is ideal to develop patterns, concepts, categories, properties, and dimensions of the phenomenon under study.

The researcher then visited each school to collect the necessary data. I sought volunteers rather than addressing individual teacher chiefly because of the potentially sensitive nature of this phase of the study which required participants to allow me to observe their assessment practices and probe their beliefs and justifications in some details. I wanted my respondents to feel comfortable with me as a visitor in their classroom and to be interested in the study, as I felt that this would prompt them to be more open and exploratory in interviews, a "tactic to help ensure honesty" Shenton (2004:66). This procedure allowed me to capture teachers' different behaviours in which beliefs and practice interact, and to suggest some of the reasons and outcomes of mismatches between them.

The selected participants comprised three kinds representing teachers with varied experiences. The first group consisted of teachers who had a university diploma. These young teachers were engaged in a one-year formal in-service training on how to deal with competency-based assessment in the Institute of Technology and Education, Institut de

Technologie et de L'éducation (ITE). They were fully trained on how to plan, teach and assess students using the current competency-based model as part of the in-service diploma program.The second group consisted of teachers who initially had a primary school certificate in teaching, then later upgraded their qualification to a diploma through the Algerian University of Continuing Education. This group included those teachers without formal in-service training but who had developed teaching strategies through assistance from their inspectors, peers, and by reading through curriculum documents. The third group composed of certified teachers who were supposed to guide the in-service program of each school to support teachers in implementing the new curriculum. All teachers involved in the study had three or more years of experience dealing with CBA curriculum and assessment. Detailed accounts of the characteristics for each group of teachers are shown in the overview of the findings in Chapter 4.

Sampling is an important constituent in field research because it is often neither possible nor desirable to collect data from the entire population Best & Kahn (1993:73). The researcher designated individuals and sites that can best supply relevant information needed to answer the research questions raised. It was difficult to visit all the two hundred and eighty-six (286) schools in Sidi Bel Abbes area / District; as such quota sampling was used to select 04 primary schools in the urban area, 03 schools in the suburban area and 03 schools in the rural area. Two rural schools were purposefully selected.

Convenient sampling was applied for this investigation. Cohen, Manion and Morrison (2007) claim that convenient sampling requires the selection of individuals to serve as informants . Accordingly, this sampling method best suited this investigation because the researcher was able to reach the respondents participants in this study. The sampling strategy followed is purposeful as participants are teachers who are busy with CBE reform practices in their day-to-day activities. Some participants have attended workshops which were aimed at informing and equipping them with knowledge and skills to implement assessment practices.

3.6.2 The selection of participants

The subject population for this study was teachers that teach at primary schools. They have different levels of teacher training and professional experience. They may have primary school level certificate, secondary school level certificate or a university degree in an area of specialization such as humanities, science, and social sciences. According to the (Orientation law, 08-04), primary school teachers in Algeria have the

responsibility to teach all the curriculum subjects. The target participants were full-time primary school teachers (Grades 1-5) teaching children aged between 6 to 11 years. Primary school teachers were selected as the informants because CBE was initially introduced into primary schools in Algeria in 2003. Thus, primary school teachers have been expected to teach and assess students' learning using the competency-based approach. All of the participants were involved in the phase one interviews. They were urged to ponder on their belief profiles and commenting on my initial analysis. Rubin and Rubin (2005) argue that research respondents should be informed about the phenomenon under investigation and should express differing points of view. This study tended to investigate how primary school teachers in Algeria understand CBE, and identifying teachers with ample experience in CBE was vital.

3.6.2.1 The participants -Teacher Sample

Participants for the study consisted of 20 primary school teachers. The sample consisted of 07 male teachers (35%), and 13 female teachers (65%). Figure 3.1 exhibits the sampling population used in tis study.
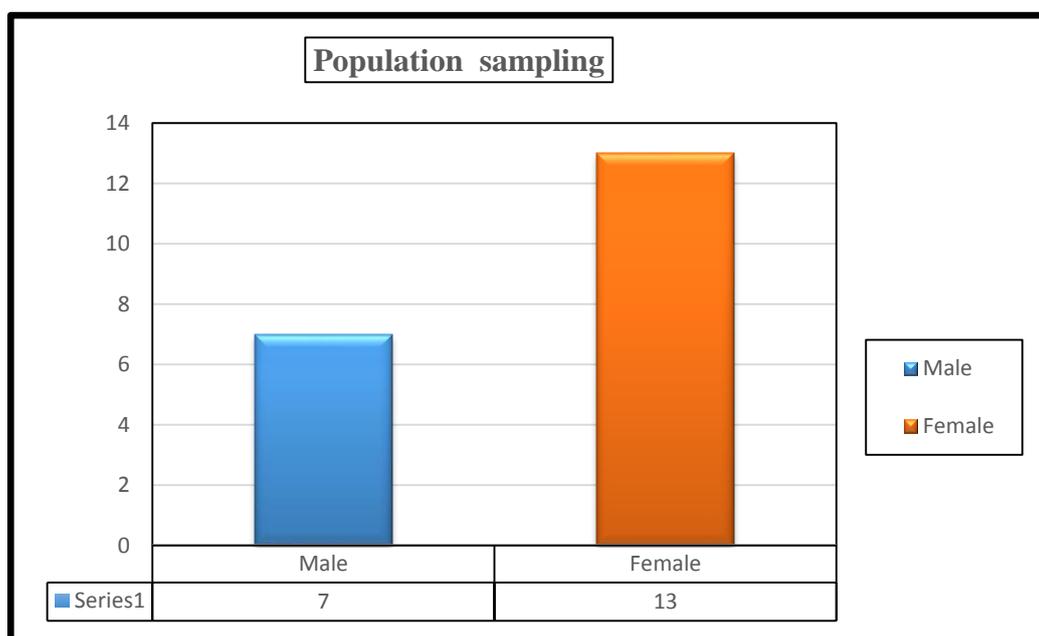
The respondents' selection was chiefly linked to their faculty to contribute to the investigator's understanding of the assessment problems facing teachers, which means engaging in deliberate sampling Merriam (1988). Purposive sampling refers to the quest for individuals with particular expertise who are most likely to boost the researcher's interest and potentially open new doors Given (2008). In keeping with the

above focus, attempts were made to ensure teachers were selected with varied qualifications, overall teaching experiences, age groups and gender. These variations enabled a broad range of perspectives to be sought about competency-based assessment when presenting the main themes in the analysis and discussion.

Two teachers per school in ten schools were randomly chosen. A network sampling was followed in selecting informants. One participant was asked to refer the researcher to another teacher who could be ready to take part in the investigation. Twenty-five percent (25%) of the target teachers had 16-20 years of teaching experience, followed by 21-25 years (15%), 6-10 years (20%), 11-15 years (20%), 2-5 years (10%), 26-30 years (10%). Figure 3.2 shows the teaching experience of the selected informants.

Figure 3.2 Teaching experience
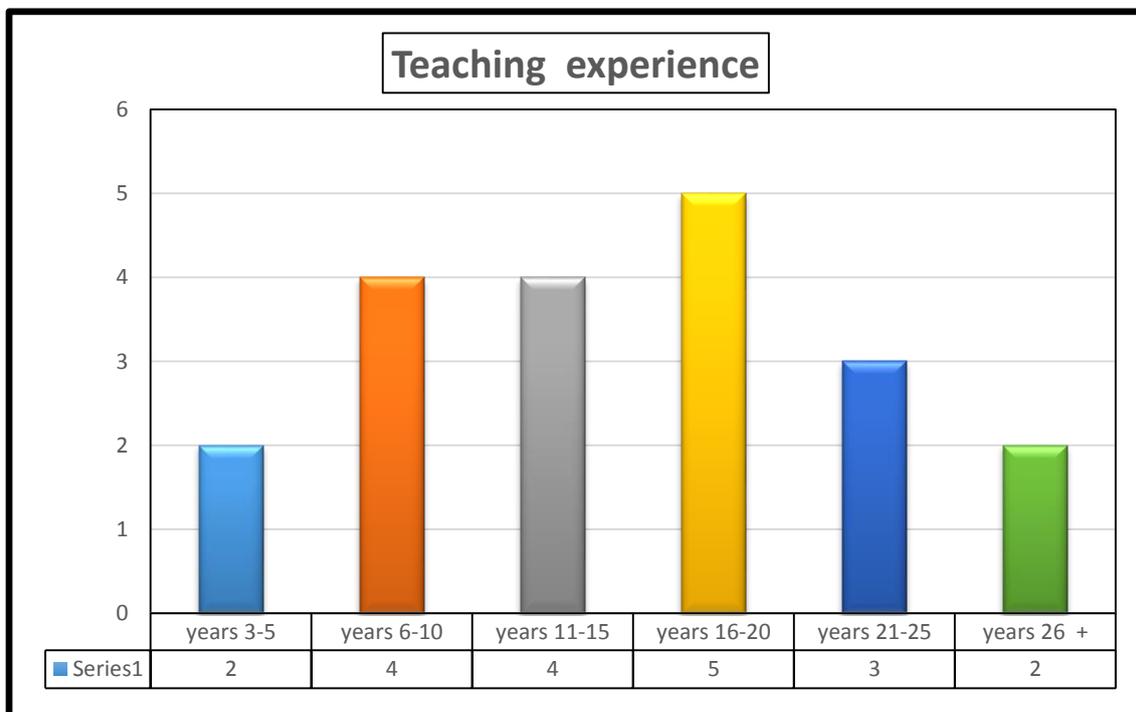
The majority (40%) of teachers were from urban settings, followed closely by those in suburban (30%) and rural(30%) settings. Figure 3.3 shows the population distribution sampling

Figure 3.3 Population distribution sampling
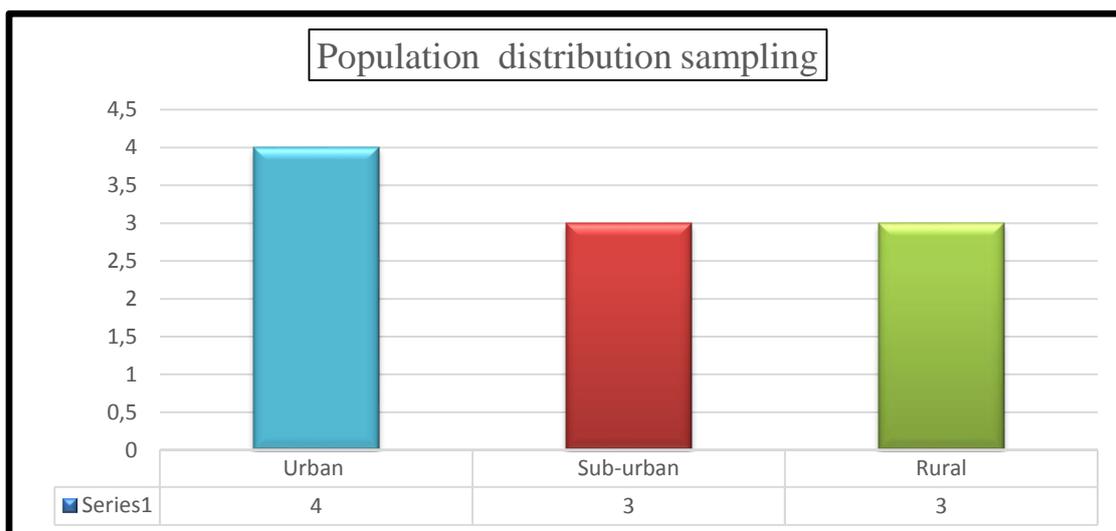
To ensure that teachers who were involved in the study represented all relevant subgroups, the sample of teachers based on their training, grade level, years of experience and school level was selected (Gay, Mills, & Airasian, 2009; Mertens, 2010). All teachers in the selected schools were asked to take part in the study, and 20 agreed to participate. The sample of teachers was fairly well representative of the country.Table 3.2 shows the distribution of teachers by experience and gender.

Table3.2 Distribution of teachers by experience and gender								
Teaching experience	**3-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**total**	**%**
Female	1	3	3	3	2	1	13	65
Male	1	1	1	2	1	1	07	35
	2	4	4	5	3	2	20	100

Different techniques are used to ascertain that the sample is representative, these techniques include determining the sample size, properly defining the population, avoiding sampling error and bias (Dillman, Smtyth, & Christian, 2009; Gay, Mills & Airasian, 2009; Mertens, 2010). Determining sample size is concerned with how much data is required to make appropriate decisions on a particular study. If there is enough data, the amount of error is expected to be reduced Abraham & Russell (2008). The selected sample of teachers is hoped to provide accurate results of the study which may be generalizable to the population (Gay, Mills & Airasian, 2009; Mertens, 2010;

Dillman, Smtyth, & Christian, 2009). All of the teachers who involved in this research were carefully observed in practice and the records they keep were deeply analyzed to investigate their assumption and understanding of assessment.

3.6.3 The setting / School Sample

This study was carried out in the district / wilaya of Sidi Bel Abbes , nearly 500kms west Algiers. The study was conducted in the Algerian primary schools. According to the local educational administration, there are 286 primary schools in Sidi Bel Abbes with a total of thirty six inspectorate areas (appendix.3). Ten conscriptions were represented in this field research. This area was chosen as the researcher works and lives there. Sampling for schools in this study was two-fold.A convenience sampling method was used to select schools that are accessible to the researcher. The sample was drawn from 10 primary schools covering different geographical area representing the major parts of Sidi Bel Abbes region.

A simple random sampling method was used to select schools in order to ensure that each school in the area under investigation had an equal and independent chance of being selected (Dillman, Smtyth, & Christian, 2009; Mertens, 2010; Gay, Mills, & Airasian, 2009). The reason for selecting this sample size allowed the researcher to draw a small and manageable number of schools from each region based on the time and data collection constraints. Patton (2002:29) posits that, "To support a holistic analysis, qualitative inquirers gather data on multiple aspects of a setting under study to assemble a comprehensive and complete picture of the situation."

3.7 Instrumentation and data collection

This study adopted and adapted instruments from the 2014 – 2015 Local Systematic Change developed by Horizon Research, Inc. (HRI). The adapted instruments were a questionnaire on the teacher's perception of classroom assessment, pre-lesson observation interview protocol, lesson observation protocol, and post-lesson observation interview protocol. The instruments were adapted to align with the main goal of the study. This combination of several data collection strategies and methods is called triangulation (Creswell & Clark, 2007 ; Golafshani, 2003; Flick, 2004; Fielding, 2012). Triangulation requires supporting evidence from diverse sources to tackle a particular theme or issue. Triangulation in qualitative research is very important to establish validity and to investigate the accuracy of the collected corpus.

Data collection used different strategies of inquiry to systematically collects information about the objects of the study such as about people, objects, or phenomenon and about the settings in which they occur (Simons, 2009; Yin, 2003). Qualitative case study approach makes use of various procedures of data gathering. The versatility of this approach makes it useful to deal with educational issues. Merriam (2009) argues that selecting relevant data collection method mainly relies on the purposes of the researcher to understand and interpret a phenomenon in a real-life context.

A single case design was used in this field research with embedded units of analysis Yin (2003). This fits well with the author's intention to investigate a real life issue through a variety of data collecting instruments. The case study involved intensive interviewing of participants coupled with the use of documentary evidence such as the record of test books, a teacher made tests, learners' activity books and assessment official documents. A single case study allowed the researcher to acquire a wealth of information about the assessment problems in primary Schools. Furthermore, Sidi Bel Abbes District is representative to other areas in Algeria because it constitutes all school types such as urban, sub-urban and rural areas.

Three principles of data collection in case studies are proposed by Yin (2003) to enhance the benefits of the selected sources of case study data and enable the researcher to gain an insightful understanding of the perceptions, values, master and concerns of the target teachers under study: (1) use of multifarious sources of facts, (2) create a case study database, and (3) keep a set of evidence. These principles including their definitions and rationales are reviewed in Table 3.3. The application of each principle in this study is described in the column on the right-hand corner of the table. The actions taken to apply the principles illustrate the need to maintain the quality of this case study throughout various phases of the research.

Table 3.3 Principles of data collection and action taken in this study			
Principle	Definition	Rationale for the principle	Action taken in this study
1.use of multifarious sources of facts	Using a multi- sources of data in case study to underpin validity and interpretation	Triangulation: enables a researcher to deal with a broad range of issues	Four sources of data use: survey, interviews, observation and document analysis

2. Create a case study repository data base	The ways of organizing and documenting data collected from case studies	Case studies have much to borrow from other research strategies or schools of thoughts.	qualitative and quantitative methods play crucial role in gathering data
3.keep a set of evidence	Allow an external observer or reader of the current case study to arrive at similar results if study conducted again using the same protocols	Increase the reliability of the information in a case study to gauge the degree of accuracy	Evidence of documents for case study protocol and proof of data attached as appendices descriptions of case study sites and inclusion of participants'' demographic data

Note. Adapted from Yin (2003, pp. 97-106).

Yin (2003) singled out six sources of data collection in case studies: documents, archive materials and records, interviews, direct observation, participant-observation and physical artefacts. A survey is also a relevant source of data for case studies Johnson & Christensen (2008). Four sources of data are used in this study: survey, interview, document and observation. These data gathering methods were used to understand the case and answers to the research questions Krauss (2005). Also, these methods enabled the investigator to focus on the assessment related impacts on quality learning as perceived by teachers. In this field research, multiple sites were visited to collect data either in urban, suburban or rural schools.The target schools were implicated in document observation, interviews, and questionnaires. Various sources of data allowed for triangulation in order to check for validation of data. Jonsen & Jehn (2009) stated that triangulation is a procedure that promotes validity of the research process through cross verification from two or more sources.

3.8 Data collection methods and procedures

The researcher used different strategies of inquiry as a guide for procedures in the main study namely surveys (Section 3.9.1), interviews (Section 3.9.2), documents (Section 3.9.3) and observation(Section 3.9.4) as sources of data to underpin validity and interpretation Henning, Rensburg & Smit (2004:19). This enabled the researcher

to gain an insightful understanding of the perceptions, values, master and concerns of the target teachers under study. Maykut & Morehouse (1994:46) state that:

> The data for qualitative inquiry is most often people's words and actions and thus requires methods that allow the researcher to capture language and behaviour. The most useful ways of gathering these forms of data are participant observation, in-depth interviews, group interviews, and the collection of relevant documents.

Within the selected schools, "multiple sources of information" were collected Creswell (1998: 62). These included individual interviews with my informants, observations of classroom assessment and feedback strategies, a collection of relevant documents (students' written drafts, teachers' lesson plans, and assessment grids) and field notes observation. The data-gathering strategies were chosen to generate information. Each data collection method served a specific purpose and was carried out within each target school on different dates.

3.8.1 Survey

A survey addresses structured questions to research participants which can complement verbal interviews Yin (2003). Such surveys are appropriate as part of a case study and generate data as supplementary evidence. A survey can be a powerful and useful tool for collecting data on human characteristics, such as their beliefs, attitudes, thoughts, and behavior (Biemer & Lyberg, 2003; Groves,. Singer, and Corning, 2000; Gay, Mills, & Airasian, 2009; Mertens, 2010). A survey research is used:

> "to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objectives have been met, to establish baselines against which future comparisons can be made, to analyze trends across time, and generally, to describe what exists, in what amount, and in what context."
> Isaac & Michael (1997:136)

In this study, a survey design was used to gather descriptive and comparative data for the purpose of describing the characteristics of primary school teachers Mertens (2010). It is used as an extra tool in order to underpin and improve other sources of data. The survey design fits well within the framework of this case study because it

explores teachers' perceptions about competency based assessment from a wide range of teachers implementing assessment instructions within the Algerian primary schools.

The survey explored the teachers' demographic data including their level of assessment awareness. The survey comprised two stages. Stage one drew on the participants' particular qualification such as gender, age, and professional background including years of teaching experience, their current position in school, current grade teaching, number of students in the participant's class, number of years using CBE syllabus, extent of formal in-service training and workshops on how to implement assessment strategies in classroom context.

Stage two attempted to investigate teachers' expressed level of perception and interpretation about the assessment strategies in primary school. Four indicators of quantity (i.e., "full", "some", "few" or "none") were used to measure how much the teachers perceived and understood the role of assessment. For example, highly competent teachers might have indicated that they had a comprehensive understanding of classroom assessment strategies. Further details related to the response formats for the survey are discussed in the data analysis section (Section 3.10.1).

3.8.1.1 Questionnaire on teachers' perception of classroom assessment

The researcher devised open-ended questions and attentively listened to what the teachers said about the problems they encountered in assessment. In this research, the interpretive research was well suited for giving a voice to teachers as they gave their views to the situation on the ground. A basic questionnaire was completed by the interviewees to verify discussion outcomes. The questionnaire was developed to collect information on teachers' assumptions and attitudes about assessment. Some survey items were modified and adapted from a similar study done by (Yue, 2012) and (James and Pedder, 2006) so as to make them more applicable to the Algerian context. The questionnaire comprised three broad sections namely, (a) demographic data; (b) belief-practice scales and (c) external contextual factors.

The first segment is focussing on two subsections. The first subsection is mainly devoted to gather demographic information about the target population, their educational background, teaching experience, teaching level, classes and subjects that they teach, and types of assessment training received (**7** items). The second subsection is based on the theoretical framework described in the literature on teachers' classroom assessment practices (MacMillan, 2008; Popham, 2008; Reynolds, Livingstone &

Wilson, 2009; Stiggins, 1994).The purpose of the questionnaire was to document, using closed-ended items, the quality and impact of the teachers' assessment on students' learning, the purpose of classroom assessment, their perceptions about test construction and grading practices (**15** items).

The initial set of items in the second and third sections of the questionnaire were adopted from Assessment Practices Inventory (API) Zhang & Burry-Stock (2003). This instrument was created and used in the United States of America to measure teachers' skills and use of assessment practices across the different levels of the teaching-learning process,   and teachers' beliefs about the implementation of assessment skills as a function of teaching experience. The (Zhang & Burry-Stock,2003) instrument consists of 67 items measured on two rating scales "use" and "skill" the "use" scale was meant to measure teachers' usage of assessment practices on a scale from 1 (not at all used) to 5 (used very often). The "skill" scale was devised to survey teachers' self-perceived from 1 (not at all skilled) to 5 (very skilled).

Appropriate adjustment were performed on the (API) instrument to fit the researcher' s goal. Based on this revision process, **10** items of the **15** original items were without modification and **5** items were modified by changing some of the words to make the content relevant to the population of teachers in Algeria , **5** items not from Assessment Practices Inventory (API) were added to the instrument. These item revisions lead to two subsections directly linked to assessment practices. In one section, teachers were invited to designate their perceived classroom assessment skills, such as constructing objective items, conducting item analysis for teacher made tests, using non- achievement factors such as students' effort, motivation, and improvement when awarding grades to students, and interpreting tests results. In the second section teachers are called to point out how often they used the assessment practices skills they perceive to have.

To determine the accuracy, the draft questionnaire was scrutinized by my supervisor and three college professors in Algeria considered being content experts in classroom assessment. Some items were reviewed for the sake of clarity and completeness in covering most, if not all, assessment and grading practices used by teachers in classroom settings, as well as to establish face and content validity of the instrument and items. Necessary revisions were made based upon their analyses.

The draft questionnaire with **15** items for assessment thoughts and **20** items for both skill and use subscales was pilot tested with primary school teachers in Algeria. This

pilot test process was meant to determine the strengths and weaknesses of the questionnaire, in terms of question format, wording and order of items. It was also meant to help in the identification of question variation, meaning, item difficulty, and participants' interest and attention in responding to individual items, as well as to establish relationships among items and item responses, and to check item response reliability (Mertens, 2010; Gay, Mills, & Airasian, 2009).

3.8.2 Interviews

An interview is a personally direct conversation established between two or more people to exchange ideas, with a deliberate purpose of collecting data. Interviews provide the researcher with data that cannot be observed such as feelings, thoughts and intentions or how the people interpret encountered problems. It is considered as the most powerful ways a researcher can use to understand human behavior Fontana & Frey (2000). The interviews are planned to encourage participation and help informants feel easy in sharing their viewpoints, feelings and experiences Seidman (2013). Patton (2002: 417) stated that face-to-face interviews are:" the opportunity for a short period of time to enter another person's world." This means being engaged in what people have to say. Glanz (2006:343) states that "Interviews will allow the researcher to learn the complexities of participants' experiences from their point of view." Knox and A. Burkard (2009). claim that interviews can be very fruitful since the interviewer can follow specific issues of concern that may lead to focused and constructive suggestions. Genise (2002) singled out three main benefits of interview method of data collection: 1) direct contact with the users often leads to specific, constructive suggestions; 2) they are good at obtaining detailed information; 3) few participants are needed to gather rich and detailed data.

A researcher must believe that the thoughts and experiences of the people being interviewed are worth knowing. In short, the investigator must have the utmost respect for these persons who are willing to share with him some of their time to help him understand their world. Seidman (2013) contends that interviewing is the best technique to use when investigating individuals, because it elicits what is on an individual's mind. Accordingly, interviews will allow the researcher to learn the complexities of respondents' experiences from their point of view and scrutinize participants' lived experiences and worldviews, which gave rich phenomenological

data Henning, Rensburg & Smit (2004). Depending on the need and design, interviews can be unstructured, structured, and semi-structured with individuals, or may be focus-group interviews Frey& Fontana (2005).

3.8.2.1 The unstructured interview

The unstructured interviews allow the interviewer to raise some open-ended questions and the interviewee to express his/her own opinion freely. This entails both the interviewer and the interviewee to be in comfortable conditions because it is like a broad discussion on the given topic. Minichiello et al. (2008) states that unstructured interviews are not predetermined but depend largely on the social interaction between the interviewee and interviewer . Patton (2002) considers unstructured interviews as a natural continuation of participant observation because they so often occur as part of ongoing participant observation fieldwork. He posits that they rely totally on the spontaneous generation of questions in the natural flow of interaction since each interview takes on its own format. This category of interview may generate rich data, information and ideas because the level of questioning can be varied to fit the context and that the interviewer can question the participant deeply to gauge specific issues as they arise; but it can be very time-consuming and difficult to analyse the data.

3.8.2.2 Structured interviews

In structured interviews, the interviewer uses some pre-prepared questions which are short and clearly formulated. Generally, these questions are closed and therefore, require definite answers in the form of a set of options read out or presented on paper. This type of interviewing is easy to direct and can be easily standardised as the same questions are asked to all participants. Preece, Rogers, and Sharp (2002) contend that structured interviews are most relevant when the ends of the research are clearly understood and specific questions can be recognised.

3.8.2.3 Semi-structured interviews

This type of interview makes use of both structured and unstructured interviews and therefore use both closed and open questions. In semi-structured interviews, the researcher has a set of pre-outlined core questions to use in the sense that the same sections are covered with each interviewee. As the interview progresses, the participants are given the opportunity to explain their viewpoints and to provide

relevant information concerning the areas of particular interest. Yin (2003) notes that interviews seem to be a managed conversation in case study research rather than structured questions. That is, although the interviewer can maintain a steady line of investigation, the actual case-study interview questions are likely to be flexible rather than rigid. According to Yin, most case study interviews are open-ended in nature, thus showing the interviewees' opinions and responses about facts and events .

Semi-structured interviews were the main method of eliciting teachers' beliefs. All participants were involved in semi-structured interviews and observations which precede them. Semi-structured interviews were conducted to collect information about teachers' conception and understanding, and how this influenced the assessment of students' outcomes. Wanden (1982) claims that the guided interview is useful as it allows for in-depth probing while permitting the interviewer to keep the interview within the limited research parameters. Denzin and Lincoln (2008:47) contend that interviews generate useful information about "lived experience and its meaning and produce situated understandings grounded in specific interactional episodes". Consequently, interviews were an important tool for understanding teachers' perceptions and beliefs in my field research, as my aim was to obtain access to each participant's viewpoint. The uniqueness of each respondent teacher's experience Huberman & Miles (2002) about assessment and feedback strategies was explored in their distinctive context.

The interviews were planned to elicit participants' beliefs and experiences about classroom assessment. However, they also included questions specifically designed for this study (see appendix II for the full interview schedules). Interviews were devised to rely on an understanding of belief that is propositional, conscious and accessible by the participant and which see beliefs in teachers' assessment practices.

I started by asking the participants to talk about the design of work generally, then selected any episode which featured assessment activities, and these were used as discussion prompts, framed by questions such as "What was your intention …?" or "Why did you choose to…?" During this discussion, the participants explained their thinking and addressed the constraints which may influence their classroom practice. These interviews urged teachers to make links between what they "say, intend and do" (Pajares 1992:314), and to explore the influence of "classroom contingencies" (Segal 1998) and other contextual factors. This offered some information to address Lee's recommendation (2009) that teachers "be asked to explain, analyse, and unpack the

issues …so as to shed light on the incongruity between their beliefs and practice" (2009:19).

The interview focused on how teachers thought about competency based assessment in relation to planning, teaching and assessing the primary learning outcomes. Hence, the specific interview questions stemmed from the central research question; "How do primary school teachers in Algeria perceive and implement assessment instructions in primary school

education?" The guided questions used for the interviews are summarised in Table 3.3

Table 3.3 Interview questions and related research questions

Research Question	Interview Question
How do teachers conceptualise assessment? (ontological)	- What is the pertinent definition / understanding the term 'assessment? - How can you describe the assessment concept with reference to CBA?
What are teachers' experiences of Classroom assessment? (episodic influences)	- How do you normally plan and use the different steps of assessment for a given lesson? -What are the strategies and techniques used to assess students' learning?
What feelings do teachers express about assessment? (affective)	How confident do you feel in your own subject knowledge of assessment?
What do teachers believe about the value of assessmet? (evaluative)	-What is your personal view of the role of assessment? -Are there some elements which you feel help / hinder your assessment process? -What are the impacts of assessment on the leaning quality ?

The devised interviews were semi-structured as some of the questions were planned prior to the interviews to stimulate informants to generate more information. Some questions were drawn from teachers' responses to elicit more detailed and elaborate responses to key issues. Questions that were planned prior to the interviews guided the investigation, but they did not restrict educators' opinions.The main goal of

these questions was to access teachers' experiences and understanding about competency based assessment. Accordingly, the proposed questions reflected their perceptions and application of classroom assessment. Each audio-taped interview took forty to sixty minutes, which was appropriate Burns (2000).

The objective of the interview in this case study is to understand the perceptions and experiences of those who are interviewed, not to predict or control that experience Seidman (2013). The researcher's task is to present the experiences of the interviewees in compelling enough detail and in sufficient depth. Hence the researcher in this study ensured interviewees were given ample opportunities to express their perceptions about competency-based assessment during interviews. The interview guide helps in interviewing the selected respondents in a systematic and comprehensive manner by delimiting in advance the topics to be probed. Besides, it provides a basic checklist during the interview to secure that all relevant issues are covered. The purpose is to strengthen the response to the question, to improve the quality of data being obtained, and to give clues to the interviewer about the level of response that is desired Berry (1992).

Teachers were expected to give their point of views with regard to their understanding of the students' learning assessment. They were supposed to show different abilities towards the assessment premises and principles. Teachers were also expected to show how their understanding influenced their classroom assessment practices, and how they implement the premises and principles within a classroom context.

3.8.3 Documents

Documents are records of human activities which provide a valuable source of data in case study research. O'Leary (2014) singled out three primary types of documents. First, public records: the formal records of a given institution's activities, including transcripts, mission statements, annual reports, records of meetings, policy manuals, strategic plans, and syllabi. Second, personal documents: first-person accounts of an individual's actions, experiences, and beliefs, including calendars, notebooks, blogs, duty logs, reports and reflections/journals.Third, physical evidence: physical objects found within the study setting (often called artefacts), including flyers, posters, agendas, handbooks, and training materials.

Documents are important references of obtaining data (Burns, 2000; Glesne, 1999). They are helpful in providing insights in the different forms of assessment used by teachers. Yin (2003) claims that documents are an important tool used in verifying

issues related to participants' experiences and qualifications. They may provide relevant details to corroborate information and documents that make key references to and with other data sources. Also, documents play a crucial role in obtaining evidence although over-reliance may affect the quality and relevance of data collected. Bowen claims that a wide array of documents is better, although the question should be more about quality of the document rather than quantity (Bowen, 2009). Yin (2009) warns that it is important for investigators to be aware that contents of documents may be used as appropriate clues for further investigation, rather than as definite findings because of inferences that could later become misleading evidence.

Documents in this study include teacher's guide, manuals for primary school teachers ONPS (2016-2017) (office national des puplications scolaires), and students' activity notebooks. These documents supply data that was essential to the purpose of the study. The main objective of using documents was to compare the interview transcripts with what the participants stated they implemented during their classroom lesson, and how they asserted that CBE influenced their assessment conceptions and practices. Therefore, documents can confirm or improve the quality of data through triangulation, and consolidate the research by enriching the overall report (Burns, 2000; O'Leary, 2014).

Documents were gathered in this study as a source of data collection. It is important to relate teachers' perception and beliefs to their understanding of the competency-based curriculum and assessment practices in their classroom, with reference to the teacher's guide and documents that the participants studied during their in-service training. Marshall and Rossman (2014) claim that documents unveil important information relating to the research purpose that has taken place before the research began. Documents reveal purposes that are initially known to the researcher. They can give an important association to the other data sources when analyzing the results of the corpus under discussion.

Teachers' in-service study guides (ONPS, 2016) and students' activity copybooks provided philosophical views about CBE and how these views become evident in the classroom as a result of the teachers' implementation of the CBE assessment methods and strategies. In other words, the teachers' interview excerpts and what the CBE teachers' in-service guides say about CBE provides a vital link when analysing the findings, and subsequently, discussing the results.

3.8.4 Observation

Observation is a research tool used to examine people's behaviour in natural settings to gather significant details about given issues. Tuckman (2012) claims that observation must focus on the event or phenomenon in action. He further highlights that in qualitative educational research this often means sitting in the classroom watching educators deliver a programme to students. Observation takes place in real world settings, in places and under conditions that are comfortable and familiar to the participants Patton (2000). Observation was used to obtain direct information on the classroom assessment process. Conrad & Serlin (2006:381) view observation as, "a systematic, purposeful and selective way of watching and listening to an interaction as it is". Observation is a systematic method of data collection that relies on a researcher's ability to gather data using a full range of appropriate senses: seeing, hearing and feeling in an integrated manner to understand the behaviours and attitudes of the users and settings. Each of the above interviews was preceded by an observation which sought to capture the main assessment activities undertaken, teacher explanations and student responses. These provided some contextualization for the interviews, enabling the teachers and interviewers to discuss specific classroom assessment events from the observed lessons. The goal of the pre-lesson observation was to have a general picture of the content matter to be covered in the lesson to be observed, the instructional materials to be used and whatever the teacher wished the researcher to know before the lesson observation. Class observation focused on the teacher's assessment practices in the classroom. Observations were designed to confirm or discredit the researcher's interpretations of the informants' opinions. Observations have been useful to help the researcher to get some information teachers might not have supplied during interviews.

3.8.4.1 Participant Observation

The Researcher as a participant observer carried out observational methods of data collection by observing how the teachers were engaging in classroom activities. Observational methods have the advantage of directly appraising teachers' involvement   in the classroom environment and with the assessment practices.   By observing teachers in different instructional practices (class discussions, active learning exercises), the researcher could explore how teachers perceive, interpreted and made sense of the assessment related issues.

During observation, rough field notes were taken down to describe what was observed, when, where, and under what conditions. The researcher was in direct contact with the occurring events of the target primary schools when the teachers were presenting how they assessed learning outcomes. Observation allowed the researcher to collect information on a wide area of behaviours, to scrutinize a great variety of interaction and explore the assessment issues. A digital voice recorder was used to record the observed lessons to remain as neutral as possible and to maintain a focus on "description" rather than "evaluation or judgment" (Holliday 2002:195). A voice-recorder was used as it is less intrusive and easier to transcribe, and as I have focused on the nature of the classroom activities and teachers' explanations and instructions. Only important items were written down with reference to pre-devised units of observation.

The purpose of conducting observations was to validate or contradict the viewpoints teachers gave during interviews. It has been evident that many teachers have theory of CBE and assessment. The ideas they shared during interviews did not relate to their practices. If a theory is not applied in practice, that theory is useless. Tiley (1997:2) argues that theory without practice is sterile and practice without theory is blind. This means that if one person knows how something should be done, that knowledge should be applied in practice. It is important to notice that "observation alone is of limited value, for the cognitive acts under investigations are normally covert and beyond immediate access to the researcher" (Calderhead, 1996:711) and that different types of 'belief' are examined through interview and through observation. The former may unveil beliefs which are more decontextualized and usually propositional, while the latter may reveal beliefs which are embedded in context, tacit or even unconscious, and may reveal competing, inconsistent, transient beliefs, or even beliefs which are in the process of change (Richardson et al. 1991:578).

3.8.4.2 Setting observation

Classroom observation is a critical component in collecting information in the qualitative study. Nunan (1992) claimed that classroom observations provide valuable data that help the researcher comprehend social events in the classroom context. The researcher visited the sampling schools in order to collect primary data associated with assessment policies. Direct observation was used to identify pathways that may help to resolve conflicting perspectives or information. Compare to participant observation,

direct observation is more focused and the investigator only observes specific occurrences in the classroom context.

The researcher developed a holistic perspective, through direct observation, to understand the context within which assessment took place. The aim was to capture the participants' view and not to impose exterior knowledge categories on what was observed Henning, Rensburd & Smit (2004). This field research aimed at scanning the assessment landscape in order to find a full descriptive picture of phenomena and to present it from the informants ' views Stark & Torrance in Someck & Lewin(2005:34). It was necessary to observe when and how teachers conduct assessments in their classrooms. This would increase data obtained from personal conversation and documentary scrutiny. Observational methods enabled me to document the ordinary features of everyday life that interviewees might not feel worth commenting about Green &Thorogood (2004:182).

3.8.4.3 Units of observation

Because it is impossible to observe everything that is occurring in the target schools, the researcher defined specific features of the actions and behaviours that will be observed. Thus, units of observation were devised in terms of specific actions, interactions and behaviours (Table 3.4) to focus only on relevant data.

Table 3.4 Units of observation

Units of observation / prepared checklist		
Targets	behaviour to be observed	times
Respondents	Teachers' behaviours 1. Praises / encourages Assessment methods used to assess their students Classroom assessment practices flexibility Teachers' instructions Teachers' feedbacks Teachers 'assessment strategies Types of assessment	

fieldwork site	types of class work s	
	Pictures on walls	
	Amount of assessment books and references	

Table 3.4 shows units of observation methods used to untangle issues and items that are already known, but difficult for participants to manage. Predetermined criteria related to the selected respondents, events, practices, issues, behaviours, actions, situations, and phenomena were observed. Besides, some manner of observation schedule and checklist were applied to organize observations, but also attempt to observe and record the unplanned and the unexpected.

3.8.5 Triangulation

Different methods of data collection were used for this study "in order to understand the complex reality under scrutiny" Denscombe (2003: 38). The multiple measure instruments, combining observations of practice, field notes and a stimulated recall interview was designed to explore beliefs in a multi-faceted way to "strengthen the findings"(Yin 2009:156) and allowed for triangulation (Guion, 2002; Creswell & Clark 2017; Leech & Onwuegbuzie, 2007). Guion et al. (2011) claimed that "data triangulation involves using different sources of information in order to increase the validity of the study. In extension these sources are likely to be stakeholders in a program". Manion & Cohen (1989:208) define triangulation as "the use of two or more methods in data collection. This dissertation adopted different research methods to contend with the assessment issues:

> "The combination of multiple methodological practices, empirical materials, perspectives and observers in a single study is best understood as a strategy that adds rigor, breadth, complexity, richness and depth in any inquiry" Flick (2002:229).

Based on these views, triangulation was implemented during data collection and analysis to ensure validity and reliability in order to strengthen the present study.

The case study in this research described data collection from teachers in their classroom context. I intended to discover teachers' conceptions, attitudes and assessment strategies in the natural classroom setting Merriam (2001). A multiple of qualitative data collection methods and procedures were adopted and adjusted to fit the ongoing research study. I was able to probe the different facets of teachers' awareness

and provide a rich, contextual description by utilising a range of methods for my data collection and providing triangulation of my data.

3.9 Data analysis procedures

Data analysis is a process of inspecting data using procedures such as coding, categorising, concept mapping or theme generation. Marshall and Rossman(1999:150) contend that data analysis is the process of bringing order, structure and meaning to the mass of collected data. These methods allow a researcher to discover useful information that makes sense of the gathered data in order to generate findings and set up an overall understanding of the case. Data analysis "is a formal inductive process of breaking down data into segments of data sets which can be categorized, ordered and examined for connections, patterns and propositions that seek to explain the data" Simons (2009: 117). Wellington claims that "The procedures are neither 'scientific' nor 'mechanistic'; qualitative analysis is 'intellectual craftsmanship" (2000:150), and Webb argues that "qualitative data analysis is a creative endeavour involving intuition and empathy" (1999:328).

Data analysis procedures aim at investigating, classifying, organizing and recombining evidence to address the initial hypothesis of a study Yin (2009). Bogdan and Biklen (2007:147) describe data analysis as a process of "working with the data, organising them, breaking them into manageable units, coding them, synthesising them and searching for patterns". Data is generally broken into bits and pieces which Miles and Huberman (1994) label 'coding' and Dey (1993) refers to as 'categorising'. Thomas & Nelson, (2001:340) states that data collection and analysis formed an important feature of qualitative research. The goal behind data analysis is to determine patterns, concepts, themes and meanings in the case study research. Yin (2003) highlights the need for searching the data for "patterns" which may explain causal links in the data base. In the process, the researcher focuses on the entire data first, then attempts to re-arrange and re-constructs it again in a worthwhile manner. Categorisation allows the researcher to consider specific patterns and complex threads of the data and make sense of them.

Analysis of these data sets was conducted within a qualitative interpretive framework discussed in Section 3.3 because of its strengths which lies in the regular process of collecting data, analysing them, developing a provisional coding data, using this to suggest further sampling, checking out emerging theory, and until a point of saturation Green & Thorogood (2004).This enabled the researcher to capture a range of concepts used by

participants to be identified and to extend the analysis so that research questions could be better understood.

3.9.1 Survey analysis

The survey was developed to collect information on teachers' assumptions and attitudes about assessment. Analysis of questionnaires in the current research comprises tabulating the responses from the survey and drawing those responses to the findings of the interview data (Section 4.2). This survey is devised to triangulate and merge with other sources of data. Thus, the type of questions followed the purposive procedure of identifying the informed participants about competency-based assessment, is related to their background data.The survey data consists of participants' background information including their personal, professional, qualification status and their level of familiarity with the competency based assessment syllabi and their level of training and experience dealing with competency-based education curriculum and assessment. Teachers' responses were tabulated and described in Sections 4.2.1- 4.2.3 in a way that is accessible and useful to interested researchers and stakeholders.

3.9.2 Interviews analysis

Interviews analysis is a process of reflection providing an account of the teachers' transcripts relating to their expressions of how they perceive and use competency-based assessment in order to distinguish, categorise and code the emergent themes. According to Yin (2009), the analysis means distinguishing what is relevant and what is not by choosing and coding the significant declarations relating specifically to the study topic; how primary school teachers conceptualize and implement assessment under the competency-based approach.

Thematic analysis was used for developing a thematic framework to facilitate the process of explanation construction   and to enable the gradual build up of descriptions and refining ideas relating to how teachers perceive CBA in Algeria. Braun et al (2006) stated that: "Thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex account of data". Thematic analysis was applied to scrutinise themes that emerged naturally from the interview data rather than attempting to impose a preconceived set of themes on the data (Simons 2009; Creswell, 2009; Attride-Stirling, 2001).

3.9.2.1 Thematic analysis of interviews

Thematic analysis is a process used for recognising, classifying, analyzing and reporting themes found within data set Braun & Clarke (2006). King (2004) held that thematic analysis is a useful method for exploring the perspectives of different research participants, highlighting similarities and differences, and generating unpredicted insights. It provides core skills for conducting qualitative analysis (Holloway & Todres, 2003; Ryan & Bernard, 2003). Burns (2000) also defines thematic analysis as grouping the emerging data into themes, representing concepts and meaning. Themes are groups of codes that repeat through being correlated to each other in a patterned way.The transcript data was identified, classified and analysed thematically in relation to the principles underlying CBA and curriculum trends.

A thematic analysis approach has been adopted from Creswell's (2009) spiral of textual data analysis and Braun and Clark's (2006) textual analysis structure. This adoption seems relevant since "in most case studies, explanation building has occurred in narrative form" Yin (2009: 141) such as the current study. The thematic analysis choice facilitates the gradual construction of explanations and refining ideas relating to how teachers interpret competency-based assessment in primary schools. To approach thematic analysis, Creswell (2009) and Braun and Clark's (2006) developed a six-phase process:

Phase 1: Familiarising with data

This stage involves immersion and familiarity with the content under study. It includes familiarisation with the collected data, wherein interviews typing field notes are repeatedly read in order to achieve a sense of the overall data. Acquaintance with data informed the different stages of analysis and helps the researcher to develop a far more careful understanding of the data through transcribing the key excerpts and abstracts relating to the interview questions.

Phase 2: Coding

This phase is mainly concerned with dividing texts into segments of information to generate initial codes that identify features of the data that might be relevant to answering the research question. Familiarity with interview data through early transcriptions of the interview underpinned the researcher's endeavour to code participants' key responses relating to the problematic: How do primary school teachers perceive and implement competency-based assessment? Detailed analysis began with

coding and organising materials into "chunks" before bringing meaning to those "chunks" Rossman & Rallies (1998:171).

Phase 3: Searching for themes

Stage 3 comprises searching for themes. It includes the checking process of codes segments and related data to distinguish significant broader patterns of meaning. The coded excerpts were reduced by grouping similar codes together as emerging themes. The citations with similar meanings were classified into possible themes by collating all the relevant coded extracts. The researcher considered how different the codes connected to form emerging themes.

Phase 4: Reviewing themes

This phase comprises the checking of the participant themes against the dataset, to decide that they tell a convincing story of the data that answers the research question.Themes are typically refined, reduced, merged,or rejected.

Phase 5: Defining theme

This phase entails developing a comprehensive analysis of each theme and collapse codes into them. The emerged themes were defined and labelled and further refined to represent the study. Defining and refining was a process that required identifying each emerging theme and deciding what features of the data each theme captured (Braun & Clark, 2006).

Phase 6: Synthesising data

The final phase requires combining together the analytic narrative and data excerpt and contextualising the analysis in relation to existing literature to produce the final writing report. This phase includes reporting the findings by drawing on the relationships between the data and the research questions related to the rational trends underpinning the use of competency-based assessment in primary school.

Thematic analysis is a process of identifying and organising concepts by examining data that carry out meaning relevant to the key research question (Burns, 2000). The researcher recurrently read and re-read the transcript coding and the emerging themes to ensure that the codes and the emergent themes were reflecting the teachers" interview excerpts. Both Creswell's (2009) spiral of textual data analysis and Braun and Clark's (2006) step-by-step thematic analysis guide have provided a practical guideline for the current work of data analysis.

Table 3.5	Phases of text-based thematic analysis		
Stages of Thematic Analysis	Phase	Description of phase	
		Braun & Clark's thematic analysis guide	Creswell's spiral of textual data analysis
One	1	Familiarisation with data	Familiarise self with text–based data
Two	2	Generating initial codes	Divide texts into segments of information
	3	Searching for themes	Code segments
	4	Reviewing themes	Reduce codes
Three	5	Defining and naming themes	Collapse codes into themes
	6	Producing the report	Synthesis data
Source: (Braun and Clark, 2006: 87)			

The study of data collection enables the investigator to make adjustments by adding more cases or adjust the interview guide. Data analyses also continued in an interactive manner during the interview stage. As Patton (2002:68) stated: "today's evaluator must be sophisticated about matching research methods to the nuances of particular evaluation questions and the idiosyncrasies of specific stakeholder needs". This research followed an interpretive/constructivist view, which emphasizes a subjective interrelationship between the researcher, the involved participants and the problematic under study.

3.9.3 Documents analysis

Document analysis is a technique of data collection that was incorporated in this study. It provided understanding in the different modes of assessment used by teachers as well as some comments made by teachers about the pupils' exercise books. Teachers' record of test books, teacher-made tests and learners' activity books provided insights in the frequency and quality of classroom assessment. The grade five summative tests

were also studied. School policies pertaining to assessment were studied. Schram (2003) argues that documents analysis can be accessed at a time convenient to the researcher at a minimum cost. Besides, documents tend to contain data that are thoughtful because adequate time and care is given to compile them. Triangulation of data gathering procedures allowed the investigator to verify the collected corpus from various documents. The analysis of documents provides valuable information about the key research question pursued through the study. The overview of the teachers' guide provides an essential link between teachers' implementation strategies and the key underlying beliefs concerning CBA.

A review of the collected documents allowed the researcher to establish whether teachers follow CBE premises and principles in their teaching or not. The investigated documents revealed the extent to which the participants understand and implement assessment strategies. The researcher inspected some documents, namely examination scripts, examination and test schedules, students' exercise books, mark sheets and portfolios. The investigated documents could demonstrate the beliefs about CBA which might influence their classroom assessment practices as well as if there are advantages and disadvantages resulting from their previous practices, prior to the implementation of CBA. The purpose of these documents analysis was to determine how the understanding of the premises, principles, and policies in CBE has influenced the actual classroom assessment practices.

3.9.4 Observation analysis

The investigator opted for direct observation method to obtain a real image of the respondents' experience, as told, both verbally and non-verbally by those who have lived it (Merriam, 1998). Findings were analysed and interpreted in term of categories that have been elaborated prior to start data collection. Observation method provides a narrative account of the teachers' behaviour, instructions and different strategies undertaken to assess learning outcomes.

Basically, the observation data was investigated through two stages. The first stage was descriptive. It tried to map classroom assessment practice using with the purpose of trying to understand what common practices are in place and how teachers carry out assessment. The initial observations were used to draw some patterns and issues of interest. After visiting a school, detailed field notes were prepared to describe what was observed and learned. Data

collected in stage one were analyzed to identify key issues for the next stage. Stage two was interpretive. The key issues from stage one were followed up in detail with the teachers, seeking clarification and confirming patterns tentatively mapped out in stage one of the study.

To answer the research questions guiding this study, a systematic search for the observation corpus was conducted and data categories were created. The researcher opted for a systematic observation and arrangement of field notes into categories in order to increase the understanding of the situation. In interpreting the field notes, the researcher generated and tested assertions by looking for key linkages and conducting member checks. Three iterative steps were followed to analyse findings:

1- The researcher tried to be familiar with the data through reading notes dealing with the specific units of observation

2- Observation notes were examined in depth to provide comprehensive descriptions of the setting, participants and activities by breaking data into analytic units.

3- Classifying and coding items of data and arranging them into themes. The latter was reduced to a manageable form referring to predetermined units of observations.

Afterwards, I reviewed the data which contained fragments of teacher questioning, listening, praise, instruction correction and feedback and so on. The main goal of classroom observation was to conceptualise the significance of assessment practices undertaken in the case study school and its impact on students' learning.

Following the grounded theory, the researcher organised and prepared data for analysis by transcribing interviews, typing field notes and arranging data into different types with reference to their sources. Besides, data was re-read to gain a sense of the overall data and start to list broad themes that exist. Detailed analysis began with coding, which was a process of organising materials into "chunks" before bringing meaning to those "chunks" Rossman &Rallies (1998:171). Data were coded and classified according to special features of setting, types of situation observed, processes, circumstances, strategies and methods observed Bogdan & Biklen (2007). The investigator aimed to collect samples of aspects of classroom assessment that he had learned about in interviews; also to build up a picture of the teachers' perceptions in their endeavour to assess the learning outcomes. Table 3.4 outlines the four sources of data analysis; survey, interviews, documents and observation; undertaken in this case study process

Table 3.4 Description of the overall data analysis processes undertaken		
Stages	Data Sources	Descriptions of tasks undertaken
Data analysis 1	Survey	Tabulates teachers' demographic data, the schools in which they work, and the levels of familiarity with CBA documents in their schools. It provides essential background information for analysis of the issue under discussion.
Data analysis 2	Interview	Exploring the perspectives of different research participants by recurrent reading of excerpts to identify key statement of utterances relating to how they perceive and implement assessment.
Data analysis 3	Documents	Investigating some documents, namely the teacher's guide, examination and test schedules, students' exercise books, mark sheets and portfolios. The investigated documents could demonstrate the beliefs about CBA which might influence their classroom assessment practices.
Data analysis 4	Observation	Getting close enough to study the subject matter and gain in-depth detail to understand whether people do what they say they do, and to access tacit knowledge which provides details that help to detect some feature about the target teachers and schools.

3.10 Trustworthiness of the Study

Researchers usually adopt some accepted trustworthiness standards following a particular research approach, such as qualitative, quantitative and mixed methods research. Quantitative researchers rely on the criteria of reliability, objectivity and validity to ensure the trustworthiness of their inquiry findings. These criteria are arguably inappropriate within a constructivist research paradigm, given that these traditional concepts are "premised on the assumption that methods of data generation can be conceptualized as tools, and can be

standardized, neutral and non-biased" (Mason,1996:145). In contrast, Lincoln & Guba (1989) proposes alternative terminologies to differentiate the naturalists from the positivists in pursuit of a trustworthy study. Four criteria should be considered in Lincoln &Guba's constructs which correlate with the criteria employed by the positivist paradigm:

a) credibility (tally with internal validity);

b) transferability (tally with external validity/ generalisability);

c) dependability (tally with reliability);

d) confirmability (tally with objectivity).

Moving far from the quantitatively oriented terminologies trustworthiness provides qualitative researchers with the freedom to describe the worth of their design in ways that highlight the overall rigour of qualitative research without trying to force it into the quantitative parameters.

3.10.1 Credibility

Credibility is the prime criterion that must be established in qualitative research. This is because credibility basically asks the researcher to clearly link the research study's findings with reality in order to demonstrate the trustworthiness of the research study findings. The precise thematic analysis process applied in this study provided a distinctive feature for reliable data analyses and presentation which was representative of the participants' views.

Credibility was enhanced through triangulation. Denzin & Lincoln (2000:5) declared that " the use of multiple methods or triangulation reflects an attempt to secure an in-depth understanding of the phenomenon in question; it adds rigor, breadth, complexity, richness, and depth to any inquiry." Suter (2006:319) views triangulation as essentially a means of cross-checking multiple data collection sources to establish validity.

The present research has attempted to ensure credibility by using different methods to explore different facets of teachers' beliefs and practice and by giving my interpretations to the participants for their comment or approval. Respondents were invited to check the accuracy of the transcribes interviews and to make any modifications. This convinced the respondent that the researcher was accurately noting their thoughts, opinions and discussions. Pring (2000:118) states that "social reality... is constituted and maintained by the agreements in interpretation of the members of society and of the groups within it". The constant iterative process of familiarization with data, generation of codes, constant searching within transcripts for potential

themes, and labelling the themes, are clear evidence of credible analysis protocols employed to maintain the credibility of the study. The use of observation, interview and alongside the original semi-structured interviews has provided me with a rich, multifaceted view of the participants' perceptions about classroom assessment. This kind of research design provides a credibility check on my own interpretations of data. This study also uses a number of Shenton's methods for improving credibility (2004). A random sampling in the selection of schools and therefore teachers who were involved in this investigation. Iterative questioning has been built to prompt participants to discuss assessment issues and their impact on students' learning.

3.10. 2 Transferability

Transferability reflects the qualitative researcher need to prove the extent to which the findings of a given research study are applicable to other contexts . It enables the researcher to provide findings that could be applied by the reader beyond the limits of the research to new cases (Graneheim & Lundman, 2004; Guba &Lincolin, 1994). Transferability is a form of 'retrospective generalization' that can allow us to understand our past/future experiences in a new way Eisner (1991:25).

This research study described the characteristics of the primary school teachers and their perception about assessment issues and exploring the diversity of experiences and challenges faced by a group of school teachers. Besides, the researcher used a thick description about data gathering methods as well as the time frame within which data were collected. This strategy enables the readers to assess the levels to which the findings may be valid of people in other settings.

The researcher was confident that the interviews from the target population provide in-depth views into exploring the diversity of experiences encountered by primary school teachers perceiving and implementing assessment in the Algerian primary school. Hence, by collecting sufficiently detailed description of data through in-depth interviews and reporting with sufficient surveyed background details, decisions about transferability was justified. Accordingly, the research findings can communicate issues to researchers who are yearning to know more about how to deal with assessment matters.

The researcher strives to use thick description to confirm that the current research findings can be relevant to other contexts, circumstances, and situations. To improve transferability, I attempted to give a contextual description of the present case study,

including thick information about the participants from multiple environments, and the research methods which support transferability Cresswell (2009) The outcomes of the work at hand can be applied to a wider population.

3.10. 3 dependability

Dependability embodies the extent that a qualitative study could be repeated by other researchers all over again using the same procedures and that the findings and conclusions would be consistent. Yin (2009) claims that a prerequisite to allow another researcher to replicate an earlier case study was to carefully document the instruments and protocols used in the initial case study. That is, the researcher presents his or her procedures and research instruments in such a way that others can attempt to obtain similar findings under similar conditions. Detailed and thick description enables the reader to assess the extent to which proper research practices have been followed Anney (2014). I have taken a number of steps to improve dependability, namely: documenting the protocol for investigating teachers' perception about CBA such as the background of participants and case sites, instruments for the conduct the study, interview question instruments used throughout the process of data collection to afford evidence of teachers' assessment practices. These documents provide material and increased dependability of the present case study. They are all archived as appendices at the end of this thesis.

3.10.4 Confirmability

Confirmability reflects the degree of neutrality in the research study's findings to ensure that the interpretations and findings are based on participants' responses and not any possible bias or personal motivations of the researcher. Four data sources were used; survey questionnaires relating to teachers background data, in-depth interviews questions to examine the participants' views and perceptions about assessment, reviewing CBE manuals and observing the field of research to gain details that help to detect some feature about the target teachers and schools. Besides, the interview and survey questions were designed with the concent of my supervisor. The recorded corpus was transcribed verbatim and reviewed by my supervisors to be consistent with the purpose of the present study. My supervisor then helped to gauge each extract against the study purpose and recommendations were made to improve the questions and interview techniques. This strategy was consistent with Yin's (2009) proposition of

engaging an external observer or reader of the case study to provide external and independent views.

Confirmability involves making sure that researcher prejudice does not pervert the interpretation of what the research participants said to fit a certain narrative. This qualitative research provides an audit trail, which highlights every step of data analysis that was made in order to afford a rationale for the decisions made. This helps confirm that the research study's findings accurately portray participants' responses. I have strived to improve confirmability by acknowledging the limitations of the study and of the methods used throughout this field research.

3.11 Ethical issues

Ethics refers to a system of moral codes, practices and attitudes maintained by a group of people to distinguish socially accepted behaviour from that which is considered socially unacceptable. It deals with the decision making related to people's behaviour and actions Wellington (2015). Ethics has become a keystone for guiding effective and significant research(Best & Kahn, 2006; Behrman & Field, 2004; Trimble & Fisher, 2006). It is concerned with establishing moral principles governing the relationship between the respondents and the researcher.

Ethical considerations formed an underpinning platform to carry on the investigations and report their findings without hurting research participants . The selected participants were solicited to give their verbal consent to speak openly about assessment practices. Johnson & Christensen (2004:102) argue that informed consent points to strategies in which individuals choose whether or not to participate in a research study after being notified of the ends of the investigation, methods of the study, risks and the right to raise issues related to the benefits of the study, and boundaries of confidentiality standards before engaging into participation or non participation.Written informed consent was secured from each participant teacher to provide information about the study, the research aims and questions, instruments, research procedures. Participation at every stage was voluntary, and confidentiality and anonymity were assured wherever possible throughout all the stages of the research process. Also, the researcher stated the general scope of the study, duration, benefits and risks behind this research.

Only voluntary participation was acceptable. All participant could retire from the project at any time as they wished. Participants made the choice to be part of the research or to withdraw from the study after some explanations pertaining to the study. Borg & Gall (2002:85) contend that "researchers should respect the individual freedom to decline to participate or to withdraw from the research study at any time". Names were not associated to any other data. Information provided by the research participants was confidentially classified.

The findings resulted from all participants were reviewed and presented as a research report with no names. Bogdan & Biklen (2007: 215) assert that "informant identities should be protected to avoid embarrassment and any form of harm on participants". The nature and goals of the research, including procedures, was plenary spelt out. This motivated participants to take part in the research.

3.12 The case study report

The case study report for this study adopted a linear-analytic format as proposed by Yin (2009). Generally, a linear structure of a qualitative case study report involves research planning and implementation from the preliminary stage through to the conclusion of the research study. According to Yin (2003), the linear case study report structure involves a description of research design, and data collection procedures; presentation of the data collected; analysis of the data; and a discussion of the findings and conclusions. Table 3.6 summarizes the different stages of data analysis protocols undertaken in this study.

Table3.6 Description of the different strategies undertaken in this study	
Stages	Descriptions of tasks undertaken
1. Data collection	-The achievement of teachers' interviews and survey questionnaires.
2. Familiarisation with the data	-Organising and tabulating teachers' demographic data, the schools in which they work, and the levels of familiarity with CBA documents in their schools. -Getting close enough to study the subject matter and gain in-depth detail to access tacit knowledge -Recurrent reading of the field notes

3. Identifying initial Codes	-Recurrent reading and analysis of all transcripts to identify key statement of utterances relating to how they perceive CBA. -Dividing texts into segments of information to generate initial codes that identify features of the data that might be relevant to answering the research question.
4. Searching for themes	-The citations with similar meanings were classified into possible themes by collating all the relevant coded extracts
5. Reviewing and regrouping themes	- ReducIing coded excerpts by grouping similar codes together as emerging themes. - Defining and labelling and further refining the emerged themes and collapse codes into them. Seven broad themes emerged, and these represented teachers' overall perception of competency based assessment
6. writing the Report	-Combining together the analytic narrative and data excerpt and contextualising the analysis in relation to existing literature to produce the final writing report. -Connecting the emergent themes to the philosophical views associated with the paradigm, premises, principles and practices entailed in CBA -Discussions of the findings including assessment issues related to CBA

(Table 3.6) exhibits the accurate process of interview transcript analysis and discussions drawn in this study, leading into the conclusion phase of the case study report.

3.13 Conclusion

This chapter introduces the philosophical context in which the study is established and the rationale for the selection of the interpretive paradigm . It sheds lights on justifications underpinning the adoption of a qualitative methodology and the reasons for choosing a single-case study procedure. Research design, participants, samples and sampling procedures, study instruments, and data gathering procedures were detailed and justified. The methods of data collection were carefully selected to obtain evidence of teachers' beliefs about classroom assessment, and data was gathered in relation to

teachers' self-reported practice, performance of the self-reported beliefs in the classroom practice and justification for the practice

Data were intentionally collected and analysed to provide credible evidence and content describing the assumptions and practices of teachers' classroom assessment and feedback (Phelan & Reynolds, 2002). Thus, the selection of the research questions, research paradigm, methodology, context, participants, and methods of data collection, data analysis, and trustworthiness employed by this thesis are given in detail, providing confidence in the interpretations reported in this study. The next chapter sets out to examine and interpret data. It discusses the different methods that can be used to empirically investigate the dynamics that are at work in teaching and assessing the students learning.

4.1 Introduction

This chapter addresses the themes that emerged from respondents' answers that relate to the research questions and the assumptions that were made at the beginning of the study. I review the themes in terms of my conceptual framework and the literature review to exhibit a series of findings aligned with my research objective. In the process of making meaning, I expound congruent as well as conflicting findings between my study and the existing literature.

This current chapter investigates in some details the case study findings generated during the field study. I started collecting data from surveys, interviews with the target teachers, observations and analysed documents. Bogdan & Biklen (2007) propose a pre-defined steps plan regarding qualitative data analysis. The researcher working with the gathered evidence tends to organise and classify data, breaking it into manageable units and synthesising it in an endeavour to seek for patterns in order to discover what is important and deciding what is worth to be learnt.

This chapter strives to respond to the central research question and sub-problems raised in paragraph 1.5. The collected data presented significant themes which arose from the study and from the questions structured in the form of individual interviews with participants, observation, note taking and document analysis. All the conducted interviews were phone-recorded, transcribed verbatim and the researcher read and reread the transcribed work until some themes emerged. The research overviewed the demographic characteristics of the target teachers. Then, the findings were described and explained.

4.2 Overview of the case study

Twenty teachers with different experience dealing with competency-based assessment were involved in the case study. Three groups forming distinctive categories of teachers emerged from the ongoing study. The first group consisted of teachers who attended the ITE and received formal in-service training on how to deal with competency-based assessment (N= 07). The second group (N= 07) composed of teachers without formal training on competency-based assessment. The third group benefited only from short period workshops training with regards to competency-based curriculum and assessment (N= 06). The detailed background information including the demographic attributes of each group is presented in subsequent sections.

Figure 4.1 Demographic attributes of each group
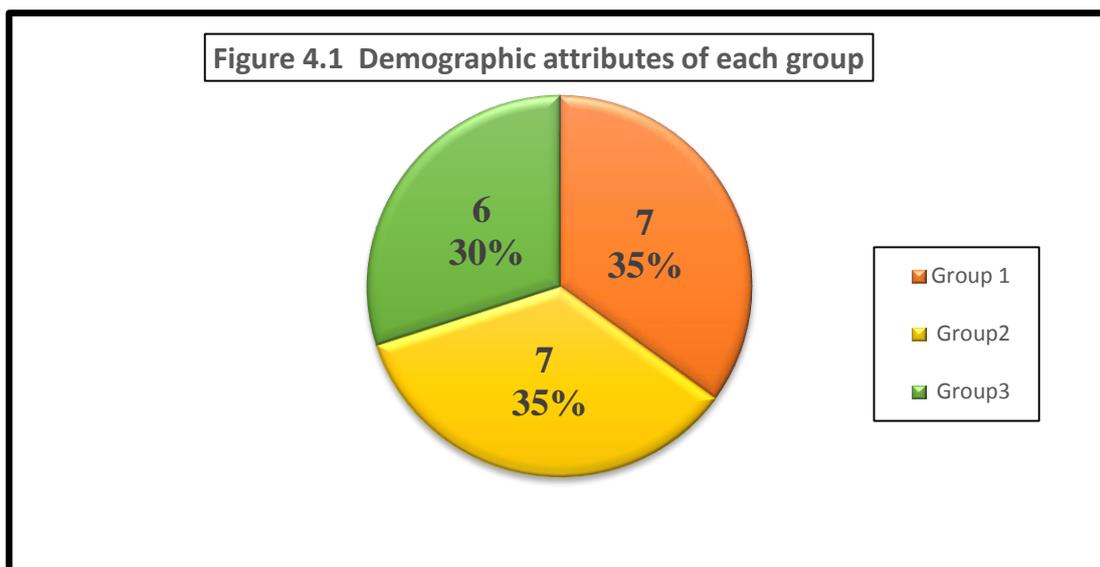
The target informants, who took part in this study, were introduced to a framework for thinking about their assessments'practice as teachers in the primary school context. They were made aware of the relationship between teacher-student, the school reality, and the role which assessment instructions do play or can play to improve   students' learning quality.

4.2.1Group1: Teachers who received in-service training in competency based assessment

Group 1 consisted of seven primary school teachers with a university diploma. They had undergone full in-service training at the ITE on how to use curriculum units and how to program, teach and assess the students' outcomes as essential components of the teaching-learning process applying competency-based strategies. Teachers attended these workshops program for one school year as part of an approach to align with the new educational reform, were intended to adapt their assessment procedures and technics to meet the new educational trend based on learner-centred learning. Table 4.1 presents the summary of the survey of the participants' personal and professional demographic characteristics.

Table 4.1 Group1: participants' personal and professional demographic characteristics.

Participant/Teacher	Gender	Age range	Academic qualification	School code
T1-gr1	M	31-35	U dipl	S1

T2-gr1	F	26-30	U dipl	S2
T3-gr1	F	26-30	U dipl	S3
T4-gr1	F	31-35	U dipl	S4
T5-gr1	F	26-30	U dipl	S5
T6-gr1	M	36-40	U dipl	S6
T7-gr1	F	26-30	U dipl	S7

Note. T1, T2 = Teacher 1, Teacher 2, etc.; S1, S2 = School 1, School 2, etc.;
T1-Gr1 = Teacher 1 – Group 1;   F = Female; M = Mal. U dipl= university diploma

In order to grasp teachers' perceptions, understanding and implementation about how assessment is enacted in the primary school classrooms, it was imperative to identify teachers' demographic and qualification backgrounds such as gender, age, levels of education and professional qualifications. Survey questionnaires were administered to the target teachers to survey their personal and qualification backgrounds. The survey showed a higher ratio of female to male primary school teachers in the districts under discussion (65%, figure4.2).

Figure 4.2 Ratio of female to male teachers
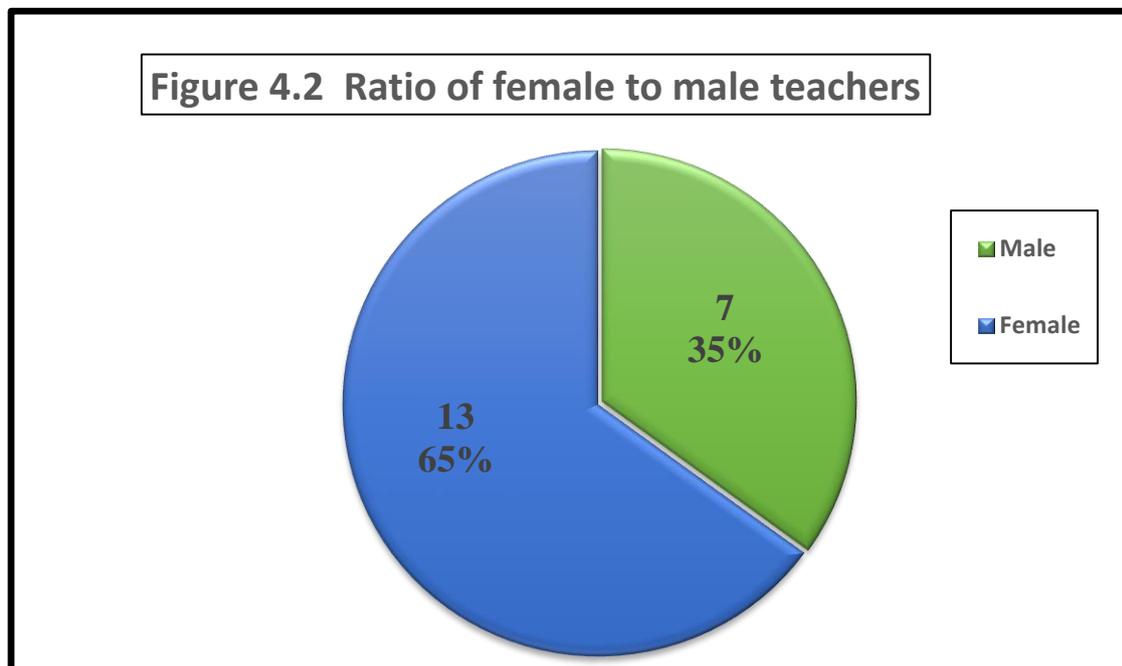
Accordingly, identifying gender was important to gauge views of male to female teachers with regards to their perspectives and understanding of competency-based assessment. Also, teachers' age levels are considered important to the study in order to illuminate the effectiveness of the implementation of competency based assessment in

the primary schools. That is, how efficient is assessment performed by teachers who graduated more recently from the older teachers generation who have been teaching for many years.

Experienced teachers acquiring some qualifications during the different educational reform stages were considered vital to this study since the study concerned teachers' perception and attitudes about assessment understanding and implementation, emanating from their conceptions and enactment of the competency based curriculum documents.The entry requirements for teachers into primary schools have been raised from baccalaureate degree to university degree according to the Special law of National Education (315/08, 240/12). Thus, the quality of teachers' output may have considerable impact on the interpretation and implementation of assessment instructions and strategies in classrooms.

In this study, although most of the teachers initially had university degree qualifications they were obliged by Special law of National Education (315/08, 240/12) to undertake a one-year in-service training to obtain a certificate in teaching. Table 4.2 shows the informants' professional background including years of teaching experience, seniority, and their status of in-service training.

Table 4.2					
Group 1: Participants Professional Information					
Participant/ Teacher	Years of teaching experience	Current position in the school	Current grade Teaching	No of years Teaching using CBA syllabus	Inservice training on CBA
T1-gr1	03-05	PST	4	03	Yes
T2-gr1	03-05	PST	3	03	Yes
T3-gr1	06-10	PST	3	08	Yes
T4-gr1	06-10	PST	3	06	Yes
T5-gr1	06-10	PST	4	06	Yes
T6-gr1	06-10	PST	5	07	Yes
T7-gr1	11-15	PST	5	11	Yes

Note.   PST=primary school teacher; T1 –Gr1 = Teacher 1 – Group 1

Table 4.2 revealed that teachers' experience in group 1 fell under three categories: teachers with 03 to 05 years , 06 to 10 years and 11 to15 years of teaching experience. All teachers in Group 1 had over three years of teaching experience under the competency based approach syllabus. All teachers in Group 1 had taught for at least three years (Table 4.2). This situation reveals that, despite fewer years of teaching experience, some teachers who proved to have strong subject content knowledge in a particular subject and a sound knowledge in a particular curriculum reform such as CBA are appointed to teach Grade 4 or 5 ahead of their colleagues who had more years of teaching experience. In other words, teaching upper grades (Grades 4 or 5) in primary schools in Algeria is a reflection of recognition of an expert teacher. Table 4.3 shows the participants" familiarity of the CBE documents in their schools.

Table 4.3

Group 1: availability and familiarity of the CBE documents in the target schools.

Participants/ Teachers	Teachers' guides Availability	Learning outcomes charts	CBE syllabuses Availability	Outcomes understanding
T1-gr1	Full	Some	Some	A lot
T2-gr1	Some	Some	Some	Some
T3-gr1	Full	A lot	Full	Some
T4-gr1	Few	Some	Some	Few
T5-gr1	Some	Some	Few	Full
T6-gr1	Some	Full	Some	A lot
T7-gr1	A lot	Some	Few	Few

The first three columns show whether teachers are afforded the necessary documents such as CBA teachers' guides, outcomes charts and programs in their schools. The fourth column represents their expressed perceptions and attitudes towards the AoL outcomes at the time this research was conducted. 'A lot' designates teachers' understandings that they fully interpret the learning outcomes, whilst 'some' indicates that teachers felt they were still coming to terms with understanding the competency-based assessment and learning outcomes.

All primary school teachers in Algeria were expected to be fully acquainted with the CBE curriculum documents set out by the Ministry of National Education. These measures would strengthen the implementation of competency-based education by enabling teachers to encourage students achieve the learning results. However, the survey in this study shows that more than half of the teachers from Group 1 indicated that they understood only some notions of the new assessment trend to align with the adopted reforms (Table 4.3). Only 2 teachers out of the 07 indicated that they knew a lot about students' assessment.

This situation should alarm the Ministry of National Education. Furthermore, it was assumed that all essential CBA materials such as teachers' guides, learning tools, and the subject syllabuses would be sent to the schools for teachers' use. However, the survey (Table 4.3) shows that almost half of the teachers had some of these materials while other schools had the full set of CBA documents. These facts appear to contradict the Ministry claims to equip all schools with the necessary resources as prerequisites to implementing CBA policy reforms. Hence, teachers' conceptions and understandings are vitally important, as these determine the kind of teaching and learning and assessment strategies teachers employ in the classroom.

4.2.2 Group 2: Teachers without formal assessment training

The teachers in Group 2 comprised seven primary school teachers who had not attended any formal training in competency based assessment. They only had short time workshops. However, by reading through CBA syllabus documents and with assistance from their senior teachers' colleagues and through school based in-service programs, these teachers had been implementing competency based assessment for over three years. Table 4.4 shows the participants' personal and qualification information.

Table 4.4 Group 2: Participants' demographic and qualification background

Participant/Teacher	Gender	Age range	Academic qualification	School code
T1-gr1	M	31-35	U dipl	S1
T2-gr1	F	36-40	SSC	S2
T3-gr1	F	36-40	SSC	S3

T4-gr1	F	41-45	SSC	S4
T5-gr1	F	41-45	U dipl	S5
T6-gr1	M	46-50	SSC	S6
T7-gr1	M	46-50	SSC	S7

 Note. SSC= secondary school certificate; U dipl= university diploma

All teachers in this group held an in-service or Pre-service Diploma in primary teaching except teacher (T1 and T5) who had a university diploma in education. They all attained secondary school certificate. These were teachers with initial diploma in primary school teaching, but upgraded to a bachelor's degree after 2 years of In-service program at the Algerian university following the educational reforms undertaken from 2008. Table 4.5 shows the professional background for teachers in Group 2

Table 4.5

Group 2: Participants Professional Information 8+7+4

Participant/ Teacher	Years of teaching experience	Current position in the school	Current grade teaching	No of years Teaching using OBE syllabus	In service on OBE
T1-gr1	16-20	PST	3	08	Yes
T2-gr1	21-25	CT	3	10	Yes
T3-gr1	21-25	CT	4	10	Yes
T4-gr1	26-30	CT	4	11	Yes
T5-gr1	26-30	CT	4	11	Yes
T6-gr1	26-30	PST	3	12	Yes
T7-gr1	+30	PST	3	10	Yes
Note. AT = PST=primary school teacher; CT = certified teacher; TT = teacher trainer					

Teachers in Group 2 had teaching experience ranging from 21 years to more than 30 years and had dealt with CBA syllabuses for over 7 years. CBA was introduced in pilot schools from 2003 and gradually applied in all Algerian schools. However, all of the

teachers in group2 had not attended any formal training on competency based assessment. These teachers developed the ideas through hands-on experience with assistance from more knowledgeable peers and from school-based in-service programs since all teachers were mandated to implement CBA.

In Algeria, student ratio in the classroom often had a negative impact upon the classroom activities and the ways teachers supported individual students to achieve the learning outcomes . The average number of students in a primary school class in Algeria is 37 to 45 students per class. Table 4.6 availability and familiarity of the CBA documents in the target schools in relation to Group 2.

Table 4.6 Group 2: availability and familiarity of the CBA documents in the target schools.				
Participants/ Teachers	Teachers' guides Availability	Learning outcomes charts	CBE syllabuses Availability	Outcomes understanding
T1-gr1	Some	Some	Few	Some
T2-gr1	Some	Some	Some	Few
T3-gr1	Full	A lot	Full	Few
T4-gr1	Some	Some	A lot	Some
T5-gr1	Full	Some	A lot	A lot
T6-gr1	Some	Full	Some	Some
T7-gr1	A lot	Some	Some	Some

All schools were presumed to have full collections of CBA documents including teachers' guides, learning charts, and the subject syllabuses. However, three teachers in Group 2 of this study indicated that their schools only had some of these materials (Table 4.6). For example, T1 indicated that her school did not have a full set of teachers' guides and subject syllabuses. Similarly, teachers were expected to fully understand the learning and assessment mechanisms for the various subjects and grades they were teaching in order to help students achieve good quality learning. However, the results from the survey shown in Table 4.6 indicated that they only understood some features of the teaching and assessment procedures. Only T5 indicated that she has lot of

information and clear ideas about competency based assessment. Understanding of the teaching-learning and assessment process is vital for teachers to guide the students towards achieving competency based learning.

4.2.3 Group3: Senior Primary School Teacher

Group 3 comprised six senior teachers who were supposed to guide the in-service program of each school to support teachers in implementing CBA (OJ 34, 25). The teachers were entrusted to design and lead various school-based in-service activities on how to implement the current reform curriculum. This means that senior teachers were expected to be knowledgeable about the reform curriculum and strategies of CBA teaching and assessment. Most of these teachers were graduated from university.Table 4.7 shows the participants personal and professional information for Group 3.

Table 4.7 Group 3: Participants' demographic and qualification background

Participant/Teacher	Gender	Age range	Academic qualification	School code
T1-gr3	M	36-40	U dipl	S1
T2-gr3	F	36-40	U dipl	S2
T3-gr3	M	31-35	master	S3
T4-gr3	F	41-45	U dipl	S4
T5-gr3	F	36-40	U dipl	S5
T6-gr3	F	31-35	Master	S6

The personal and qualification background for teachers in Group 3 reflected in (Table 4.7) shows that the only two teachers (T3) and (T6) were the youngest. They hold a master degree whilst the elder colleagues had a university degree or higher institute degree. Concerning the variation of teachers' qualification and age reflect the current growing number of graduate and post- graduate teachers who are motivated to take part in the teaching process.Table 4.8 shows the professional status of teachers in Group3.

Table 4.8					
Group 3: Participants Professional Information					
Participant/ Teacher	Years of teaching experience	Current position in the school	Current Grade teaching	No of Years teaching using OBE syllabus	In-service on OBE
T1-gr3	11-15	T T	5	12	Yes
T2-gr3	11-15	T T	4	12	Yes
T3-gr3	11-15	T T	5	11	Yes
T4-gr3	16-20	T T	5	13	Yes
T5-gr3	21-25	T T	4	12	Yes
T6-gr3	21-55	T T	5	11	Yes

Note. TT = teacher trainer

Teaching experience and their seniority are basic factors which determine their role in guiding and training teachers, through in-service training school unit and workshops, to adjust their pedagogical strategies to contend with requirements of the competency based education and assessment issues to achieve strong results. Table 4.9 shows availability and familiarity of the CBE documents in the target schools with regard to Group 3

Table 4.9 Group 3:availability and familiarity of the CBE documents in the target schools.

Participants/ Teachers	Teachers'guides Availability	Learning outcomes charts	CBE syllabuses Availability	Outcomes understanding
T1-gr3	Some	A lot	Some	A lot
T2-gr3	A lot	Full	Full	Full
T3-gr3	A lot	A lot	Full	A lot
T4-gr3	Full	Some	A lot	Some
T5-gr3	A lot	Some	Full	Full
T6-gr3	Some	Full	Some	Some

Senior teachers are supposed to acquire the official CBA documents including teachers' guides, learning charts and subject syllabuses which are prerequisites for implementing CBA. Hence, all teachers were expected to be versed in these documents that were produced and disseminated by the Ministry of National Education. However, three teachers from Group 3 indicated that their schools did not have access to the whole set of CBA documents. This is no different to what teachers in Group 1 and 2 indicated. Only (T2),(T3) and (T5) in this group indicated that their school did have full sets of CBA documents. However, they indicated that their understanding is limited to some teaching and assessing areas.

The teachers' survey of personal and professional background including the data on the availability of the CBA syllabus documents in their schools and their level of familiarity with these syllabi documents varied within the three groups. Since, the teachers in the study had over seven years of experience dealing with the CBA curriculum, they either had some or a lot of knowledge about the teaching and assessment strategies. This is encouraging for the Ministry of National Education who expected all teachers to be fully versed with the different facets of competency based assessment, although some teachers indicated they were yet to clearly understand the teaching and assessment process. Second, teachers in Group 1 had attained full in-service training on how to deal with CBA and could be more confident to take on a larger number of students than teachers in Groups 2 and G roup3. Third, most teachers in the study have been teaching for over 5 years and had a long history of teaching before they were introduced to the idea of CBA. This would have inherent effects on transiting from didactic teaching methods to a more-learner centre approach as advocated by CBA.

4.3 The case study findings

This chapter presents ample details on the codes and themes as emerged from this study. Discussions describe what each theme means, along with supporting data from teacher interviews, classroom observations, and classroom conversation interviews. Data sets were organized using codes that emerged through the recognition of "themes and patterns" (Alhojailan, 2012; Clarke & Braun, 2013; Javadi & Zarea, 2016; Thomas and Harden (2008) in the data. I have arranged the codes so that they are organized under the larger related themes.

In this section, I try to link my results to the existing literature settled within the chosen conceptual framework. As explained in Chapter three, the framework includes four major perspectives that inform teachers' assessment practices i.e., beliefs, knowledge and skills, ability, methods and procedures. This section is devised according to the outline of the conceptual framework. It discusses and relates the teachers' conceptions revealed in my study to existing literature and to the conceptual framework. I highlight the similarities between my findings and the literature and provide insights generated from the study.

The interview transcripts, gathered from 20 teachers, were analysed and the common statements relating to the main research question were singled out. The key research questions were:

How do primary school teachers perceive classroom assessment?

Do teachers' perceptions influence their assessment practices?

Seven themes emerged from the interview data through the iterative process of data analysis. These were classified as follow:

1. Teachers' perceptions of classroom assessment.

2. The impact of teachers' perceptions on classroom assessment practices.

3. Teachers' competencies in assessment.

4. Assessment methods, tools and strategies.

5. The role of assessment in developing learning skills.

6. Assessment supports learning advancements.

7. Insights into teachers challenges on classroom assessment.

Themes one and two represent the participants' perception and understanding of developing and implementing adequate assessment strategies with reference to the epistemological framework that underpins their current practices under the competency-based approach.Teachers who had undergone in-service assessment training and workshops were taught about these rational bases underpinning competency-based assessment, among various subject syllabi written under CBA. Themes three to seven reflect the teachers' point of views about current experiences of classroom assessment issues and the rapid change which swept the Algerian primary school last years. Table 4.10 shows the codes that represent the themes that emerged from the teachers' interviews in relation to theirconception and understanding of assessment. A statement describing each theme is given next to the themes.

Table 4.10		Theme and Descriptions	
No	Code	Theme	Theme Description
01	TPA	Teachers' perceptions of classroom assessment	Teachers describe their perceptions and attitudes towards classroom assessment
02	ITP	The impact of teachers' perceptions on classroom assessment practices	Teachers describe assessment tasks to measure students' learning which may include their beliefs, prior academic performance and motivation
03	TCA	Teachers' competencies in assessment	Teachers describe what assessment to be conducted when they give instructions. They provide information or attempted efforts necessary to prepare themselves for assessing student.
04	AMT	Assessment methods, tools and strategies	Teachers describe strategies they use to assess learners' achievements
05	RSA	The role of assessment in developing learning skills	Teachers describe what they are going to achieve and what they expect students to achieve by the end of the class.
06	AEA	Assessment supports learning advancements	Teachers determine the link between assessment and learning advancements to secure adequate learning
07	ITC	Insights into teachers challenges on classroom assessment	Teachers describe the strategies they use to manage challenges-related to classroom assessment

Table 4.11 shows the number of teachers who answered for each theme within the three groups as arising from their interviews transcripts. Character **+** designates that the teachers responded to the theme. **–** indicates there were no willing or comments made at all in relation to the theme.

Table 4.11: Number of Teachers who responded for each theme within the three groups							
The Main Themes							
	Participants/Teachers	(TPA)	(ITP)	(PCA)	(AMS)	(IAC)	(RAS)
Group1	T1-gr1	+	+	+	+	+	+
	T2-gr1	+	+	-	+	+	+
	T3-gr1	-	+	+	-	+	-
	T4-gr1	+	+	+	+	+	+
	T5-gr1	+	+	+	+	+	+
	T6-gr1	+	+	+	-	+	+
	T7-gr1	+	+	+	+	+	+
	Percentage Value	6/7	7/7	6/7	5/7	6/7	7/7
		86%	100%	86%	71%	86%	100%
Group2	T1-gr2	+	+	+	+	+	+
	T2-gr2	+	-	-	+	-	+
	T3-gr2	+	+	+	+	+	-
	T4-gr2	+	+	+	+	+	+
	T5-gr2	+	-	+	+	+	+
	T6-gr2	+	+	+	+	-	+
	T7-gr2	+	+	+	+	+	+
	Percentage Value	7/7	5/7	6/7	7/7	5/7	6/7
		100%	71%	86%	100%	71%	86%
Group3	T1-gr3	+	+	+	+	+	+
	T2-gr3	+	+	-	+	+	+
	T3-gr3	+	+	+	+	+	-
	T4-gr3	+	+	+	+	+	+

	T5-gr3	+	+	+	+	+	+
	T6-gr3	+	+	+	+	+	-
	Percentage Value	6/6	6/6	5/6	6/6	6/6	4/6
		100%	100%	83%	100%	100%	67%

The teachers' interviews in the current study were calculated and classified diagonally with reference to each group of teachers. The percentage rate for each theme as mentioned by the participants is displayed at the end of the table. Each of the seven themes will now be explained in detail.

4.3.1 Theme 1- Teachers' perceptions of classroom assessment

It has been globally recognized that assessment is a very important part of the teaching and learning process (Brown, 2003; Brown and Hirschfeld, 2008; Harris and Brown, 2009; Remesal, 2007). They started from the premise that assessment should improve learners' own learning and the quality of teaching (Black et al., 2003; Van de Grift, 2007; Rahim, Venville and Chapman, 2009). At the schools where I conducted my research, the collected data revealed that teachers' perceptions and understanding of classroom assessment unveiled some divergence towards the interpretation of their current classroom assessments practices. 65% of my respondent teachers showed their eagerness to use different methods and tools to assess their students' performance while teaching. They considered classroom assessment as an essential aspect of efficient teaching and learning. Some teachers pretended to cope with the assessment methods, however they cannot say what their answers mean.

What teachers indicated about their teaching was not revealed in their classroom practices. Five out of seven teachers in group 2 perceived classroom assessment as tests, usually given to their students at specified time intervals. They exhibited little concern about the vital role of assessment during course observation. The interviews have shown weaknesses in the way assessment is perceived and applied. Hence, classroom assessment practices were not clearly embedded in their teaching practices. The sample excerpts helped me to map out patterns between perceptions of classroom assessment and the teachers' classroom assessment activities.

- Assessing constitutes a bridge between teaching practices and learning quality in the primary school context. The assessment new trend focuses on the students' learning achievements and productions, knowledge and skills acquired, learning approaches and methods carried out by the teacher (T2- Gr1, par.1).

- Assessment is designed to diagnosis the students' weakness and provide them with the adequate remedy to overcome the learning barriers (T4-Gr1, par.2).

- First of all, we need to change teachers' attitudes regarding classroom assessment. The students' individual needs and abilities are always treated the same throughout the year without making any attempt to understand their learning difficulties. Some teachers fail to understand the learners' needs but instead respond to external pressure positively by aiming at covering the curriculum content at a specified time predetermined by other people who usually fail to consider the teachers' role (T3-Gr3, par.3).

The acronyms provided at the end of each excerpt denote the details of the teachers' interview transcripts. For example, T2-Gr1, par.1 refer to teacher number 2 from Group 1, and paragraph number 1. The acronyms have been applied throughout the dissertation wherever teachers' excerpts were illustrated in the texts.

The respondent teachers showed strong and heterogeneous belief towards classroom assessment practices. In response to an item on the questionnaire required the teachers to mark a statement that best-defined classroom assessment in their daily instruction, twelve teachers out of twenty perceived classroom assessment as tests that teachers administer at the end of a term or a topic. This may have implications on when and how teachers would assess students' competencies. Thus, the main purpose would be to check mastery of subject matter and not necessarily to help students learn. It is, of course, important to check whether students have achieved the intended objectives, but at this point, it would be too late to go back if the objectives are not achieved.

Five teachers viewed assessment as a process, which helps teachers to promote students from one level to another, while only three teachers defined classroom assessment as a tool that a teacher uses to promote teaching and learning. Of the twelve teachers that defined assessment as all tests a teacher gives at the end of a topic or term, eight of them indicated that they assess their students in about every lesson. This answer did not seem to correspond with their perception of classroom assessment. All my respondents agreed that classroom assessment is helpful to them and to their students. The teachers were further asked to support their answers. They gave the following:

- Because I can identify students' levels of mastering different skills and elaborating a picture of individual learner's ability(T4-gr1; par.19).

- It helps me recognize the strength and weakness in teaching areas as well as students' competencies (T6-gr1; par.20).

- It helps me to know whether the students have understood or they have not understood what they have been taught (T1-gr1; par.21).

- It helps learners to test their comprehension and applying whatever they learned (T5-gr2; par.22).

Using a five-point Likert scale, ranging from strongly disagree to strongly agree, the participants were invited to specify whether in-service training program and workshops they underwent provided a variety of ways to assess students. Nine participants strongly disagreed, seven participants agreed while four strongly agreed. Figure4.3 schemetised the percentages of teachers' views on the effectiveness of assessment in-service training.

Figure 4.3 opinions on the effectiveness of assessment in-service training
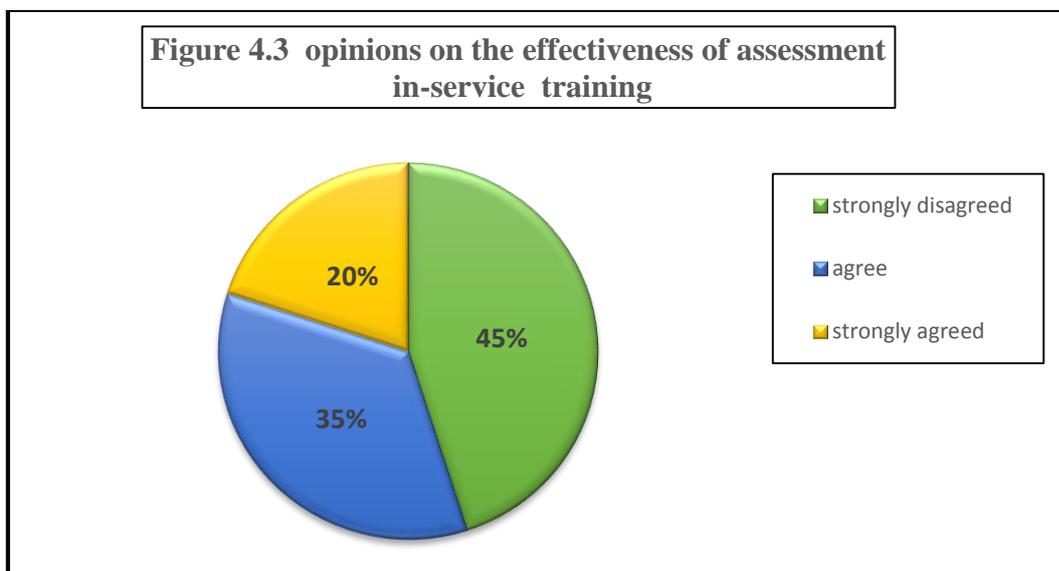
Within Theme 1, teachers described four components, represented as sub-themes, in which their perceptions are reflected in their assessment strategies. These sub-themes included, (1) Teachers' beliefs and attitudes towards the implementation of competency-based assessment (BAA), (2) The importance of assessment training and workshops   in the teaching-learning process (IAT), (3) the current experiences of classroom assessment (CEA), and teachers defining competency-based assessment(TDC). Table 4.12 shows

the number of participants from each group that commented on Theme 1.

Table 4.12: Number of Teachers who responded for each Sub theme within Theme 1					
Theme1: Teachers' perceptions of classroom assessment TPA					
The sub- themes					
Group1	Participants/Teaches	BAA	IAT	CEA	TDC
Teachers who received in- service training in competency based assessment	T1-gr1	+	+	+	+
	T2-gr1	+	-	-	+
	T3-gr1	+	+	+	-
	T4-gr1	+	+	+	+
	T5-gr1	+	-	+	+
	T6-gr1	+	+	+	-
	T7-gr1	+	+	+	+
	Percentage Value	100%	71%	86%	71%
Group2	T1-gr2	+	+	+	+
Teachers who did not received any formal training in competency based assessment	T2-gr2	-	+	-	+
	T3-gr2	+	+	+	-
	T4-gr2	+	+	+	+
	T5-gr2	+	+	+	+
	T6-gr2	+	+	+	-
	T7-gr2	+	+	-	-
	Percentage Value	86%	100%	71%	57%
Group 3 Senior teachers	T1-gr3	+	+	+	+
	T2-gr3	+	-	-	+
	T3-gr3	+	+	+	+
	T4-gr3	+	+	+	+
	T5-gr3	+	-	+	+
	T6-gr3	+	+	+	+
	Percentage Value	100%	67%	83%	100%

Table 4.12 shows the number of teachers whose responses accounted for the emerged four sub-themes within theme 1. An acronym is used to represent each sub-theme in the table. Each of the sub-themes is now discussed with support excerpts from the interview transcripts.

4.3.1.1 Teachers' beliefs towards competency-based assessment

Fives and Buehl (2012) stated that all pedagogical acts are influenced by the conception teachers have about framing classroom instruction and the process of assessment practices (see 2.12). One of the emerging theme highlighted by the interviewee teachers focused on the assessment policy interpretation. This was an important inquiry in the sense that I worked on the assumption that the way in which teachers relate to and practice assessment depends to a large extent on their perception and interpretation of the assessment policy. The teachers' attitudes towards competency-based assessment took different forms. They were talking about the assessment philosophy and the role it plays as an integral part of the teaching learning process.

Asked on the type of assessment they prefer to use in the classroom: summative or formative, some teachers reacted in the following:

- There is a growing trend towards the use of formative assessment, but school effectiveness is perceived by the whole population in the light of Grade 5 results. End-of-term tests are considered important to the learners' achievements. So, I strive to prepare my students for such final tests (T2-Gr2; par.23).

- I am convinced that as long as the education system is based on examination performance of Grade 5 learners, the summative assessment will always be directly related to school effectiveness (T3-Gr1; par.24.

- Formative assessment is very more important in worldwide education policy since two decades at least. But in Algeria, we are not well-prepared. Things seem ambiguous. Teachers should make some efforts, at the mindset level, to adjust the assessment practices to resonate with the new method of gauging students' learning (T6-Gr3; par.25).

When asked to comment on the implementation of competency-based assessment in the primary schools, the participant teachers provided the following responses:

- I do not have any involvement in as far as competency-based assessment in the primary school is concerned because I believe that we (teachers) set our own tests on termly basis because learners are expected to be assessed through public examination at Grade 5 (T7-Gr2; par.26).

The above interpretations seem to indicate that there is a poor conception of the competency-based assessment notions. Most teachers opted for summative assessments at the expense of formative assessments in the primary schools. This tallies with findings of Firestone, Shorr & Monfill's (1998) who stated that summative assessments are used to publicly exhibit schools and teachers efficiency.

Eight out of twenty teachers understood classroom assessment as a tool for promoting students from one-grade level to the next. This attitude is not different from the viewpoint held by the other twelve teachers. The only difference is related to time-factor. All teachers use test results to promote students from one grade level to the next and to verify if they have mastered the subject matter at the end of a topic or term. This suggests that assessment means testing.

Among the teachers who perceived classroom assessment as tests were (T2-gr2; T3-gr2; T4-gr2; T5-gr2; T3-gr3; T6-gr3) with more than20 years of teaching experience and participation at various in-services workshops. Despite their long teaching experience, nothing seems to differentiate their assessment practices from the less experienced teachers. It is possible that the in-service limited workshops and study-days that they attended never addressed the issues of classroom assessment. Chester and Quilter (1998) strongly recommended that in-service training should focus on helping teachers to see the value of assessment methods rather than "how to" do assessment only.

Interestingly, (T1-gr1; T4-gr1; T5-gr1; T6-gr1; T5-gr2) with less than seven years of teaching experience and trained under the competency-based approach, perceived classroom assessment as a tool used to inform teaching and learning. Their perception of classroom assessment may refer to a number of factors. They indicated that they do assess their students in about every lesson.

There was a lack of agreement in the responses, which , (T1-gr1; T4-gr1; T5-gr1; T6-gr1; T5-gr2) gave to the same question. They stated that they assess almost every lesson and yet they perceived assessment as tests. Their understanding of classroom assessment seemed not to be grounded on any learning approach and the concept may

have carried different meanings at different times. Besides, they may have found the concept (assessment) itself confusing.

Some teachers accept the new vision of the assessment reforms. They started from the assumption that competency based assessment supports the students ' knowledge, skills and values. Others either rejected the assessment reform and maintain their traditional methods of assessment or show a partial approval.The assessment involvement in classroom practices is expected to generate the outcomes that students are working towards. Hence, the teachers' attitude about assessment impact the students' learning quality. The following samples excerpts related to theme1.1 show teachers attitudes and providing their understanding of classroom assessment.

- I would say assessment is a way of determining the children' levels of understanding of what has been taught in the classroom. So it gives you, as a teacher, directions of where they are, what knowledge they have acquired, and that guides you as to what you still need to do. At the end, we assess to see what they have gained and how far they have progressed along the way (T4-Gr1; par.27).

- Assessment is a process of making decisions about a learner's performance. It involves evidence gathering in order to examine what learners have achieved. It also supports teachers to establish whether learners are performing according to their full potential and making improvement towards the expected levels of standards(T7-Gr2; par.28).

- I, generally, assess the learners' abilities holistically, what the learners' competencies are and to see if they have basically met outcomes as set per term by the Ministry of Education for each learning area. You know, a child has to be able to accomplish some standards at the end of each year or each term and we use the suitable means to see if the child is able to meet those ends (T6-Gr1; par.29).

- ....I easily understood the new method of evaluation in particular during the organized workshops. Everything is clear. Competency based assessment helped me to focus on individualized learning which certainly promotes Students' learning outcomes. (T5-G2, par.30)

It emerged from the collected data that some teachers articulated that there were some assessments that they were required to use with their learners because it was mandated by the (PARE, 2005) in the assessment policy. For instance, (T1-gr2) indicated that the assessment policy was streamlined and prescriptive and as teachers, we were expected to comply with it. Meanwhile, others teachers in my study (T2-gr2; T7-gr1; T3-gr2) admitted that certain types of assessment, especially peer assessment and portfolios, were irrelevant, inaccurate, subjective and would negatively affect their learners. Only four teachers (T6-gr1; T4-gr1; T2-gr3; T5-gr3) declared that they used them to comply with the school requirements sake. However, none reported resisting these required practices, despite their personal objections, which implies that in general teachers do comply with assessment demands regardless of their personal perception.

The classroom assessment practices suggested that teachers lacked a clear understanding of the new assessment policy because the policy explains that not everything that is taught should be assessed formally and not everything that is assessed has to be recorded (PARE, 2005).

4.3.1.2 The importance of assessment training in the teaching learning process

Findings unveiled that the assessment policy was full of loopholes. Serious concerns were raised during interviews. The major challenge was with support and the direction that teachers needed. It was established that many problems work against the effective implementation of assessment in the Algerian school as understood by primary school teachers. According to the findings, 65% of my respondent teachers have not attended enough seminars or workshops on effective implementation of classroom assessment.

figure 4.4 The importance of assessment training

- lack for assessment training
- enough assessment training

35%

65%
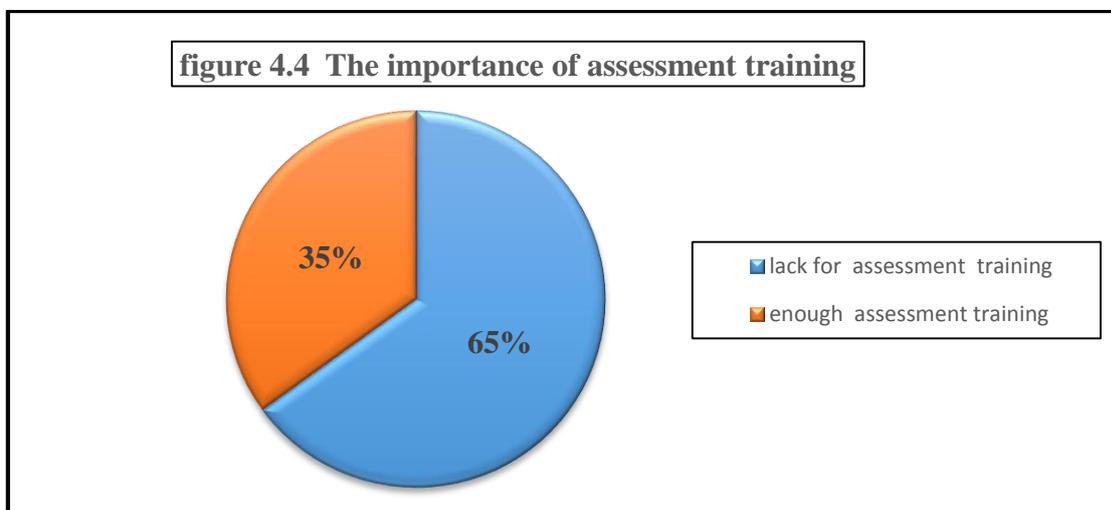
Figure 4.4 exhibits that the target teachers need more training and workshops on assessment. They believed that this was a general problem which swept the Algerian school.This becomes clearly an obstacle towards efficient implementation of assessment because one cannot give what he or she does not have. All participants in this study identified assessment training as the best strategy which relate theory to practice in classroom situation. Some teacher argued that:

- Teachers needed training so as to be able to use the assessment effectively, and they needed guidance on how to implement the content and teaching plans. (T6-gr3) strongly emphasised that teachers also needed to be mentored about assessment-related issues in order to acquire more knowledge and skills in assessment(T6-gr3; par.31).

- We, teachers, are somehow lost. We are standing at crossroads and we are still waiting for guidance and support to help students acquire qualitative knowledge by providing necessary support and resources. (T2-G2, par.32).

Teachers seemed aware of the new assessment policy and understood its stipulations, but did not have the necessary training and skills to support learners with barriers to learning. They felt that teachers did not have sufficient education regarding diversity and inclusivity. They hoped to receive the appropriate training they need to conceptualize assessment expertise. As a result, schools are staffed with teachers who are being given new assessment roles and duties without the tools needed to do that work adequately.

They claimed to attend training on the general aspects of the curriculum, where classroom assessment became part of the discussions. The training that teachers in this study received was fragmented and irregular, in the form of one-day session workshops that were general in nature and related to CBA. These teachers were not provided with the opportunity to engage in discussion about the practical procedures to implement the assessment policy in a way that empowered them to develop a clear assessment understanding. (Vandeyar and Killen ,2007; Bayrakci, 2009; Coolahan,2002) bring to the fore the importance of in-service training. They highlighted the needs to engage teachers in thorough training in assessment practices since teachers cannot use assessment strategies and skills that they do not understand. All participants' teachers in this study claimed that they did not have adequate in-service training. They seemed

eager to understand the CBA in order to know how to deal with learners with barriers to learning.

Based on this evidence, I claim that few workshops to understand the contents and learn how to implement the ideas of a complex assessment policy is clearly insufficient. Besides, teachers constantly proclaimed that the type of training they received was too abstract and insufficient. Evans (2002) states the importance of continuous training because it gives opportunities for teachers to consider and reorganise their views through the changes in their assumptions. Thus, create a deep and lasting impact on their assessment practices. Most teachers (65%) are less satisfied with the new assessment regime.They declared that alternative assessment is more abstract than practical.

- We can easily notice the inherently biased subjective judgments and often inferior-quality assessments made by teachers. We are far from truly scientific assessments in a cost-effective way. The new era assessment remains a hollow slogan away from the reality of the school. Education sector officials should adopt significant patterns of assessment tools that maintain our educational standards and improve student performance (T4-gr2; par.33).

- We, teachers, find ourselves in transition between eras of assessment and that time of change is characterized by confusion and frustration. For many years we used the direct writing assessment methods which are valued as the appropriate assessment methods. Actually, we are asking ourselves how do we develop and use these new assessment tools effectively? Our excitement is tempered by a feeling of anxiety and uncertainty about the new assessment tendency(T5-gr2; par.34).

- There is a misunderstanding and a misconception about competency-based assessment. Due to this reality, we are unable to understand and use it well to gauge our students' competencies. (T5-gr2; par.35).

- Our reluctance reflects our confrontation with painful and frustrating realities and results of many decades of declining assessment literacy throughout the fabric of Algerian education (T6-gr3; par.36).

- We have not the necessary resources and qualities to meet the technical challenges associated with the growing demand for performance assessment alternatives. We are ill-equipped to face practical issues associated to performance assessment use. Research should invest in developing resources needed to meet these technical challenges associated with the use of alternative assessment strategies (T6-gr3; par.37).

4.3.1.3 Current experiences of classroom assessment

Teachers' experiences and understanding about competency-based assessment reflect their concerns about the adequacy of quality teaching and assessment. Most of the problems relating to teaching, learning and assessment procedures were experienced by teachers during their implementation of the new curriculum and reflected through their interview responses. This notion also represents teachers' continuing struggles to provide qualitative teaching and pertinent feedbacks. Evidence showed that there were no significant discrepancies between the urban and the rural school teachers in the way they managed and assess their learners. The teachers focused on low-level questions and choral answers were given by students. Teacher-centered approaches were predominant.

Lack of relevant understanding or misinterpretation may affect teachers' motivation and performance which certainly impact students' learning. These are samples of interview excerpts relating to theme 1.4

- Teachers are making efforts to manage the school reform era. But it is insufficient. We need more assistance to keep up to date with the competency based approach. The misconception may prevent many educators to develop their teaching qualities and assessment reforms from realizing their full potential (T2-gr1; par.38).

- Since we are part of the world, we should improve our educational system and prepare the new generation for the work market. I am.....really optimistic (T7-gr1; par.39).

- The new era of educational reform obliges teachers to look more closely at how assessment frameworks and practices, implemented by the Algerian educational system, can best promote the acquisition of skills and improve students' learning strategies (T1-gr3; par.40).

Teachers' long experience and teachers' education level did not seem to develop the teachers' attitudes and understandings of classroom assessment. However, teacher's academic qualification seemed to influence teachers' flexibility to adopt new methods and assessment strategies. Assessment provides teachers with suitable clues about the way students think and construct their knowledge. Few teachers showed an impressive understanding of the education reform, and their assessment practices were in line with the policy prescriptions.

4.3.1.5 Summary

The collected corpus related to theme one revealed that the target teachers perceive classroom assessment as tests and they use tests to assess students' learning. Although tests are part of assessment and could be used to assess students' learning, they do not answer all questions that a teacher would ask about his/her students. Teachers may be interested to identify and determine the students' progress in a particular lesson and what knowledge or skills they need in order to improve their learning abilities. A test would not provide such information because a test is one form of assessment and refers to procedures used to measure learners' learning at a specific time intervals. Besides, it is not possible to conduct tests every day, but it is possible to assess students on a daily basis. Tests help the teachers to check students' progress and achievements. Thus, other methods and tools must be used to comprehend the teaching and learning quality.

My informant teachers perceive classroom assessment as testing and fail to understand the learning prospects and challenges experienced by their students during the learning practice. They seemed committed to cover all the syllabus topics within a limited span of time at the expense of supporting students to learn with minimal difficulties. Accordingly, tests do not provide students with sufficient opportunities to improve their skills because the tests are conducted after the learning process has taken place.

4.3.2 Theme 2- The impact of teachers' perceptions on classroom assessment use

Teachers' experiences and understanding about competency-based assessment reflect their concerns about the adequacy of quality teaching and assessment. Most of the problems relating to teaching, learning and assessment procedures were experienced by teachers during their implementation of the new curriculum and reflected through their

interview responses. This notion also represents teachers' continuing struggles to provide qualitative teaching and pertinent feedbacks. Lack of relevant understanding or misinterpretation may affect teachers' motivation and performance which certainly has bad impact on the students' learning.These are samples of interview excerpts relating to theme2:

- No one can deny pedagogical complexities facing young people but when we really guide them to go through these problems they generally become effective elements in classrooms. Because just by guiding them they already know what to do (T1-Gr1, par.4).

- ok,ok, ... I know the critics, but I think that competency-based assessment is a suitable model to gauge students learning quality unlike before in the objective based teaching. Before it's teacher-centered lesson. It's only the teacher who does a lot of talking. But now all the teachers try to develop core ideas about student-centered education and assessment. And I find that the students are learning very well (T5-Gr2; par.5).

- When students are provided with feedbacks and continuous assessment, they compete with each in order to achieve activities within the limited span of time. Teachers are experiencing a new education era which valorizes the learning outcomes. So if we teachers really commit ourselves to look for adequate assessment, then students do their part, then the lesson becomes interesting (T2-Gr3; par.6).

The second theme that emerged from teachers' declarations on classroom assessment practices focused on perceptions of CBA as a means of assessing students' achievement of learning. Four sub-themes emerged from theme two, which included the following teacher perceptions of assessments as; (1) The impact of teachers' assessment on students' outcomes quality (IAS) ,(2) Adequate assessment creates significant learning experiences. (ALE), (3) Shift from content assessment to competency based assessment (SCC) and (4) Objectivity of assessing learning achievements (OAL). These four sub-themes reflect the teachers' knowledge of the key principles underlying competency based assessment as described by The National Education Orientation law (04-08).

Table 4.13 shows the percentage of teachers' interview responses in relation those sub-themes within theme 2.

Table 4.13 Number of Teachers who responded for each Sub theme within Theme 2					
Theme 2: The impact of teachers' perceptions on classroom assessment practices ITP The sub- themes					
Group1	Participants/ Teachers	**IAS**	**ALE**	**SCC**	**OAL**
Teachers who received in- service training in competency based assessment	T1-gr1	+	+	+	+
	T2-gr1	+	+	-	+
	T3-gr1	+	+	+	+
	T4-gr1	+	+	+	+
	T5-gr1	+	-	+	+
	T6-gr1	+	+	+	-
	T7-gr1	+	+	+	-
	Percentage Value	100%	86%	86%	71%
Group2	T1-gr2	+	+	+	+
Teachers who did not received any formal training in competency based assessment	T2-gr2	+	+	-	+
	T3-gr2	+	+	+	+
	T4-gr2	+	+	+	+
	T5-gr2	+	+	+	+
	T6-gr2	+	+	+	-
	T7-gr2	+	+	+	+
	Percentage Value	100%	100%	86%	86%
Group 3 Senior teachers	T1-gr3	+	+	+	+
	T2-gr3	+	-	-	+
	T3-gr3	+	+	+	+
	T4-gr3	+	+	+	+
	T5-gr3	+	-	+	+
	T6-gr3	+	+	+	+
	Percentage Value	100%	67%	83%	100%

4.3.2.1   The impact of assessment on students' learning

Competency based assessment is implemented into primary school with varying degrees following the teachers' beliefs and attitudes towards the student's centered education . This theme is mainly related to the teachers' experiences resulting from their implementation of CBE. A number of policy papers including the 'National Education System Reform Commission (CNRSE) (2001), and The The National Education Orientation law (NEOL) (2008) are amongst other reform policies that guide the implementation of CBE in Algeria. The sample excerpts related theme 3 exhibit the following:

- It's a good opportunity to implement CBA in our school. I think that many positive aspects may be mentioned namely communication, interaction , instant feedbacks.... (T6-gr1; par.41).

- Sorry, but the stakeholders are concerned only with the implementation of educational reforms regardless of the results. We do not have the right to refuse or to show our point of views. What is required of us is the implementation of the new curriculum and to respect the laws. So we have to go by the policy. We cannot say, oh, we cannot do it. In fact, many of us complain that we don' t have the resources or materials and adequate trainning to teach .Sometimes we feel that we are lost. So, we just have to try our best to implement this (T3-gr2; par.42).

4.3.2.2   Adequate assessment creates significant learning experiences.

Based on the information provided by teachers in the interviews, it seemed to me that teachers did not really have a clear understanding of the assessment policy or its guidelines. I felt teachers still needed much training and workshops on assessment, stating that their greatest concern in the school was the implementation of Bloom's taxonomy, a way of classifying educational objectives under the three domains of cognitive, affective and psychomotor skills. Much assessment in different schools did not probe the deeper thinking processes of the learners expected by the above-*mentioned* taxonomy, and as a result, pupils did not develop complex thinking skills, and failed to synthesise, analyse or evaluate properly.

According to (T1,T6-gr2), pupils might be able to recall and best apply information but they could not go into the deeper levels of thinking. The researcher observed that the

questions that some teachers set in their assessment tasks did not probe learners' thinking and did not take them to a higher level. Teachers needed to attend workshops especially on how to implement proper questioning strategies ,techniques and structure which really probe the learners' thinking processes.

By comparing their responses to the assessment definition as outlined in (PARE, 2005), I would argue that 65% of the target teachers had a shallow interpretation of assessment. However, the key aspects that they mentioned in their definition were progressed in learners' learning. (T3-gr3) indicated that he used continuous assessment throughout his lessons:

> ● I believe that teaching and instructions should be followed by revision and assessment activities. When it is a double period, we have to teach them in the first period and assess them in the next. Without assessment, teaching would be pointless (T3-gr3; par.43).

This response reveals a profound understanding of continuous assessment in the sense that assessment is not a separate entity from teaching and learning. Most teachers explained that they did not like to use these lesson plans because they were not specific and in some learning areas they were too prescriptive. Their interpretation was based on the fact that the use of different assessment methods creates a relaxed and free atmosphere for the learners. They focused on the use of projects in mathematics as well as tests and class work. They were satisfied with the projects that learners did as they showed that they had grasped the content.

4.3.2.3 Shift from content assessment to competency based assessment.

Because of several years of unwavering devotion to traditional assessment based on written test, teachers have remained unaware of the full range of assessment alternatives at their disposal. Consequently, they entered the era of assessment alternatives without the technical understanding needed to take full advantage of them. The researcher noticed that some teachers still rely on traditional forms of assessment. This suggests that these teachers were still thinking in terms of teachers being both the source of information and the judge who assessed student capabilities. I assume that it is because of the transitional shift from content assessment towards competency-based assessment, these teachers still kept traditional assumptions regarding instruction and assessment. 65% of my informants remained committed to the old school of thought that mainly rely on tests as the best way to assess learners' achievements and on

traditional methods of teaching in their classrooms, such as question and answer, drill work and rote learning, and they were happy and comfortable with these because they firmly believed that they went on the right way. They claimed that there was not so much paperwork in assessment. Also, they avoided challenges such as the excessive time spent on paperwork, on recording and reporting of assessment results, feedback to learners, compilation of assessment tasks and on the planning of assessment.Thus, they failed to probe the deeper levels of thinking or to give learners an investigative research topic.

On the contrast, 35% felt that the new assessment system was working very well because it was learner-centred. These teachers claimed that in the old system the environment in which they worked was strict and prescriptive and there were clear directives to be followed. They appreciated the support they received from their superiors because it came with guidance, clear directives and prescriptions, and the teachers knew what was expected of them. They felt that there was no pressure on them when they cope with their workloads (T3-gr1; par.44) clearly stated that :

> • The current way of assessing learners was making a difference in the way learners were taught: If teachers assess the way they are supposed to, then they would get a much clearer picture of the holistic competencies of learners. I think previously, the focus was more on the learners' ability to count, read and write. Now we are individualizing instructions and giving learners an opportunity to investigate and do some research. The results are much better. I am quite sure that if assessment techniques are used correctly then assessment results would be interpreted correctly.

They agreed that the traditional method of assessment was not inclusive since it did not make provision for catering for the diverse needs of learners nor address the different assessment methods. All participants in this study found learners' assessments overwhelming, both for them as teachers and also for their learners. They further indicated that in the past there had not been much reporting of marks, while assessments were done once a term in the form of a test, not as often as is the case now. I argue here that the teachers' understanding and interpretation about assessment could account for the weak link between the education policy and their assessment practices.

4.3.2.4 objectivity and subjectivity in assessment practices

Objectivity and subjectivity in classroom assessment practices refers to the nature of

data gathered through different stages of the instruction process. Objectivity refers to information that is obtained through measuring, observing, and examining facts. Subjectivity defines data that is based on personal views, feeling, or value judgments. Most teachers highlighted that the issue of objectivity in assessment was problematic, because in most cases teachers were unable to use the rubrics effectively. The researcher had observed that there was no common understanding of rubrics and the rating scales that teachers used. Through discussions with the target teachers, I realised that these problems were generally prevalent in other schools as well.

4.3.2.5 Summary

The teachers' perceptions of classroom assessment had a great effect on their classroom assessment practices. A couple of attempts were undertaken to understand how the students were learning. One teacher stated that it is not possible to assess students on a daily basis as they learn different topics. The findings support previous findings by Mussawy (2009) and Buyukkarci (2014) who found that teachers' perceptions of classroom assessment affected their classroom assessment practices.

It is worth noting that two broad categories of classroom assessment are used, to varying degree, in the Algerian school, and these are AoL and assessment for learning (Pophan,2008; Ussher and Earl, 2010; Chappuis, et al.,2012; McMillan& Turner, 2014). Generally, my informants consider tests as the suitable tools for assessing students' learning levels. Hence, one could claim that teachers mainly emphasized assessment of learning.

In addition to teachers' beliefs and perceptions of classroom assessment, other factors seem to influence teachers' classroom assessment practice. These factors depicted in figure 4.1 revealed that teachers' flexibility and willingness to adopt and try out new ideas seem to depend on their academic qualification and their age. The youngest teachers who had higher academic qualifications were more ready to try out the new assessment policy than those who had low academic qualifications. In this context, we claim that oversized classes, teaching and learning supports have a significant impact on classroom assessment. During lesson observation, teachers were unable to finish marking students' work within the limited period devoted to each topic because of the large number of students. Accordingly, teachers had no opportunity to specify the students' levels and abilities to manage problem-solving activities. They

failed to distinguish the percentage rate of the students who were able or not able to solve the proposed problems (Palomba & Banta,1999). Besides, teachers who participated in this study claimed a fatal lack of teaching and learning resources. This may influence the limited choice of activities to do with students. Generally, the teachers' participant in this research used assessment for the sake of ranking students and not to identify individual strengths and weaknesses. They perceived assessment as a means for promoting students from one grade to another.

4.3.3 Theme 3. Teachers' competencies in assessment

Classroom assessment is one of the tools that teachers can exploit to inform their teaching and the learning of their students. Unfortunately, the purpose of classroom assessment in some schools seems to be confused and, therefore, not supporting students' learning needs. The purpose of assessment differs from one teacher to another. Six out of seven teachers in Group2 considered assessment as test and grade. However, four out seven teachers in Group1 recognized the rationale of assessment as a suitable tool used to fit the students' needs to improve the learning quality. Similarly, three out of six teachers in Group3 showed their ability to deal with the new assessment instructions regardless of the traditional cognitive accumulations. They regarded assessment as an adequate tool for improving students' learning. Figure 4.5 schemetises teachers' positions towards assessment conception and use.

figure4.5   teachers' positions towards assessment

	gr1	gr2	gr3
test and grade	3	6	3
adequate assessment tool	4	1	3
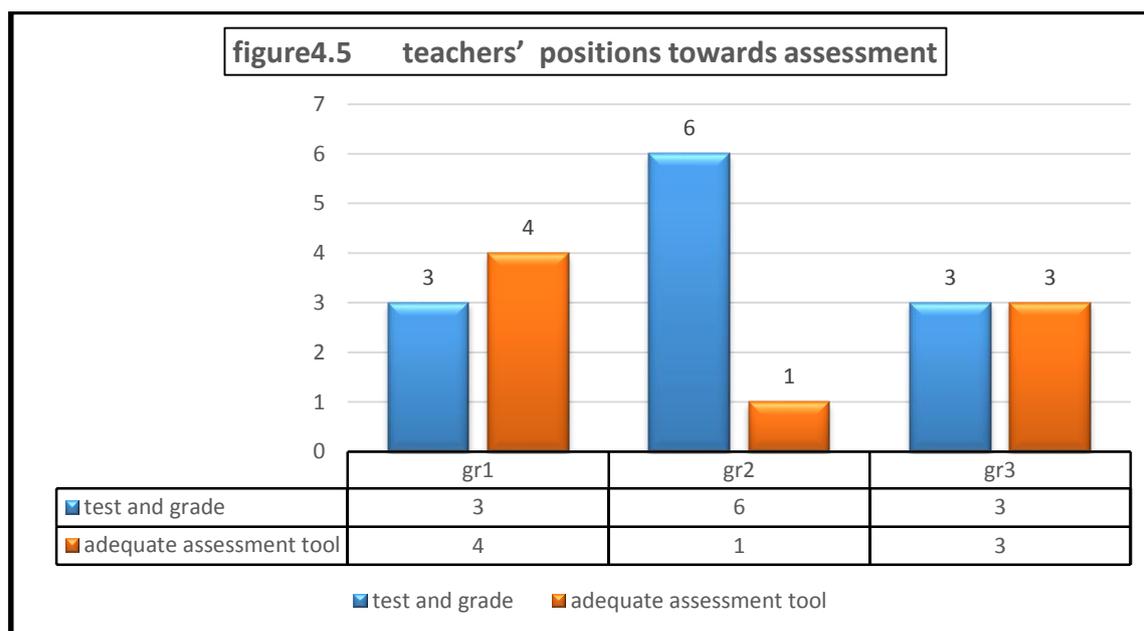
The available body of collected facts exhibited a common misconception, among teachers, that grading and assessment are the same. Twelve from twenty teachers (60%) failed to explain the significant role of assessment in enhancing the students' learning outcomes. Some teachers still continue to teach and assess in a teacher-centered way. Meanwhile, only eight out of twenty respondents (40%) recognized the essential role of classroom assessment. Their focus is mainly put on what the students know, how they learn and how they use competencies in different learning situations. These are samples of interview excerpts relating to theme 3.

- We are really confused; we do not know how to assess students. We are just given tests to classify students. We are lost between the traditional and the new assessment concepts. We need support, a practical classroom assessment course would provide teachers with the suitable clues about the way how to assess students competencies(T1-Gr2; par.7).

- I feel that nothing is moving in the correct direction. Each teacher tries to assess students' learning according to his/her understanding regardless of the new educational reforms(T6-Gr2; par.8).

The third theme that emerged from teachers' reports on classroom assessment practices focused on competencies in CBA as a means of assessing students' achievement of learning. Four sub-themes emerged from this theme three, which included the following teacher competencies of assessments as; (1) Assessment shapes effective learning (ASL), (2) assessment improves teaching and learning quality (AIT), (3) assessment guides students to reach clear objectives (AGO), and (4) assessment tests competencies and skills (ATC). Table 4.14 exhibits the percentage of teachers' interview responses in relation to those sub-themes within theme 3.

Table 4.14 Number of Teachers who responded for each Sub-theme within Theme 3					
Theme 3: Teachers' competencies on assessment TCA					
The sub- themes					
Group1	Participants/Teacher s	ASL	AIL	AGO	ATC
Teachers who received in-service training	T1-gr1	+	+	+	+
	T2-gr1	+	+	+	-
	T3-gr1	+	+	+	+

in competency	T4-gr1	+	+	+	+
based	T5-gr1	+	-	+	+
assessment	T6-gr1	+	+	+	+
	T7-gr1	+	+	+	+
	Percentage Value	100%	86%	100%	86%
Group2	T1-gr2	+	+	+	+
	T2-gr2	+	+	-	+
Teachers who	T3-gr2	+	+	+	+
did not receive	T4-gr2	+	+	+	+
any formal	T5-gr2	+	+	+	+
training in	T6-gr2	+	+	+	+
competency	T7-gr2	+	+	+	+
based assessment					
	Percentage Value	100%	100%	86%	100%
Group 3	T1-gr3	+	+	+	+
Senior teachers	T2-gr3	+	+	-	+
	T3-gr3	+	+	+	+
	T4-gr3	+	+	+	+
	T5-gr3	+	-	+	+
	T6-gr3	+	+	+	-
	Percentage Value	100%	100%	86%	100%

Assessment is viewed as a comprehensive educational system, which aims at promoting the learner personality. Airasian (1997:24) stated that classroom assessment is a many-sided purpose closely related to diagnosing pupil problems, judging their academic performance, providing adequate feedback to pupils, planning and conducting instruction, and establishing the classroom society. Teachers should be skilful enough in classroom assessment to appraise the status and changes in pupils' personality development, to determine pupils' needs and possibilities of improvement, to support teacher planning, and to be familiarized with the nature of pupils learning levels. Additionally, assessment helps to measure development and progress and to facilitate the selection and improvement of assessment tools to appraise the teacher's proficiency.

"Assessment is at the very heart of the teaching and learning process. It helps us: evaluate our own teaching; to consider the strength and weaknesses of curriculum; to priorities our effort most productively; to diagnose difficulties with individual children and to allow us to pass on information to parent about pupils. Thus, assessment interacts with the curriculum, parents, the learner, and the teacher." Harrison and Wintle (2003:8).

4.3.3.1 Assessment shapes effective learning/assessment for learning

Assessment for learning is designed to equip teachers with necessary information to modify and adopt different teaching and learning stimuli. It recognizes that individual students learn in distinctive ways, but it also acknowledges that there are foreseen patterns and pathways that many students follow. Thus, teachers use the resulting information to determine students' needs and carefully design adequate strategies to streamline and target instruction and resources and to afford instant feedback to shape more effective learning.

However, the literature study in paragraph 2.19 indicates that teachers held inadequate information on how to use proper methods of assessment and using results for whatever purposes. In the separate interviews with the 20 primary school teachers, 16 participants (80%) reckoned that they were not well-prepared to manage the new assessment policy. Teachers lacked expertise. They attributed it to inadequate assessment training. In response to the question on whether they received adequate training, teachers participating in the interviews confirmed that the training periods were very short and workshops were limited to some theoretical basic concepts. The following excerpts reflect the teachers' responses:

- I reckon that assessment was part of our training, but I don't think it was enough as what the actual situation on the ground demands. I believe that focus was more on a theoretical level than the practical level needed to deal with the new education era (T1-gr2; par.45)

- It was theoretical, no skills really were imparted during training workshops. Practically, I had to go out and learn on my own for the needed details. I usually asked for help from teachers around (T6-gr2; par.46)

- I don't know whether we were trained or not because we were not exposed to specification grids, we were not exposed to skills to be addressed

> when setting tests, we were not taught the variety of items used in setting tests(T3-gr3; par.47).

Interviews with teachers further revealed that inspectors, apparently, concentrated on theory and neglected the practical aspect necessary to acquire the competencies that enable the teachers to carry out different assessment strategies. I will say the bulk of primary school teachers were not trained enough in assessment theory because when you look at the course outline of most of our primary school teachers the assessment constituent is not emphasised. The study established from teacher's interviews and observation that teachers gained assessment skills while they were already in the field. While asked where they got the skills from, since they already carried out classroom assessment, they declared that:

- I am using trial and error method. I am still learning in class now to acquire suitable assessment tools (T3-gr2; par.48).

- I taught myself through experience. That is I learnt through practice and experience(T3-gr3; par.49).

The experiences gained by teachers is not enough to conduct classroom assessment. It might be a vicious cycle of malpractice. If we consider that teachers were not sufficiently instructed in the field of assessment, we can conclude that the experience teachers perceive might be packed with poor assessment strategies.

Only four teachers (20%) from all the interview respondents had a positive interpretation of the new assessment policy. They stated that the new syllabi have given much attention to the assessment area. Accordingly, I establish that reaping benefits from seminars and workshops is linked to teachers' motivation to promote their professional competencies. It is disturbing to note that some teachers are developing a negative attitude towards the efforts made to promote instruction and assessment. Besides, they did not cater for developing competencies. They felt that they had the requisite skills to carry out assessment. Teachers' negative attitudes, as well as lack of knowledge and motivation, became an impediment to effective assessment. This tallies with the results of) Jones, 2005; Mussawy, 2009; Blazar, 2017) who explored teachers' perceptions of classroom assessment and the degree of the overlap in teaching attitudes that negatively impact the learning process.

4.3.3.2 Adequate assessment empowers learning quality

Assessment results are used to improve teaching and learning. My respondent teachers believed that adequate feedback was very important in assessment to improve the learning quality.

- When I provide feedback to learners my objective is the improvement in a particular task. This procedure makes learners aware of the gaps in their performance and equips them with ample opportunities to correct their mistakes and perform better (T5-gr3; par.50).

Only 30% out of my   informant had often had reflection sessions after every assessment activity, where they looked at how particular pupils had performed and explained to them where they had gone wrong. The feedback was provided in the form of a rubric which some teachers used to assess a particular milestone in specific occasions to show the learners' strengths and weaknesses in an attempt to encourage them to improve their levels and to positively cope with different learning situations.

4.3.3.3 Assessment guides students to construct their knowledge with clear learning objectives

The learning-centered assessment Huba and Freed (2000) states that learners should construct their own knowledge. This means that teachers should create the learning environment relevant to the learners, and then adopt the active method to check the progress and quality of the students' learning using various assessment strategies. The other role of the teacher should be to provide the students with feedbacks and experiences that will enable them to establish links and relationships. Teachers can only do this if they are able to supervise the learning process and are able to know what sort of support the learners need at a particular point. It emerged from interviews that teachers were aware that assessment shapes learning and assists students to construct their knowledge correctly.

- You know, assessment is very important to cope with students' learning issues. Logically,   we cannot teach without knowing the results of instruction, and if the objectives are reached or not. Our students need guidance and support to align with specific criteria related to their syllabi.

I advise you to visit other schools and you will see that each teacher has a distinct method of helping learners (T5-gr3; par.51)

4.3.3.4 Assessment Seeks to test competencies, skills and intelligence.

I established that teachers used preparation books to identify the themes for developing tests and examinations usually given monthly or at the end of each term to test   learners' competencies, skills and intelligence. However, the researcher noticed that the devised tests and exams failed to include strategies for assessing high levels related to Bloom's taxonomy.

It is apparent from these definitions that teachers perceived the main purpose of assessment as improving teaching, even though their definitions focused more on the aspect of teacher reflection. This meant that they understood assessment as the foundation for effective teaching. They assessed the quality of their teaching by using the assessment information gathered during each lesson presentation or activity that they conducted. Through assessment, they could adjust or modify their teaching appropriately according to the new learning situations and learners' needs.

- We mainly use tests to evaluate students' tasks because we are not prepared to ensure the quality of these classroom assessments until we acquire resources and practical training. We need clear pedagogical guidance to implement the new form of assessment in an effective way (T4-gr3; par.52).

4.3.3.5 Summary

Competency and flexibility to cope with the individual learner's needs. The findings emerged from this study showed that assessment is used to determine students' needs and carefully design adequate strategies to promote learners' performance and skills. It also equips teachers with necessary information to modify and adopt different teaching and learning strategies that shape effective learning. Practically, most teachers held inadequate information on how to use proper methods of assessment and using results for whatever purposes. Teachers participating in the interviews affirmed that the training sessions were very short and workshops were limited to some theoretical concepts. They indicated that they were not well-prepared to manage the new assessment policy. I strongly confirm that most teachers failed to implement competency-based assessment

due to the inadequate training that concentrated only on theory and neglected the practical aspect necessary to acquire the competencies that enable the teachers to carry out different assessment strategies.

Assessment practices in the visited classes were limited, inadequate and used as a separate entity, not linked to the learning activities.Classroom assessment should provide information to teachers for their own self-evaluation and the evaluation of their students (Jonson, 2006; Stassen et al., 2001; Peck & Chance, 2007). Information from assessment should enable teachers to gauge the effectiveness of their instruction and help them to discover areas where students have difficulties in order to readjust their teaching methods and strategies to support students' learning.

4.3.4Theme 4. Assessment methods, tool and strategies

Through engaging with competency based assessment documents and in-service training, teachers describe how they learned new assessment strategies. This study shows that teachers were constantly challenging themselves with the emerging pedagogies of assessment and altered their instruction and procedures in their bid to support students achieving their learning outcomes. The new assessment philosophy is a theme that supports students' learning strategies to align in a harmonious balance with their intellectual capabilities. The competency based assessment principles adopted in Algeria require primary school teachers to develop a set of assessment activities that are sufficiently flexible in order to enable students to reveal the learning outcomes quality. The following sample excerpts are taken from interviews relating to theme 4.

- I usually use more than one assessment strategy during the teaching learning process. It depends on the topic to be tackled and the students' motivation (T6-Gr1; par.9).

- I have to prepare each course using assessment methodology and technique especially with the emergence of the centered learner based education and try to provide students with feedbacks along the learning unit (T5-Gr3, par.10).

- It was really interesting to see that students are manifesting and sharing their point of views after each feedback or comment. (T2-Gr3, par.11).

The fourth theme that comes to the fore focused mainly on assessment methods , tools and strategies used in classrooms. Four sub-themes emerged from this theme, which included: (1) Assessment strategies and technics used in classrooms. (AST), (2) Assessment practices increase students'success (APS), (3)Different assessment theories enable students with different learning abilities to reach their goals (TEL), and (4) Planning assessment activities (PAA). Most teachers felt CBA urged them to use a greater variety of assessment instructions and strategies which in turn support students to engage in a variety of learning activities. This theme resonates with the CBE principle of engaging students in a variety of methods to demonstrate their learning. Table 4.14 shows the number of participants from each group that commented on Theme 4.

Table 4.15 Number of Teachers who responded for each Sub theme withinTheme 4					
Theme 4 : Assessment methods and strategies used in classrooms					
The sub- themes					
Group1	Participants/Teachers	AST	AIS	TLE	PAA
Teachers who received in-service training in competency based assessment	T1-gr1	+	+	+	+
	T2-gr1	+	-	+	+
	T3-gr1	+	+	+	+
	T4-gr1	+	+	+	+
	T5-gr1	+	+	+	+
	T6-gr1	+	-	+	-
	T7-gr1	+	+	+	+
	Percentage Value	100%	71%	100%	86%
Group2	T1-gr2	+	+	+	+
Teachers who did not receive any formal training in competency based assessment	T2-gr2	-	+	+	+
	T3-gr2	+	-	+	+
	T4-gr2	+	+	+	+
	T5-gr2	+	+	+	+
	T6-gr2	+	+	+	+
	T7-gr2	+	+	+	+

	Percentage Value	86%	86%	100%	100%
Group 3 Senior teachers	T1-gr3	+	+	+	+
	T2-gr3	+	-	-	+
	T3-gr3	+	+	+	+
	T4-gr3	+	+	+	+
	T5-gr3	+	-	+	+
	T6-gr3	+	+	+	+
	Percentage Value	100%	67%	83%	100%

Most teachers from each of the 3 groups indicated that CBE helped them to increase the range of strategies which they used. Each of the sub-themes is now discussed with support excerpts from the interview transcripts.

4.3.4.1 Assessment strategies and technics used in classrooms

This study showed that most of the interviewed teachers from the three groups revealed that various classroom assessment strategies and techniques, undertaken to assess students' achievements of learning, enabled teachers to equip students with more opportunities to explore more ideas. Angelo and Cross (2002) define classroom assessment techniques as quick, simple formative assessments that teachers can employ to determine the best way learners are learning.

When asked to rank the assessment methods they used in their classrooms, only four teachers showed clearly the practical use and purpose of summative and formative assessment. Teachers tend to report what they acquired during seminars and workshops and not what they practice. Lessons were mainly teacher-centered and a very limited student-teacher interaction was observed. Teachers tended to ask low-level questions to gauge learners' levels and, in most cases, students gave choral responses to their teachers.

There was a clear disparity between what the teachers stated they do during interviews prior classroom observation, and what they practiced in the classroom. The responses that teachers gave before lessons observation indicates that they have the theoretical information but fail to put the theory into practice. This is due to the lack of in-service practical training. Teachers claimed the need to see inspectors and

instructors representing learner-centered approach into model courses for teachers. The following excerpts are taken from the interview transcripts.

- We're bored with theories. We implore our inspectors and instructors to put the different assessment methods in exemplary classroom courses to promote the classroom assessment task (T2-gr3; par.53).

- Certainly, we have participated in some seminars. We were equipped with some theoretical notions related to CBA. But, practically speaking, I do not know how to evaluate the competencies and skills of my students. We need experts who can guide us to harmonise our practices with the CBA reforms (T4-gr2; par.54).

The interview transcripts unveiled that teachers provided feedbacks for students to individually investigate and gauge thoughts through a couple of ways. Whole class activities were introduced, in which individual students were allotted time to develop thoughts and notions based on mind activities. Teachers urged students to follow given assessment criteria in order to perform the required task. The transcript extracts below demonstrate teachers' engagement to guide students towards learning success.

- Be sure that various classroom assessment strategies and techniques help students to give their own judgments about certain issues that are taking place in their societies (T4-gr3; par.55).

- I have been guiding my students along the courses by giving them with assessment criteria. Basically, they were supervised step by step about how to achieve quality learning (T6-gr3; par.56).

In fact, learner-centered learning forced teachers to search for different assessment procedures. The latter has a significant impact on the learning instructions. The Classroom assessment techniques serve the dual purpose of enhancing teaching effectiveness and improving learners' understanding and performance. Teachers can adjust their instruction in the light of learner outcomes; meanwhile, learners can use it to measure and modify their understanding of important concepts Brookhart (2009). Teachers revealed that assessment was important for self-reflection to see how well the activities were performed in an attempt to adapt their teaching methods according to the new needs. Some teachers declared that unlike the old objective-based education

that was teacher-centered, CBE now enables students to construct their own knowledge and solve problems and activities with assistance from their teacher's feedbacks and assessment comments. These teachers stated:

- You can notice the significant change which swept the Algerian school. With the advent of CBA the teachers' role is reshaped to help and supervise students with different assessment methods according to their needs (T1-gr3; par.57).

- Competency based assessment is basically involved in providing students with the necessary tools to improve their learning outcomes. We, teachers, are supposed to explain little and the students have time to do activities. Our role is to guide them where there is a need. Otherwise, most of the time is devoted to the students' activities. (T4-gr1; par.58).

Through specific assessment technics learners explore information at different levels of school learning. That is, the research findings and practical classroom experiences provide useful cues for teachers to comprehend key learning outcomes in CBA. At the primary school level one of the CBE teaching and assessing strategies is to encourage students to construct their learning using new horizons' research underpinned by teachers' adequate assessment guiding.

- The old assessment system is static that is students' outcomes are evaluated at the end. Teachers in the old curriculum, just support and monitor and they don't know whether the students are learning or not. But with this competency-based assessment strategies, students have enough time to research and solve activities they are required to do (T1-gr1; par.59).

- According to me, it is sufficient to come up with a topic for discussion, and students are invited to build their knowledge, taking into account adequate feedback and assessment instructions (T5-gr2; par.60).

The variety of assessment strategies, adopted by primary school teachers, empowered students to learn more and to use their own initiatives as a significant aspect of CBE in Algeria. However, this has not been an integral part of teachers' practice in the classrooms in Algeria before 2003. In this study, the majority (71%) of teachers from Group 1 (that is 5 out of 7) explained that when students were provided with suitable assessment they

were able to support each other in exploring the subject content. However, only 29 % from Group 2 (that is 2 out of 7) shared similar sentiments. This difference is attributed to no CBA in-service training for Group 2, except for some limited workshops. Meanwhile, four out of the six teachers (67%) in Group 3 did express that in CBE teachers allow students to explore learning on their own.

4.3.4.2: Assessment practices increase students' success

The use of assessment practices and experiences emerged as a useful strategy for teachers to increase students' success. Theoretically, This was revealed by 80% of teachers from Group 1, 65% from Group2 and 100% from Group3.These teachers stated that through competency- based assessment, lesson demonstration in authentic contexts became integral to their procedures.The teachers confidently showed evidence of their assessment methods through performing actual tasks. Teachers' focus on students' performance and learning outcomes is a key principle within the CBE paradigm Spady (1994). Thus, it was important for teachers to be confident of their teaching and assessment performances when they were engaged in actually performing the subject content. But, classroom reality contradicts teachers sayings except for four teachers who showed competencies in dealing with different assessment techniques to support students' learning. Some teacher stressed:

> • I train them how to align with the assessment strategies. I focus on formative and self-assessment skills and showed them the steps to be carefully followed in order to achieve quality learning…I had to demonstrate to them how to tackle a given theme and to gauge it following the competency based assessment. I actually urge my students to build up an assessment conceptual chart in order to evaluate their learning outcomes (T6-gr1; par.61).

> • So, I describe the new assessment strategies using different technics, I mean that I show them how to compare their learning performance against specific benchmarks and criteria (T6-gr1; par.62).

Some teachers perceived competency based assessment strategies as a vehicle that encouraged students and supported their experience in relation to the subject content they discussed in the classrooms. For example, these two teachers stated:

- ... with the new evaluation system, the students had more chance to be assessed because we should follow some assessment guidelines to rate students' competencies (T2-gr1; par.63).

- It is difficult to assess students in the old system. But now we are shifting towards a new trend. It is sufficient to know the assessment principles and how to apply them.(T2-gr3; par.64).

Students were equipped with certain criteria referenced activities in authentic contexts. Most teachers tried to adapt the teaching and learning activities to learners' needs according to the competency based approach. But the results seemed far from their expectations. (T5-gr3) reemphasized the importance of sharing students the classroom assessment procedures to discover real information and at the same time encourage learners to acquire and promote skills in real situations.

- All teachers are supposed to guide students, through step by step feedbacks according to classroom standards, and to lead them towards new horizons of success. That is why competency-based assessment is important (T5-gr3; par.65)

The teachers, participating in this research, argued that competency-based assessment methods and strategies are a suitable tool to concretize students' experiences. This resonated, to some extent, with their current classroom practices in Algerian schools. That is, students are involved in concrete learning situations, backed up with pertinent feedbacks and assessment practices in the primary school context. This was revealed by 45% of teachers in this study. These teachers seemed to apply formative assessment strategies in their classroom instructions. Students were subject to real learning situations. Evidence showed that less than 50% of teachers from group1 and group3 in the study unveiled that using various assessment strategies and technics helps students to learn more effectively. Meanwhile, only 14% in group 2 support this trend.

4.3.4.3 Different assessment theories enable students with different learning abilities

Assessment is required to any pedagogical process to ensure quality learning. The use of a variety of assessment methods affords information for instructional improvement

and for monitoring learner learning (see 2.6). It emerged from the current study that teachers used both summative and formative assessment though more emphasis was placed on summative. Literature review 2.4.2 indicates that formative assessment provides continuous feedback on students' learning progress. The interviewee teachers recognized that formative assessment guide learners to improve their learning outcomes. But it was difficult to implement because of the overcrowded classes they have and consequently, the large workload. Similar findings (Stiggins, 2005; Popham, 2008; Volante and Beckett 2011; Butt, 2010) showed that a range of assessment particularly those that focused on traditional summative measures are overemphasized within contemporary schools. They stated that schools used mainly tests, homework and classroom exercises. Unfortunately, teachers failed to use a range of assessment techniques in order to attain as much information as possible on the learners' attainment. In response to a question related to the variety of assessment methods teachers gave the following answer:

- I suppose that drilling learners on examination techniques is my ultimate goal because my effectiveness is judged on how high the students performed in the final examinations (T5-gr3; par.66).

- You know , in Algeria all attentions are directed to grade5. So, we are supposed to prepare pupils for this great day of examination at the end of the school year(T3-gr2; par.67).

The NEOL (2008) urges teachers to include a variety of suitable assessment methods, tools and forms of assessment that should be used to improve learners' knowledge, skills and attitudes, assess their strengths and weaknesses, provide additional support and encourage them to reach quality learning.

It emerged from my study that assessment methods used in the visited classrooms provided one of the major topics discussed during the interview. Teachers seemed aware that they should use various different methods to assess learners, as was evident in their expression of using the correct means in their understanding of assessment. Some teachers clearly showed that :

- We have pupils who are more inclined towards practical tasks and those who are actually good at counting and writing things down. A teacher needs to get a good balance in the forms of assessment to be used as well as how

to use different tools effectively, like the rubrics and checklists and not only to reckon on tests (T4-gr1; par.68).

- We do not assess the same way and we also do not assess the way we should. I think in most cases, pupils do not have problems, the problems lie with our own methods of teaching and assessment (T6-gr1; par.69).

On the question of how often and when they assessed learners, only 35% of my respondents mentioned the importance of using different assessment methods and procedures. Their procedure was based on a deep look at the topic to be covered, break it up into sections, teach and assess as they went along to see how well the learners had perceived the taught concepts. Assessment is conducted only when learners had had enough exposure to the concept and had grasped what was required.

These findings align with the claim of Adams & Hsu (1998) that an accurate assessment is only accomplished by the use of a variety of techniques. Maki (2002) and McAlpine (2002) supports this in arguing that the wide range of objectives and skills that can be addressed in the classroom requires the use of a variety of assessment formats. Hence, the use of one or two techniques exclusively will not give an exact picture of learners' improvement in any learning area. Angelo and Cross (2002) argue that teachers' perceptions determine their beliefs about which techniques are more important than others and which techniques will be used more than others. They emphasized the variety of techniques which may provide teachers with better opportunities for decision-making about classroom assessment. A teacher reacted in the following:

- Learners need a diversity of assessment methods. Teachers had to stop relying on tests and focus on the numerous possible techniques, tools and diverse forms of assessment to cater for the different levels of learners and their preferences. Learners need not only to count and write but also to speak, listen and create. (T3-gr1; par.70).

It is clear from the evidence provided that teachers did not view portfolio, self- and peer assessment as an important assessment method. Much of the literature highlights the importance of portfolio, self- and peer assessment as a collection of learners' achievement that can exhibit learners' efforts, progress and achievements in various areas of the curriculum as indicated by Adams (2001)and Hewitt (2001), Brookhart

(2001) . It defines portfolios as a way of integrating assessment and instruction to promote meaningful classroom learning (Hewitt, 2001).

The researcher affirms that it is an ongoing series of opportunities for teachers to create and use carefully prepared questions to gather information about learners' learning. These opportunities need to focus on teachers' observation of learners interacting with others, participating in lessons and completing assignments. These observations exhibit the authenticity of classroom activities and generate information about the effectiveness of teachers' planning, their instruction and the students' learning.

3.4.4.4 Planning assessment activities

Assessment is believed to have great potential to improve student learning skills and inform instruction when used appropriately Black & Wiliam (1998). To increase its benefits, assessment requires mindful planning before it is implemented in classroom-related activities. As the first step in teachers' practices, assessment planning is integral to instructional planning as "they are two sides of the same coin that need to be done together" Nitko & Brookhart (2011:106). The quality of assessment planning can be checked through investigation of teachers' instructional plans. Popham (2014) submits that planning instruction with assessment components in mind is part of the assessment acquaintance repertory that all teachers should possess.

In CBA, the terms planning refers to the initial process where teachers map out possible teaching, learning and assessment activities that can sequentially be combined around selected topics. Accordingly,   preparing and scheduling various classroom activities and practices prior to the presentation are an essential part of the teaching, learning and assessment process. Preparing and programming are devised according to a set of learning outcomes or the desired end result. This means that all initiative and measures to plan a given course are traced back from the outcomes as the starting point.

The researcher observed that teachers relied on their experiences and on textbooks for their daily preparations of lessons. Their practices were not at all in harmony with the PARE (2005) which clearly stated that planning for assessment is an integral part of the planning for teaching and learning. Any teacher needs to outline the assessment programme to meet the learners' needs in the classroom and to align to the curriculum aims.

This suggested to me that teachers did not definitely figure out the procedures for establishing clear assessment activities. A lack of clear understanding of the assessment design and the curriculum could be a crucial motive behind the manner in which teachers conducted classroom assessment activities. For example, (T5-gr1) mentioned that she looked at assessment standards and the learning outcomes and then designed an assessment activity. In so doing, she was able to see which assessment methods she could use. She added that when she assessed she wished to see what the children could or could not do.

Only 35% of my respondents clearly focused on planning practices consistent with the policy which described planning for assessment as an integral part of teaching and learning. The assessment programme was planned by the teacher to meet the needs of learners in the classroom and to facilitate teaching and learning. Each assessment programme thus contributed to the compilation of an assessment plan for the school.

Nine out of twenty teachers (45%) described students' assessment plan to be implemented into the teaching and learning programs. This is consistent with the CBA emphasis in Algeria where assessment is a basic part of the teaching and learning process (PARE, 2005). The CBA practices focus on the students' development and support the notion of assessment as integral to teaching and learning in the Algerian school. The assessment tasks are then implemented while the teaching and learning progress. This was reported by 57% of teachers from Group 1, (14%) from Group 2, and (67%) from group3.

Even though teachers had indicated in the interview that they used lesson plans for her lessons, 55 % of them could not provide me with a copy of such a plan. Rather, they showed me a teaching plan (extracted from the teacher guide document).They indicated that they used it to prepare   their lessons to cope with the students' needs. They said that writing   a lesson plan would mean they had to copy everything from the teaching plan as the information was essentially the same, adding that they could not teach without the teaching plan. Some teachers from Group 1and Group 3 declared:

- • All right ... before I draw up any assessment task, I refer back to the assessment standards get from (PARE, 2005). It clearly stipulates what pupils are supposed to be able to do, and how they are to be assessed. So my assessment is devised and fixed even before I give them an activity(T1-gr1; par.71).

• Younger teachers can grasp things very quickly. But, we the elderly teachers cannot understand things easily. It is very difficult for us to manage. So planning, it takes a lot of time for us and we are struggling to alleviate the pressure that was experienced by some teachers(T2-gr3; par.72).

• We know that all teachers prepare and plan their lessons, but they have to think also about the assessment strategies as part of the planning of teaching and learning. You know we are trying our best to really perceive the idea of teaching and learning together with assessment. So as we prepare programs of teaching, we also plan for the assessment for that lesson (T5-gr1; par.73).

• It seems to me that preparing and programming are the most important features of modern teaching and assessment. Under the competency based education, different types of assessment are available. I mean it's very helpful (T1-gr1; par.73).

• Planning, teaching and assessing are the foundations underpinning my courses. Well... while I plan an activity I do not forget the assessment strategies depending on the context and students' involvement. Right ... All these things go together according to themes.... I said that learning outcomes refer to education calendar as well yearly and term program (T5-gr3; par.74).

I observed that all the lessons they taught were indeed derived from the yearly teaching plan, in which they had described clearly the learning results and skills, activities to achieve the assessment standards, assessment forms and resources. However, the assessment standards themselves were not outlined. According to the teacher' s document guide, assessment standards in each learning area are important as they determine the minimum requirement for achieving the learning result at a specific grade. Teachers teach towards learning outcomes and the activities to achieve a certain assessment standard or a group of clustered assessment standards can be varied. At the same time, they can assess in many different ways, depending on what they would like to find out.

4.3.4.5 Summary

The selection of assessment methods is very critical for any teacher to monitor students' understanding and organize their classrooms to promote active participation and explore new horizons in the sense of keeping with good practices in student-centred learning O'Neill & McMahon (2005). The interviews and course observation revealed that teachers had restricted methods of assessing their students. These teachers mainly focused on tests to gauge their students' understanding levels. Although they sometimes gave individual exercises at the end of every lesson, the exercises were given to the students to practice and consolidate what the teacher had just demonstrated. This type of approach promotes memorization of procedures and processes.

Teachers are supposed to use different strategies to observe and check the students' progress and quality learning in different topics. Strategies such as probing questions based on Bloom taxonomy, observation and individual interview may help teachers to understand the mental processes of their students as they become involved in problem-solving activities Cornoldi, et al. (2015). Teachers should assign significant assessment at the center of instruction to give students insights into their individual reflection and development to gain new learning perspectives. It is worth noting that only four out of twenty teachers involved in this study have shifted from an AoL (tests) to assess how students are learning AfL. Such an attempt would help teachers to explore useful ways of supporting the students in their learning experience.

In this study the use of classroom assessment as a tool for learning was limited. It was perceived by some primary school teachers as an add-on activity. Classroom assessment should be seen as a bridge between teaching and learning Wiliam (2013). It should be integrated into the daily instruction procedures. Two third of the interviewed teachers stated clearly the time interval they assess their students' learnings, an evidence that classroom assessment is an add-on task disconnected from teaching. The remaining third of teachers, those who indicated that they assess in about every lesson, did not reflect any systematic elements of classroom assessment during lesson observation.

4.3.5 Theme 5. The role of assessment in developing learning skills

Assessment is supposed to strengthen students' learning and support them to take positive

attitude towards teaching and learning. This positive attitude is addressed to prompt teacher commitment towards their students. This theme reflects the dynamicity of assessment practices, where teachers play a pivotal role in creating a positive learning environment in which students become confident.

In this theme, assessment is also perceived as enabling students to take control and responsibilities for their own learning. Teachers' main role is to guide students through pertinent feedbacks in order to identify their learning potential during the course stages. During the teaching and learning process, teachers explore students' individual learning needs in which they try to provide specific support. The samples excerpts relating to theme 5 taken from interview illustrates the importance of assessment.

There is a consensus amongst teachers that classroom assessment helps teachers to establish what students already know and what they need to learn. In explaining their understanding of assessment they pointed out the purpose of assessment: The following excerpts reflect the teachers' viewpoints:

- I try to centre my assessment objectives on the experiences and skills that students should acquire. The new assessment purpose invites teachers to provide numerous and varied opportunities for students and guide them to quality learning achievements (T1-Gr3; par.12).

- We need to assess in order to know how learners understand what has been taught and whether there is progress in learning. Assessment is important to indicate what the learners have been taught and what they know (T5-Gr1; par.13).

The fifth theme to emerge was the role of assessment in developing students' skills. There is almost a consensus among teachers that assessment was designed to guide learners in acquiring knowledge and competencies in order to use them correctly in a given complex situation. My respondents referred to the importance of assessment for any teacher. 55% of my respondents were convinced that the assessment policy would make a difference to the way learners were taught at their school if the teachers understood and interpreted it well. They said that the new assessment policy was important as it specified guidelines to be followed in assessing learners' competencies. Teachers should keep their assessments in line with the policy. Table 4.16 shows the number of teachers whose responses accounted for the sub-themes within theme 5.

Table 4.16 Number of Teachers who responded for each Sub theme within Theme 5					
Theme 5 : The role of assessment in developing learners' skills (RAS)					
The sub- themes					
Group1	Participants/Teachers	ADL	REP	ALS	AGS
Teachers who received in-service training in competency based assessment	T1-gr1	+	+	+	+
	T2-gr1	+	+	+	-
	T3-gr1	+	+	-	+
	T4-gr1	+	+	+	+
	T5-gr1	+	+	+	+
	T6-gr1	+	+	+	-
	T7-gr1	+	+	+	+
	Percentage Value	100%	100%	86%	86%
Group2	T1-gr2	+	+	+	+
Teachers who did not received any formal training in competency based assessment	T2-gr2	+	+	-	+
	T3-gr2	+	+	+	+
	T4-gr2	+	+	+	+
	T5-gr2	+	+	+	+
	T6-gr2	-	+	+	+
	T7-gr2	+	+	+	+
	Percentage Value	86%	100%	100%	100%
Group 3 Senior teachers	T1-gr3	+	+	+	+
	T2-gr3	+	-	-	+
	T3-gr3	+	+	+	+
	T4-gr3	+	+	+	+
	T5-gr3	+	-	+	+
	T6-gr3	+	+	+	+
	Percentage Value	100%	67%	83%	100%

Four sub- themes emerged from theme 5 included , (1) Assessment diagnoses of the strengths and weaknesses of individual learners (ADL), (2) Assessment provides feedbacks and supervise individual learner progress (AFS), (3) Assessment supports students' learning strategies (ALS), (4) Assessment gauge the learners' performance and skills (AGP). Table 4.15 shows the number of participant teachers from each group that commented on Theme5. Each of the sub-themes is now discussed with support excerpts from the interview records.

4.3.5.1 Assessment diagnoses of the strengths and weaknesses of individual learners

It emerged from the collected data that teachers used assessment to identify the strengths and weaknesses of their learners, through diagnosing their barriers to learning. This finding is supported by the works of Jones (2005) and Carles (2005), who affirmed that assessment for learning requires a focus on feedback to inform students of their strengths and weaknesses. Overall, teachers regarded assessment as a significant tool for gauging learners' performance, as mentioned in the following excerpts:

- Assessment issue is the most important focus in my daily instruction because it conducts me and the learners as well; it tells us where we are and where we should be, where we are ok and where we have difficulties and obstacles (T5-gr1; par.75).

Another teacher stated that:

- I suppose that assessment gauges learners' abilities and determine their competencies and achievement of learning outcomes (T5-gr2; par.76).

The researcher observed that during and after lesson presentations, five teachers (T4,T5,T6-gr1; T2,T5-gr3) preferred to give assessment activities to identify any problems that the learners might face with the proposed content. These teachers supported learners with guidance to overcome learning difficulties and to improve learning quality. These findings are in agreement with continuous assessment as explained in the (PARE, 2005). This type of assessment is similar to formative assessment, which emphasizes development and informs teachers about learners'

progress with a view to improving teaching and learning. Thus, assessment allowed teachers to monitor the influence of their lessons on learners' understanding.

I deduced from my study that teachers' perception and understanding of assessment are associated with the improvement of teaching and learning. 57% of teachers in group1 stated that assessment is a tool used to help students meet certain curriculum standards. They added that the assessment data is used to identify strengths and weaknesses in student performance, and to increase the quality of teaching and learning. The identification of areas for improvement permits the instructors to draw on information gathered in the assessment process to identify learning needs and adjust teaching methods to meet each learner's unique needs. The individualized assessment instructions must be fitted to students' strengths and weaknesses.

Teachers claimed to provide individualized assessment instructions which help students to individually explore ideas and acquire skills according to his/her methods of learning. Students are also actively involved in classroom activities in which individual students were allowed time to elaborate adequate techniques and procedures to deal with the proposed learning situation. Besides, teachers allowed students to follow given criteria in order to perform the task such as in practical projects. The transcript excerpts below reflect the teachers' views.

> • It seems to me that the prime purpose of assessment must focus on students' involvement in the teaching and learning process, and push learners to perform well-defined tasks to show their individual competencies and skills(T1-gr3; par.77).

4.3.5.2 Assessment provides feedback about learners' progress

Feedback could be interpreted as a process of providing students with necessary guidance about their learning, which will help them to perform the learning purposes successfully. Research asserted that constructive comments can generate a huge boost to the learning process (Kulhavy, 1977; Suttun, 2009; Timperley & John, 2007).The participants were asked to specify the type of feedback they provide to students based on their assessment practices. Different responses were given including clapping hands for the students, praising the students, giving them grades e.g. 8/10, displaying assessment results for everybody to see, and reviewing students' work with the students.

In contrast, (T1,T2,T3, T4,T6,T7- gr2) and (T4, T6- gr3) did not seem to have a clear method of providing thoughtful feedback to students. For instance, (T6- gr3) thought by giving a student a grade, that would help the student to improve. The teachers' responses on the questionnaire on types of feedback that they give to students are summarized in Figure 4.17

Table 4.17 Types of Feedback Provided to Students as Reported by Teachers
• clapping hands for the students

- clapping hands for the students
- praising the students
- giving them grades e.g. 8/10, 5/10 …
- displaying assessment results for everybody to see, and reviewing students' work with the students.
- enhance motivation and learning,
- encourage reflection and clarify understanding

Some teachers failed to implement feedback effectively. Thirteen out of twenty teachers that is (65%) gave no individual written or verbal feedback to students. They lacked both knowledge and skills to use feedback and encourage students' learning. Some teachers felt grades are always meaningful to students, although they acknowledged that students could not learn about their particular strengths and weaknesses from the grades only.

Feedback has been recognized as an effective procedure in the learning and teaching process Poulos & Mahony (2008). Feedback must be perceived as a tool used to enhance motivation and supporting learners to adjust their competencies with the learning goals. It must inspire reflection and clarify understanding with respect to future classroom tasks Knight & Yorke (2003).

My informant teachers asked a series of questions during the lessons, an important feature of formative assessment. But, a critical observation made during the lessons was that teachers used lower-order questions more frequently than higher-order ones. Most of the teachers' questions required "yes or no" responses. Accordingly, the researcher argues that teachers lacked knowledge of questioning skills based on the taxonomy of learning. This situation contrasted with Roth(1996), Lovett (2002) and

Chin (2008) who suggested in their studies, that teachers should use rich questioning skills to make assessment effective.

The information generated from assessment provides teachers with insight into the meanings constructed by the learners to different concepts taught in the classroom. Nitko and Brookhart (2007) explain that this kind of assessment allows teachers to gauge whether or not the taught notions and concepts of a given topic were communicated successfully to the learners. Interviewed teacher participants highlighted the following practices:

- I definitely believe that every teacher should provide learners with continuous assessment feedback along the planned lessons. But, this is far from reality. We just focus on the achieved results at the end of the terms. Even this feedback does not include the strength and weakness of the learners. It simply shows the results in numbers (T6-gr3; par.78).

- We know that whenever there is immediate feedback for the learners based on fair assessments, it narrow the communication gap between the teacher and students, and positively impacts students' learning outcomes (T7-gr1; par.79).

- My strategy is based on recording assessment activities along the teaching day. All learners' activities are recorded on a special mark sheet, transcribe the information and record all assessment tasks and activities on the final mark sheet (T5-gr2; par.80).

Feedback and reporting appeared to be mis-carried out in all visited schools and teachers showed a lack of concern towards the teacher's guide book and the assessment chart.

4.3.5.3 Assessment supports students' learning strategies

The collected data revealed that teachers attempted to understand assessment as an important ingredient of the teaching and learning process, which provided them with essential information to decide on the suitable instruction in their classrooms. This concurs with the findings of (Rahim, Venville, & Chapman, 2009) that teachers regularly make decisions concerning learners' learning.

This theme represents the teachers' perceptions and understanding of assessment as a way of gauging the students' progress in achieving the learning results. The continuous assessment concurrently occurs as teaching and learning progress. Thus, continuous assessment resonates with the competency-based approach principles of which teachers were expected to establish clear expectations for the students' to perform. That is, teachers refer to a set of criteria which students are supposed to manage in their endeavour tasks. The CNRSE (2001) provides the assessment framework for primary schools in Algeria. These are samples excerpts of interview for theme 5.1

- Oh yea, I think that assessment under competency-based approach take a continuous form and students are constantly assessed to see if they are achieving the outcomes (T1-gr1; par.81).

- We are assessing the students' activities and providing feedback in order to value their efforts. We are teaching and assessing at the same time. This certainly helps students to develop their competencies(T6-gr1; par.82).

- Contrarily to the traditional assessment methods, I feel free to assess my students many times during my courses since I try to implement the centered- learner method. You may notice that my students are making some continuous progression (T4-gr3; par.83).

4.3.5.4 Assessment measure learners' skills and performance

The implementation of continuous assessment in primary school requires knowledge, abilities, motivation and commitment on the part of primary school teachers. The necessary knowledge and skills can be developed throughout workshops training in the preparation and use of continuous assessment activities.

Findings revealed that some teachers appeared to conduct a daily assessment. After every lesson, they followed up on what was taught through worksheets in order to measure students' skills, performance and capabilities. The significance of this practice relates to the findings of Black& Wiliam (1998), Raveaud (2004), Jabbarifar (2009), Gomez et Jakobsson (2014) that every-day assessment practices are arguably more relevant to pupils' experiences than evaluation at the end of the year.

The daily assessment procedures that teachers used included question-and-answer and classroom activities included some general questions to touch transversal competencies Petrovici (2014), Inkila (2015). All teachers assessed orally through question-and-answer, written activities and duties on worksheets. My respondent teachers seemed to consider tests as much more important than the use of different classroom activities, a finding that correlates with those of Erickson and Gustafsson (2005). Teachers declared that the learners exhibit levels of understanding which allowed them to develop new strategies after each test. The procedure followed when developing tests and examinations differed from one learning area to another.

4.3.5.5   Summary

Classroom assessment practices emerged as the adequate strategy used by teachers to illuminate problems and improve the learning process. This was revealed by 57% of teachers from Group 1, 14% from Group 2 and 67% from Group3. All these teachers recognized the implications of assessment practices and focused on assessment reform to significantly improve students' learning. Most teachers in Group 1 and 3 acknowledged that CBA has been accompanied by considerable changes, namely at the assessment levels in the education system. They stated that effective teachers have a strong and direct impact on students' learning outcomes. They indicated that competent teachers involved students in constructing and increased their learning. Hence, inappropriate assessment practices will generate a negative impact on the students' learning quality and motivation. Thus, understanding a reformed view of assessment may help students to overcome the challenges of their daily learning. Classroom assessment instructions and feedbacks had encouraged students to manage their own learning. In CBE practices, students were assisted by their teachers to acquire new knowledge using aware procedures of what they are learning.

4.3.6 Theme 6. Assessment supports learning advancements

Teachers are supposed to devise assessment strategies that boost students' learning and push them to acquire pertinent techniques and skills oriented towards different learning situations and harmonised with the curriculum objectives. Teachers across the case study schools were supposed to integrate formative assessment into their instruction, and to encourage interaction and use of assessment tools. In each visited school, teachers talked about the importance of building a safe learning environment. They tried to determine the

link between assessment standards and learning advancements to secure students'
involvement to achieve the learning goals and to monitor their learning progress toward
the established standards. Some teachers reacted as follow:

- Practically, pupils who feel safe take the learning opportunities and show
  what they can do and don't understand. This is an essential feature of the
  formative process which helps students to go further (T4-Gr1; par.14).

- I suppose that assessment   promotes students' learning progress and
  understanding, identify the learning needs and adjust teaching appropriately.I
  strive to use different assessment approaches and techniques to meet diverse
  students' needs, through differentiation and adaptation of instruction to the
  planned goals (T2-Gr3; par.15).

Classroom practices seem to oppose   teachers' perceptions. No such assessment
strategies were used during the class observation, except for very limited attempts that urge
pupils to reach specific criteria.

The sixth theme that emerged from teachers' expressions of their understanding of
classroom instruction focused on perceptions and believes of assessment as a means of
assessing students' learning achievement. Four sub-themes emerged from this theme,
which included the following teacher perceptions of assessments as; (1)fair and
realistic (2) based on set criteria, (3) ongoing and come in various ways and (4),
demonstration of the assessment tasks. These four sub-themes reflect the teachers'
knowledge of the key principles underlying CBA assessment as described in the
teachers' in-service guide prelude. Table 4.18 shows the percentage of teachers'
interview responses in relation to those sub-themes within theme 6.

Table 4.18 Number of Teachers who responded for each Sub theme within Theme 6					
Theme 6 : Assessment supports learning advancements(ASL) The sub- themes					
Group1	Participants/	AFR	ABC	AOV	ASL
Teachers who received in-service training	T1-gr1	+	+	+	+
	T2-gr1	+	+	-	+
	T3-gr1	+	-	-	+

in competency	T4-gr1	+	+	+	+
based	T5-gr1	+	-	+	+
assessment	T6-gr1	+	+	+	+
	T7-gr1	+	+	+	+
	Percentage Value	100%	71%	71%	100%
Group2	T1-gr2	+	+	+	+
Teachers who	T2-gr2	+	+	-	+
did not received	T3-gr2	+	+	+	+
any formal	T4-gr2	+	+	+	+
training in	T5-gr2	+	+	+	+
competency	T6-gr2	+	+	+	-
based assessment	T7-gr2	+	+	+	+
	Percentage Value	100%	100%	86%	86%
Group 3	T1-gr3	+	+	+	+
Senior teachers	T2-gr3	+	+	-	+
	T3-gr3	+	+	+	+
	T4-gr3	+	+	+	+
	T5-gr3	-	+	+	+
	T6-gr3	+	+	+	+
	Percentage Value	83%	100%	83%	100%

This section   provides detail discussions of the sub-themes within theme 6 as responded by the interviewees from Group 1 to 3 in (Table 4.18). Each sub-themes is now discussed in some detail.

4.3.6.1 Assessment is fair and realistic

Teachers were asked to describe how assessment allows students to exhibit their learning abilities fairly and realistically. Teachers' comments about fair and realistic assessment clearly show the philosophy of CBA practices which requires teachers to provide the kind of assessment task that can fairly reflect the students' actual knowledge and understanding of the   support program to the reform of the Algerian educational system (PARE, 2005).

Sixty five percent of my participants mainly from Group 1 and Group3 asserted that competency based assessment was realistic. It is based on practical rather than theoretical considerations. Such realism represents an essential part of everyday classroom practices and reflects students' constant demonstration of their understanding and improvement of knowledge and skills. Realistic assessments as manifested by teachers in this field study also resonate with Driscoll and Wood's (2007) notion of authentic assessment. In authentic assessment, students performing real-world tasks that demonstrate meaningful applications of essential knowledge and skills. Similarly, the principle of fair assessment in CBA is one that enhances all students' opportunities to achieve their best and have their efforts recognised (PARE, 2005). Only one participant from Group 2 commented on competency based assessment as being fair or realistic. This could be attributed to lack of in-service on how to deal with assessments in CBA. It is worth noting that all teachers in Group 1 attended workshops about competency based assessment. According to teachers in Group 1, the assessment was real and fair in the sense that the students' own performances reflected their capabilities through a wide range of assessment strategies. The students' needs and the progress the students were making at that point of time were also reflected in the assessment as seen in these teachers' descriptions.They claimed that:

- Assessment becomes very realistic because we are using criteria to gauge pupils' potentials and to develop their individual skills. In contrast to the old assessment system, a pupil is not competing with someone in a test at the end of the term or year. But he is doing his best the reach the standards. I believe that children will really discover their own capabilities and potentials as they are learning and assessing at the same time. I am really eager to confine my instructions to practical guidance. My goal is to engage pupils whether it is practical subjects or something to do with mathematics, reading or writing... a pupil always comes up with fresh ideas because that is his or her own conception and he is doing it while he is learning at the same time (T4-gr1; par.84)

- You know the new assessment system requires each teacher should apply classroom individualised instructions and lead the child to achieve the outcome at his or her own time because all children are different ... And I find this type of assessment very helpful. It truly helps pupils and it

definitely gives teachers a real picture of children in a given classroom, especially the weaknesses and how you can be able to help them ... I feel it provides a real picture of pupils so we can identify the strengths and weaknesses in order to take necessary measures to overcome difficulties (T2-gr3; par.85)

• According to the target teachers, the assessment applied in classrooms was based on the CBA philosophy that both students and teachers had been practising during classroom activities. That is, the assessment task was based on the actual subject content that students were unpacking in their activities. Teachers, therefore, felt that competency based assessment depicted a real picture of a students' strengths and weaknesses since the assessment guidelines were closely linked to students' competencies to manage the proposed topics (T5-gr3; par.86)

4.3.6.2 Assessment is based on criteria and guidelines

Competency based assessment is based on a defined set of criteria which determine the learners' ability and skills. The guidelines principles of assessment under CBA require teachers to establish clear expectations using sets of standards for students to perform adequately in a different complex learning situation. The criteria are based on subject content which is built in, the assessment criteria (PARE, 2005). In this study, 65% of teachers from Group 1, 14% from Group 2, and 67% from Group 3 asserted that CBA strengthens criterion–base assessment. The teachers recognized that students knew in advance the ends to be reached during the assessment task.

• No one can deny the role of criteria in the new assessment approach. An agreement is established between students and teachers about the outcomes to be achieved. I tell the students, we have taught this lesson. Now that is what you are supposed to do. These are the criteria I give you. You follow the criteria; write up the assignment (T5-gr3; par.87)

• When I prepare my lessons, I know exactly what kind of assessment I will use to assess my students, depending on the topic to be taught. If I am teaching pupils how to protect the environment, I should confine myself to use set criteria dealing with the topic (T1-gr3; par.88)

- I cannot imagine an assessment system without criteria and guidelines. Whenever I want to assess, I had a set of criteria that I use to gauge the students' level of understanding. Believe me, without criteria and guidelines both teachers and students are lost (T5-gr1; par.89).

CBA thus provided clarity in the way of assessment. That is, making the assessment criteria and guidelines known to the students in advance of performing the task positively helped them pulled together their strengths and abilities to achieve the learning outcomes. This means, students knew what was expected of them, hence they knew what and how to achieve a given task as this teacher pointed out:

- My students know the rules. The assessment strategies are clear enough and the students' product is compared to pre-defined criteria. That is, they know where the end point is. I had to share the criteria with my students before I assess them. We agree on the golden rule you have to align with the criteria to get the mark (T2-gr1; par.90).

Practical and scientific matters required continuous observation assessment using set criteria. In this perspective, teachers concentrated on set aspects of the learning results during a task. For example, Physical Education, Arts and even Natural Sciences had the key contents built into the criteria in which teachers observed and formally recorded on a checklist during the time students performed on the field. This teacher stated that:

- I mean teachers set up guidelines in my school to assess practical tasks. In a test, we know that it is a written test and students can read and comprehend. But in observation, in participation, especially in physical education or poem recitation, we give guidelines. And then we observe them (T5-gr2; par.91).

The assessment pattern for setting out marking criteria in CBA differs from one subject to another. For example, practical matters require a set of checklists to mark off when students perform competencies in various skills. In contrast, theory-based subjects such as Language, Science or Social Sciences, teachers used checklists that contain key concepts as this teacher explains.

- We have to make the difference between criteria. Not all criteria are going to be the same in all subjects. But certain lessons have got specific criteria. So, I can say the use of criteria depends on the teachers' skills (T3-gr3; par.92).

Teachers recognize that observing and assessing students' performances, using a set of guidelines or criteria, were considered as vital components of assessment in CBA. Students were conscious about the assessment criteria in advance. Thus, they were more likely to meet the criteria in their assessment tasks. Hence, teachers regarded this to be significant in competency-based education.

4.3.6.3 Assessment is ongoing and varied

The respondent teachers reported that a variety of ongoing assessment strategies have been adopted to assess the students' learnings. This is necessary because students have different learning capabilities and so different learning and assessment styles are needed. This is consistent with the CBA assessment practice of building a variety of cumulative assessment such as using techniques of observation, and peer assessment to facilitate learning (PARE, 2005). This study revealed that 57% of the teachers from Group 1 mentioned that they were provided with a variety of assessment techniques to use in classroom; while 14% from Group 2, and 67% of the teachers from Group 3 considered CBA as a means through which a variety of assessment styles were applied to assess students' achievements. Here the teachers expressed:

- Different assessment procedures are used in CBA. I consider these as very important because students don't just learn in one way. They learn in different ways, so using different methods to assess the students' performance, is really fruitful. We have to individualize instruction and also assessment. We know that some pupils are not good enough in theory, but they can gain good marks from their practical work. So I see the new assessment trend very helpful. For example, those unfortunate ones who cannot read well, they can do better in practical assessment (T1-gr1;par.93).

- CBA requires that assessment marks are not only gathered from written tests only. There are so many ways to assess learners' skills. For

example, we can give assignments or projects.The other is we observe students' behaviour and attendance, punctuality and the general behaviour (T7-gr1; par.94).

- It seems to me that competency based assessment is very significant in the sense that children are assessed in different ways. It is an ongoing and flexible way to gauge pupils' constant achievements. I can just through observation, watch them and assess. I can also assess them in written form or through an interview, or they may be engaged in research and present report for assessment. And I find that it is very helpful. It truly helps pupils and it gives a teacher a good picture of a class level, the weaknesses and how you can help them to overcome difficulties (T6-gr3; par.95).

Teachers declared that they adopted various assessment strategies to resonate with students' different learning abilities which help them to demonstrate what they learnt. Teachers also agreed that different assessment types helped them to identify their students' weaknesses and to treat each case separately. In doing so, teachers were striving to render appropriate learning support for the students:

- You cannot imagine ....you know each class is an amalgamation of learning capacities. Some pupils maybe excellent in theory, in written test. Some may be very good in observing. Others may be impressive in talking. So, all these areas are taken into consideration. So your assessment depends on your analyse at the end of the day, at the end of the term (T6-gr3; par.96).

CBA assessment is an on-going process occurring concurrently every day with teaching and learning practices. Following the tenet of CBA assessment practice, teachers are invited to provide students with a variety of progressive and on-going assessment in terms of timely and constructive feedback which enable students and push them to make concerted efforts to improve their own learning (PARE, 2005). Overall, 60% of teachers across the three groups in this study claimed that, compared to assessment practices used in objective-based teaching, assessment in CBA was on-going. Teachers were assessing students throughout a given unit while teaching and learning was taking place and not just at the end of the term or year.

- I know that most teachers recognize the CBA assessment is a continuous flexible tool and that students need to be assessed continually to see if they are achieving the outcomes, but we still need sometimes to use it effectively (T7-gr2; par.97).

- We have to look at assessment as a whole process that is to apply different types of assessment from the start to the end. It does not come in the end unlike before. We teach and then in the end we set test to find out what we have taught and if they have remembered. Things have changed and we should deal with such change. Assessment comes on the spot and is continuous (T3-gr1; par.98)

- Unlike the old curriculum, CBA emphasises on daily assessment to support students and help them to improve their learning levels. We focus on the daily and constant assessment. And that's where you also pick up whether your lesson was successful (T6-gr1; par.99)

Some teachers seemed to adopt a variety of assessment techniques in their daily assessment. Hence, these teachers restated that students with different learning abilities were able to find their way in any of the assessment tasks and showed their abilities fairly well. Besides, continuous assessment which targets key learning ends, provide the benchmark against which students' achievement can be judged (Linn, 2005:12).

4.3.6.4 Assessment demonstrates students' actual tasks

Competency-based assessment allows students to show concrete evidence of learning achievements compared to objective-based assessment where mostly written tests are used. This was suggested by 57% of the teachers from Group 1. That is, teachers claimed that they were able to witness students' achievement as they performed the required tasks in concrete ways. Also, 67% from Group 3 and only 14% from Group2 respectively commented that assessment in CBA was an adequate strategy students actually demonstrate their learning through practical ways. This means, teachers assigned assessment tasks that allowed students to focus on practical projects and to develop diagrams and concept maps that demonstrate the knowledge and skills that they learnt. For example, the teachers explained:

- I feel free from the rigid traditional assessment system. Under CBA, teachers have to choose among a variety of assessment strategies and to develop concept maps that are used during our lesson. Besides, students really align with the new concepts quickly. The evidence that I saw in their assessment chart was very significant, and I realize that the outcomes reflected their understanding (T5-gr1; par.100).

- We, the new generation of teachers, are deeply interested in guiding students. We know that pupils are very interested in the proposed project. So I manage to support my pupils and at the same time, I do my assessment. I generally make a small observation next to the pupil's name, like high interest, low interest, interested and so on. I also use other techniques like a checklist with numbers next to them. So I circle the number to give them marks. Sometimes I prefer rubrics to report how they work and I give them marks. I have rubrics like very good, or good and give numbers next to them. These words have their value. So I add the numbers together and then grade them (T6-gr3; par.101).

Students' involvement is important and also reflects a social constructivist approach to learning and teaching Glasersfeld (2005) where students are supported to demonstrate significant learning outcomes in a real and meaningful context Spady (1994). In this way, students' works are assessed within an authentic work environment which further develop relevant knowledge that is vital for the students' performance. School assessment policy is necessary to keep assessment standards, particularly when dealing with practical or performance assessments (PARE, 2005). At least, five teachers (T1,T4-gr1; T5-gr2; T2, T5-gr3) revealed that they had to ensure that the assessment criteria for assessing students' knowledge and skills were consistent with the school assessment procedures in order to allow consistency with assessments for all subjects.

- Yes, we have the school assessment policy which requires us to get marks for practical assessments so we could not go beyond that... I have to follow   certain guidelines and criteria to suit my students' skills (T1-gr1; par.102).

Overall, teachers asserted that in CBA students were able to exhibit their learning skills through class or project presentations. Students were given opportunities to

improve their learning skills, and to perform their learning outcomes in real life situations. Thus, students were helped to increase self-confidence and to promote effective learning.

4.3.6.5 Summary

Competency based assessment method was considered as a way of assessing students' achievement of learning by the participants in this study. This was the sixth theme that comes to the fore from the teachers' interviews. Teachers in Group 1 were satisfied that assessment in CBA was practical and realistic on the ground that student learning abilities were fairly and continually assessed. Fair assessment was attributed to the fact that teachers used a variety of assessment techniques and criteria generally known by the students prior to performing their tasks. So, students were engaged consciously towards accomplishing the outcomes. Students with different learning abilities also found their ideal place in various assessment tasks. Four teachers in Group1 and Group 3, and only 1 in Group 2 commented on assessment of CBA that supports students' learning. This suggests their lack of in-service training and exposure to in-depth ideas about CBA. Research has revealed that successful implementation of curriculum reform depends largely on informed teachers who are responsible for the implementation of the reform syllabus, assessment practices and standards for students' performances. Sixty percent of teachers expressed that in CBA students actually demonstrate the tasks for assessment. But, class observation appears to contradict teachers' comments. Most of their assessment activities seem to be linked to their traditional way of instruction.

4.3.7 Theme7. Insights into teachers challenges on classroom assessment

It emerged from theme7 that teachers reacted strongly about the various problems hindering the implementation of classroom assessment in the target schools. There has been a spontaneous outcry, strong expression of disapproval and harsh criticism against the way competency-based assessment was introduced in their schools. They seemed totally unprepared for managing the educational reform, particularly at the assessment level. The following quotations reflect challenges faced in classroom.

- Lately, my role in assessment becomes so complex to such an extent that I should be spending more time on record keeping to the detriment of my primary assignment which is teaching(T4-gr2; par.16).

- Honestly, we are carrying an exhausted load. Look at the assessment notebook. It does not reflect the learners' performance because I work under pressure. The learner-ratio in classroom is too high and the curriculum is overloaded (T2-gr2; par.17).

- I really believe there is great pressure on teachers in terms of curricula, assessment and teaching. So I have to be able to stand up to it and be ready for daily challenges with a positive attitude and committed to working hard to implement a fair assessment of my students' products (T3-gr1; par.18).

However, nobody seems to have come out objectively to single out these problems. I contend that if the new assessment method is adopted correctly, it is expected to adjust the classroom malpractices,reach meaningful learning result and to portrait pupils' performances more reliably and comprehensively.

The seventh theme that emerged in the current study focused on problems and challenges impeding the implementation of assessment in primary school. Four sub-themes emerged from this theme, which included t (1)overcrowding hampers classroom assessment (OHA), (2) lack of resources impede the assessment process(LIA), (3) competency-based assessment is time-consuming (CTC), and (4) lack of motivation hinders learning progress(LHL). Table 4.19 shows the percentage of teachers' interview responses in relation to those sub-themes within theme 7.

Table 4.19 Number of Teachers who responded for each Sub theme within Theme 7					
Theme 7 : Insights into teachers' challenges on classroom assessment (ICA) The sub- themes					
Group1	Participants/	OHA	LIA	CTC	LHL
Teachers who received in-service training in competency	T1-gr1	+	+	+	+
	T2-gr1	+	+	+	+
	T3-gr1	+	+	+	+
	T4-gr1	+	+	-	+

based	T5-gr1	+	+	+	+
assessment	T6-gr1	+	+	+	+
	T7-gr1	+	+	+	+
	Percentage Value	100%	100%	86%	100%
Group2	T1-gr2	+	+	+	+
Teachers who did not received any formal training in competency based assessment	T2-gr2	+	+	+	+
	T3-gr2	+	+	+	-
	T4-gr2	+	-	+	+
	T5-gr2	-	+	+	+
	T6-gr2	+	+	+	-
	T7-gr2	+	+	+	+
	Percentage Value	86%	86%	100%	71%
Group 3 Senior teachers	T1-gr3	+	+	+	+
	T2-gr3	+	-	-	+
	T3-gr3	+	+	+	+
	T4-gr3	+	+	+	+
	T5-gr3	+	+	+	+
	T6-gr3	+	+	+	+
	Percentage Value	100%	83%	83%	100%

This section provides detail discussions of the sub-themes within theme 7 as responded by the interviewees from Group 1 to 3 in (Table 4.19). Each sub-themes is now discussed in some details.

4.3.7.1 Overcrowding

The primary challenge that my respondents identified was overcrowding. When asked about the problems they encountered during the classroom assessment process, teachers declared that high enrolment is a major drawback which hampered their progress in assessment because they had to mark more than 40 books each day and assess the learners individually. In the same realm, a good deal of research on class-size effects (Anderson, 2000; Biddle & Berliner, 2008; Hattie, 2005 and Wilson, 2006) claimed that smaller classes help to better the learning conditions and students'

performance. All the interviewee teachers revealed that they failed to implement competency-based assessment policies. The following reasons were advanced:

- It is not realistic to implement the assessment reform policy in such a climate with our overcrowded classes. You may notice the shocking facts about the conditions of the pupils' education. The year 2016marked the worst year in terms of overcrowding, as the sections were turned into camps where science was missed. This affected the educational achievement of students who found themselves unable to understand and perform classroom activities (T2-gr2; par.103).

- The reform policies from 2003 till the second generation reform force teachers to continuously engage learners in writing activities and there is a lot of marking to be done. It is very exhausting. I feel that I am lost. I do not have time to teach and ensure that learners have understood (T6-gr2; par.104).

In such a climate, teachers showed less enthusiasm concerning the new assessment method. They were overloaded with tasks as such they deliberately consider it difficult to cope with high enrolment classes. Discipline appeared to be a major problem as some learners made noise while the teacher was attending to individual learners. The researcher observed that teachers could not even move around the class because there was literally no space to do that. They usually relied on intelligent learners to assist them in supervising class work and other class activities while they were busy attending to some individuals. They claimed that overcrowding hampers their efforts to provide learners with quality learning. They affirmed that overcrowding had a negative impact on their instruction and assessment practices. This comes in line with the findings of Khan and Iqbal (2012) who claimed that adequate teaching and assessment was not possible in overcrowded classes and most teachers were confronting instructional, discipline and evaluation challenges. Research revealed that large class sizes affect quality learning. Earthman (2002), Yaman and Uygulamada, (2009) affirmed that overcrowded classroom conditions hinder teachers' attention to individual students and slows down the progress of students' learning.

The overcrowded classes made it difficult to assess learners on a continuous basis as proclaimed by (PARE, 2005). Besides, little consideration was given to the time that

teachers had available to meet the obligations and the requirements of the new assessment policy. The over population of students is a highly identified problem in this research. According to the findings, the majority of classes in primary schools in Sidi bel abbes have an average of 43 students per class and this raises the student-teacher ratio. This adversely affects the efficient application of competency based assessment.

Most teachers (65%) believed that with the average between 40 to 43 students in one class, it is impossible to give an appropriate assessment and to define clearly the students' levels. The majority of the teachers (table 1.1) stated that their present class size does not encourage the effective implementation of assessment. Thus, they spend much time on classroom assessment which requires marking and recording the students' scores.

Moreover, most teachers (80%) agreed that there is no sufficient time to assess students' individual work and to present it. Thus, shortage of time is another constraint that hindered to administer appropriately. Thus, lack of awareness (knowledge), shortage of teaching materials, negative attitude of teachers towards assessment and lack of teachers' commitment are the basic factors impeding the flexible implementation of assessment in the Algerian school. A teacher reacted as follow:

> • But now teachers want and need to be supplied with necessary information on how to assess student attainment of goals that take the form of achievement-related behaviours, for example. How do we assess students' ability to communicate, cooperate, perform certain motor activities, and solve complex problems? In addition, teachers have begun to wonder aloud about the effectiveness of the wide variety of achievement-related products they want students to create; for example, various samples of writing, such as themes and project reports as well as art and craft products (T4-gr3; par.105).

The data drawn from the target teachers also revealed that teachers' negative attitude on classroom assessment poses a big problem to the effective implementation of competency-based assessment. For instance, half of the teachers in Group1 and all teachers in Group 2 saw assessment as an excessive workload and a way of punishing them. Meanwhile, only two teachers in Group1 showed their reluctance to apply the new assessment methods. This no doubt will adversely affect the implementation of competency based assessment.

Thus, teachers' attitude affects the way they assess students which also affects students' achievement. One may also note that the reliability of scores awarded in assessment becomes questionable in a sense that some teachers inflate the scores of their students in order to reflect the excellent performance level of students which in turn determines their teaching effectiveness. Teachers showed that the present assessment format is difficult to implement on the real ground. Moreover, most teachers give individual assignment to all their students but the majority of them (65%) do not let their students reflect or present what they did. The main reason which teachers mentioned is the shortage of time.

4.3.7.2 Lack of resources

During interviews, teachers expressed disappointment about the shortage of resources such as exercise books, textbooks, photocopiers, printers and furniture in some schools which are all essential in promoting authentic assessment.They complained about inadequate teaching and learning resources which impacted negatively on assessment in the primary schools.The researcher confirms that all visited schools lacked basic resources. For example, photocopiers and printers had been out of order for a long time. This pushed teachers either to write activities on the chalkboard or print copies of the summative assessment task outside the school at their own expense. Some teacher confirmed that resources such as printers and photocopiers were difficult to come by in the school. They said:

- No typing resource is available in our schools to have typed-tests. We are suffering from the scarcity of printers and photocopiers. This may be attributed to the economic crisis that affected our country (T3-gr2; par.106).

- I am using my personal computer to prepare some classroom assessment activities to evaluate students' learning outcomes. Also, I use my printer to facilitate the students' tasks. All the teachers in our school manage their classes with their own means(T2-gr3; par.107).

I observed a clear lack of assessment mechanisms at the visited schools. Teachers had pointed out in the interview that the organized workshops were not doing enough to support teachers in the assessment task. Teachers monitoring is important to achieve the planned objectives of the assessment policy. The lack of a monitoring strategy shows an

over-reliance on individual conduct and leaves spaces or loopholes for actions that could conflict with the intentions of the assessment policy. Interviews revealed that teachers decided to do what they felt was right to achieve the desired assessment practices. Besides, I firmly believe that the non-availability of pedagogical resources and facilities played a vital role in their classroom assessment practices.

4.3.7.3 Assessment is time-consuming

Teachers aroused strong disapproval about the increased administrative workload in terms of policy instructions on continuous assessment. They highlighted that much time is spent on paperwork and tasks of recording performance and end-of year common tasks of assessment. This situation puts teachers under pressure and leaves them with little time for proper planning or consultation with a variety of sources.

While scrutinizing documents, the researcher became aware of the teachers' concerns and saw the different records in the majority of the participating teachers, namely test records books, individual progress records, remedial records and even daily task records. When asked about the reliability of marking, some teachers overtly stated that marks do not reflect on the learners' performance. Thus, teachers fail to respect the important use of assessment to support students' learning. During my observation, I noticed that teachers described the present assessment as much more demanding in terms of administration, planning, implementing, recording and reporting. Accordingly, I assert that most teachers were still influenced by the traditional teacher-centred method of assessing learners. This view would impede the transition of implementing the competency-based assessment shift to learner-centred, needs-based and diversified assessment.

My informants were unsatisfied on the fact that the new assessment approach increases the teachers' workload. In addition to their teaching responsibility for different learning areas in the same grade, teachers had to assess a number of learning areas at the same time, which posed cumbersome challenges. The researcher noticed that indeed much time in the classroom was spent on assessment-related activities. (T5,T7- gr2) indicated that checking all the learners' exercises was very time-consuming and marking class work, projects, examination scripts, comprehension tests and class tests presented a burdensome challenge.

4.3.7.4 Lack of motivation

A common challenge was that most elder teachers seemed unenthusiastic about actively engaging in the new assessment activities. It emerged during the interviews that very few teachers exhibit readiness to implement intervention strategies to support learners with barriers to learning. I think that the lack of teachers' involvement refers to their perception of incompetency to deal with the new reform. It was revealed during interviews that teachers resorted to assessment practices aligned to the national examination. They declared that:

> • Practically, I strive to equip my students with exam skills so that they perform well during end-year examinations. It is necessary for any teachers to produce satisfying results to avoid critics and blame. You know, some colleges were reprimanded for poor results last year (T6-gr3; par.108).

> • Sorry, I do not care about critics. I am actually drilling and preparing my students so as to reach best results at the district level. That is, I am teaching for examinations rather than for quality learning sake (T7-gr2; par.109).

Findings confirmed that teachers were forced to spend most their instruction time preparing learners to master the content covered in the national examination and train them on test format strategies so as to be fully prepared for the final examination. It emerged from discussions that teachers' feeling was impacting negatively on the level of their commitment towards assessment of learners' achievements. Some teachers declared that:

> • I have more than 25 years in the field of education. I am using the same assessment procedures and I get satisfied results. I feel that the imposed reforms have apparently no significant impact on classroom practices (T7-gr2; par.110).

> • No one can force me to use the competency-based assessment methods. Regardless of the expressed criticism, I am really satisfied with the way I assess my students' competencies. Refer back to the results of past years examination and you will be convinced that I am on the right way (T2-gr2; par.111).

- Ok ! we should stop talking demagogy. Teachers are trying to deal with competency-based assessment reforms. We are facing big difficulty since we were not formed to cope with such assessment alternatives (T3-gr1; par.112).

The assessment methods used by my informants seemed to be dominated by the teacher-made tests and examination. This means that teachers were still bent on the old traditional way of testing. I argue that a lack of in-service training in assessment-related issues and practical workshops could be the cause. Meanwhile, informal assessment was not mentioned during interviews. It appears that teacher's favoured formal assessment because they wanted to record and document learners' achievements. Figure 4.6 summaries the factors that likely seem to influence teachers' classroom assessment practices.

Figure 4.6   Factors influencing teachers' classroom assessment practices
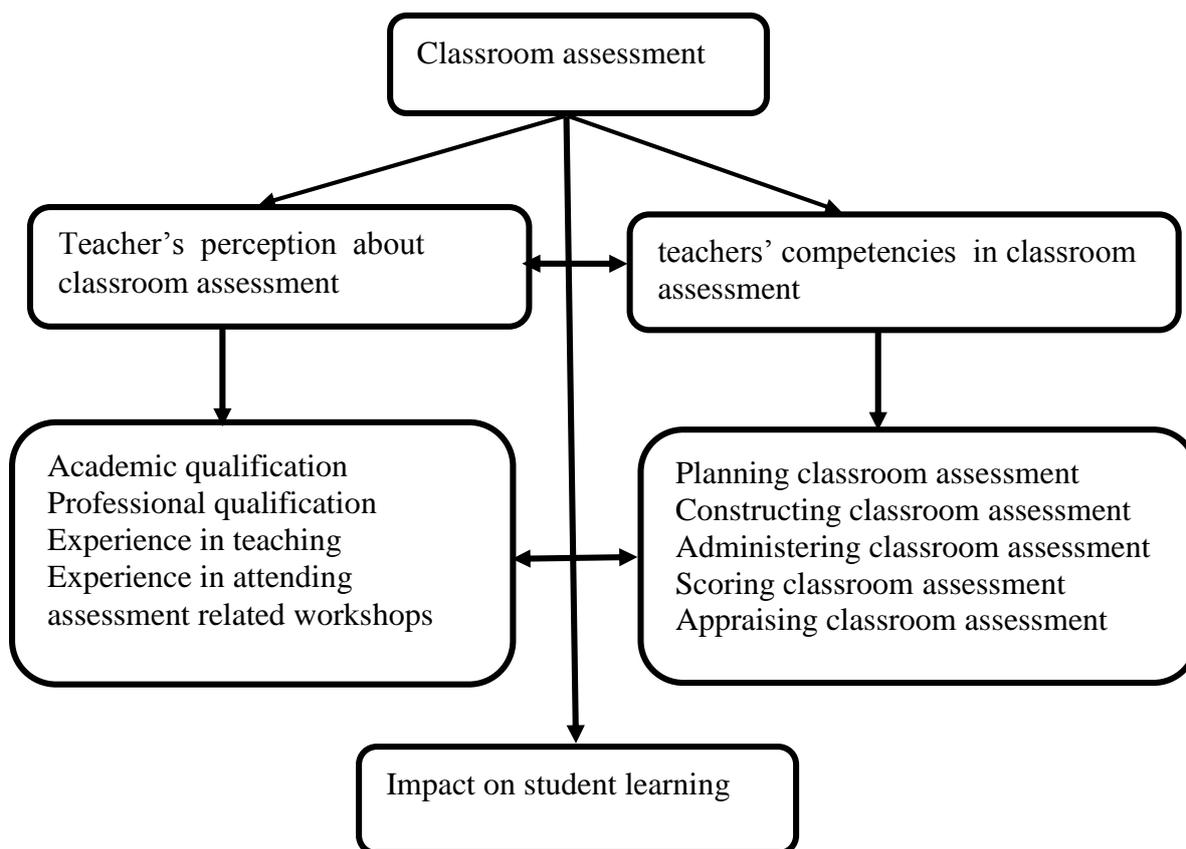

Figure 4.6 schematises the conceptual framework of classroom assessment built based on two dependent variables namely teachers' perception and competencies on classroom assessment.Two perspectives were focused in this study: from the first perspective, teachers have evaluated their perception about classroom assessment. They have

reported their view based on how they perceive classroom assessment; from the second perspective, teachers have self-perceived their competencies and practices in classroom assessment.

My respondents did not have a distinct understanding of informal assessment. The latter is defined in the literature as a procedure to track the ongoing progress of students regularly for obtaining data that can be used to make decisions about the way learners' study and cope with particular teaching approaches Angelo and Cross (2002). According to Marsh (2008), teachers are obliged to hold knowledge and skills; academic and professional qualifications and experiences to monitor students' learning and measure their achievements against specific learning objectives. Teachers need to update themselves with the necessary information and knowledge needed to perform classroom assessment in a proper and professional manner.

Some teachers overtly talked about their experiences of how they were supported in their assessment practices and raised concerns that this support differed from grade to grade. They estimated the support they received from their colleagues and inspectors. Holding that teachers lacked training, I assert that a training priority was assessment. I suppose that teachers' assessment practices could be adjusted if they received accurate training on the whole process of assessment, PARE(2005) and The NEOL (2008) documents.

Besides, I found that the training teachers received was too brief, fragmented and insufficient hands-on training. The few training days and workshops had provided different levels of understanding CBA, but there were real challenges once in practice for the designing of assessment related tasks. I posit that any lack of in-service training made teachers feel incompetent in their assessment practices. Thus, teachers should be exposed to intensive training workshops in order to have a clear framework that guides them to implement the competency-based assessment method correctly.

It has emerged from the individual interviews with teachers that lack of motivation was affecting assessment procedures in the visited schools. Motivation is an inherent emotion inspiring people to share organizational commitment to reach particular objectives (Lee &Bruvold, 2003) When the researcher looked for the rationale behind the teachers' lack of interest, five main factors emerged:

1-shortages of financial and basic resources including printers and photocopiers.

2- teachers' low status and degradation in the Algerian context.

3- overcrowded classes and work overload related to the new curricula activities.

4- misconception and misalignment with the pedagogical reforms emanating from assessment illiteracy.

5- lack of mastery in competency-based assessment.

Teachers lack of motivation emanated from the lack of resources, inadequate facilities, large class sizes, unachievable policies, too many records among other factors. The combination of low professional preparation and weak motivation is lethal in terms of weakening the overall education system and lowers the teaching and learning quality. In spite of the manifolds problems, it surfaced that some primary school teachers were aware of the important role of assessment. They were striving to make assessment more efficient dependent on the empirical model whose thrust is on traditional standardized approach to assessment.

While teachers seemed theoretically conscious of the importance of formative assessment, practically most teachers used summative assessment strategies due to the pressure of reaching excellent Grade 5 results. Besides, summative assessment was easy to use in large crowded classes. The scrutinized documents show that teachers mainly centered on testing the cognitive domain and there was a tendency to sideline the other domains. Moreover, most of the tests concentrated on the first and second level of Bloom's taxonomy (1956) which emphasized recall questions.

4.3.7.5 Summary

The evidence gleaned from this study suggests that teachers meet complex challenges that impact their classroom assessment practices and that these could be mapped onto the four major perspectives as outlined by Hargreaves, Earl and Schmidt (2002) and discussed in Chapter Three. Most teachers mentioned that some assessments were performed to meet the policy requirements, and they incorporated practices that went against their personal beliefs. Evidence revealed that teachers' perception of assessment is influenced by various constraints. These include pressures such as overcrowding, time management, policy interpretation and implementation, extra administrative workload and paperwork, support or lack of in-service training and resources. As Harris and Brown (2009) discovered, these challenges create a much more complex teaching-learning context which hinders the classroom assessment practices.

Teachers declared that they use a variety of assessment types for a range of purposes which concorded with their personal beliefs about best assessment practices. They argued that their students' needs were their first priority, which led them to reject the mandated assessment practices that they deemed inaccurate for students. This is consistent with the learner-centred instruction PARE (2005).Class size and lack of resources may have contributed to the way teachers managed their classes, but their perception of classroom assessment may have contributed even more.This study raises significant concerns related to the quality of classroom assessment. Most of the issues addressed are from lesson observation and the post-observation interviews the researcher had with the target teachers. I strongly contend that teachers' assessment competencies in classrooms are associated with their motivation, experience, knowledge and skills, overcrowded classes, inadequate educational resources, and teachers' ill-preparation.

4.4 Consultation of classroom assessment

The results obtained from this research seem to be consistent with the national consultation of classroom assessment, launched by The Ministry of Education in 2017 to determine the best method of assessment that will have to be applied when assessing students' skills. The goal is to improve the current assessment methods applied in the Algerian school . To do this, a questionnaire was sent to primary school teachers. It consists of a series of questions about whether or not teachers are satisfied with the assessment method currently in use. It insists on the teachers' opinion regarding the current student assessment grid, for example to define whether teachers are satisfied with the effectiveness of classroom assessment. If not, teachers are sollicited to propose another way to evaluate students effectively. For instance, if teachers have to give students daily, weekly or monthly homework .The consultation aimed to know what teachers are looking for better performance. According to the Ministry of Education (2017), 95% of the teachers showed their willingness to answer a questionnaire devised to ensure that all students have access to high-quality learning based on international criteria and requires experience in its implementation. Statistic emerged from the questionnaire incited educationists to open discussions on the overhaul of the evaluation and the pedagogical system, its objectives, the results of the consultations, the protocol followed, the summaries of the four regional meetings that have already been organized and   alternative solutions needed to improve classroom assessment activities.

The survey results established that pedagogical assessment is currently based on the quantity and grading where the teacher asks the pupil to answer the subjects of the examination by what he has learned by heart. This assessment system considers only one skill, which is memorization. Hence, it is necessary to review the current assessment methods applied for primary cycles. The results highlighted the need to review current assessment methods for primary grades that are based on scoring, stressing the importance of continuous assessment according to precise objective criteria and indices. Accordingly, teachers were required to broaden the range and means of their pedagogical assessment in order to recognize all the skills of the learners, and ensure that in the future, every pupil performs better in his field of competence.

The Ministry of Education called for the quick implementation of the new assessment system to support students' learning. This new system is based on the quantitative and qualitative aspect but the most important is to accept the new system.It should be noted that teacher training suffers from some shortcomings and that most of them have asked for a better explanation of the concepts and to provide the necessary instruments. In response to these shortcomings, inspectors were required to supervise teachers' training to change certain visions and mentalities, and push them to take into account the student's intelligence.

The Ministry of Education indicated that the results of this large-scale consultation, launched for the first time in Algeria, on the methods of classroom assessment and achievement of objectives revealed that two-thirds of the teachers rely on the evaluation by the grading and the remaining third on the assessment by the skills, those are on the right track, the others need a training because, according to him, " the mark evaluates a product and is not a scientific criterion". He recalled that 99% of teachers have a university diploma which means that the academic training exists and it remains to provide training in assessment, techniques and design of exam subjects, stating that the Ministry will put in place the necessary instruments and means for launching the new system in the nearest future.La Tribune (2017)

4.5 Relating teachers' challenges to the existing literature

Teachers are required to be classroom assessment-literate in order to implement high-quality assessments regarding students' broader knowledge and skills. Teachers need to possess a sound knowledge base of the assessment process to become classroom assessment-literate (Price, Rust, O‟Donovan, Handley, & Bryant, 2012). In this sense,

some strategies should be considered. Teachers should be able to identify assessment purposes, select and design assessment methods, interpret the assessment data, make grading decision, and record and report the outcomes of assessment. Besides, teachers need to clearly determine the factors that can have a potential impact on the accuracy and consistency of assessment results, as well as demonstrate capabilities to ensure the quality of assessments (Jones, 2005; Stiggins, 2010; Harlen, 2014). Such knowledge and understanding will lead teachers to form holistic perspectives regarding the interlinkage of all stages within the classroom assessment process. Such a process will support teachers to properly design a variety of assessment methods to enhance instruction and promote students' learning (i.e., formative purposes) and summarise students' learning achievements (i.e., summative purposes).

Evidence from the current research aligns with several researchers who have argued that a number of factors hinder teachers' classroom assessment practices (Webb, 2005; DeLuca, 2012; Lumadi, 2013; Izci , 2016). They stated that these factors negatively impact on effective teaching and learning. Results show that teachers' assessment challenges are closely intertwined with their perceptions and understanding. The beliefs the participant teachers held influenced their decisions, which in turn affected their behaviour and practices in the classroom. The literature review highlights that teachers' experience is a determinant factor in shaping their understanding and classroom assessment practices.(Graham, 2005; Rice, 2010; Kini and Podolsky, 2016).The collected data shows that teachers built their own conception of assessment, based on their experiences, lifelong exposure to training, workshops about the changing demands of assessment.

This study revealed that teachers' assessment practices are influenced by factors emerged from their pedagogical belief systems. Also, it revealed that my informants used assessment as a diagnostic tool to identify learners' strengths and weaknesses and their barriers to learning and development. Also, it showed that my informants understand assessment as blocking their own initiatives to assess learners' competencies independently. They believed they had to comply with policy requirements to meet specified prescriptions, even when they felt this was against their beliefs. Teachers in this study practised and preferred traditional summative examination. They argued that such assessment reflected the overall learner performance. I posit that this is because they had as students been exposed to this type of assessment, which implies that their

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background and personal experiences played a significant role in their assessment practices. The field observations showed that educators tried to apply these reforms with some difficulties since they were not formed to cope with such assessment alterations.

A number of studies have frequently highlighted that teachers' personal beliefs about assessment play a decisive role in shaping the ways in which they implement their assessments (Rogers et al. 2009; Brown, Lake, & Matters, 2011; Smith, Hill, Cowie, and Gilmore, 2014; Looney, 2017). It could, therefore, be argued that teachers' assessment perceptions are equally paramount to their assessment knowledge base in performing high-quality assessments; and as such the two are interwoven (Mussawy, 2009; Fives & Buehl, 2012; Moe, 2012) and form the bases of classroom assessment literacy.

4.6 Summary

This chapter presented and discussed results emerged from the current analysis and interpretation of data collected on the impact of teachers' assessment on students' learning quality and the problems they challenged in primary schools. The data unveiled that assessment was generally misconceived and thus poorly implemented in the target schools. Most teachers observed that if assessment must be adequately utilized in primary schools, teachers must of necessity show the ability to construct the various tools and employ the various procedures of collecting evidence on learners' products. Moreover, they should be able to understand and explain the meaning of scores and grades awarded to students in different topics. Thus, teachers should exhibit competences in the construction of test including various sorts of questions necessary for assessing cognitive and effective learning outcome.

Another problem challenging the implementation of assessment was the problems of comparability of scores. Most teachers declared that it is impossible to equate assessment grades awarded to students from different schools. They stressed further that each teacher has its own philosophy and standards to gauge students' learning skills and that kind and generous teachers are easily influenced and this affects the awarding of marks. We have noticed that some schools are awarding high marks to ordinary pupils while other schools are severe with marks. Such inequity surely affects the quality of education and yield invalid and unreliable results.

My informants affirmed that the Algerian educational system is characterized as examination oriented with low internal efficiency. Students' progress and moving from one level to another is determined by tests and examinations administered termly and at the end of the school year. These examinations do not take into consideration previous performance of the pupils, in that school year, and who failed to take the final examinations, especially in grade 5, either due to sickness or otherwise have been made to repeat the year. This shows how much value the system attaches to summative evaluation.

The Algerian policy makers are aware of the fact that teachers need pedagogical assistance that backs up their educational practices. But without understanding what exactly happens in the classroom, all teacher support programs, and efforts may not adequately prepare teachers to meet the challenges faced in the classroom. During the course of my research, I observed that some teachers adopted a casual approach to assessment. Some others established tests that would only address one level of the taxonomy of learning objectives (Bloom,1956; Anderson and Krathwohl, 2001), while others would duplicate set of items from past examination papers. It was also noted that some test items were inadequately constructed and that assessment methods lacked flexibility and variety. Besides, most teachers showed pessimistic attitude towards assessment in primary schools, with reference to competency-based education.

5.1 Introduction

The purpose of this study was to explore how primary school teachers in Algeria understand competency-based assessment. The aim of this chapter is to provide a summary of the investigation regarding the main findings of the current study according to the literature and empirical data. The researcher provides recommendations and draws conclusions associated with the research questions as presented in Chapter One. This chapter begins by restating the research questions, thereafter providing the significance of the findings in relation to the assessment issues and make suggestions for more research. This research focused on the main challenges affecting teachers' classroom assessment methods and practices. It strives to establish which assessment strategies are mostly used by teachers in their daily instruction in order to describe how the challenges influenced their assessment practices and thus the learning quality. Besides, a review and synthesis of the whole research is presented.

5.2 Summary of key findings

This study was a single exploratory case study which involved 20 elementary school teachers from Sidi Bel Abbes District, 500 km West Algiers. The adopted procedures for data collection included a survey, interviews, document analysis and observation. The study, supported by the theoretical framework of an interpretive ontology and an epistemology of social constructivism, explored two main research questions:The first question focused on the teachers' perceptions and beliefs of classroom assessment. Question two focused on how the primary school teachers' perceptions impacted students' learning. The data were analysed using the thematic analysis and explanation building techniques of case study research to describe the prospects of three groups of teachers: The first group has acquired some knowledge and in-service training on how to deal with competency-based assessment. The second group encompasses those teachers without formal training but developed some strategies by reading through CBA syllabus documents and with assistance from their head teacher and inspectors. The third group comprises senior teachers who were deemed to guide the in-service program of each school to support teachers in implementing curriculum reforms related to CBA.

Findings revealed a significant range of understandings related to competency-based assessment including issues and constraints which prevent teachers to implement CBA reforms adequately. Next section reviews the findings as emerged from the discussed

themes in response to the main research questions to align with the goals and objectives of this dissertation.

5.2.1 Theme1: Teachers' perceptions of classroom assessment

   To give an overall picture of the main findings from the individual teachers, the researcher starts by presenting the teachers' perceptions and interpretation of classroom assessment policy based on the questionnaire, which they completed at the beginning of the study followed by the type of feedback they afford to students, assessment methods, strategies and techniques used by the target teachers, classroom assessment practices, and the teachers' acquaintance with assessment use. Teachers' pedagogical conceptions are manifested in their instruction and decision-making (Borg, 2002; Wilkins, 2008; Handal & Herrington,2003).Therefore, it is assumed that different pedagogical beliefs affect the teacher's acts of teaching, planning and designing classroom activities, and the process of assessment practice.

   The target teachers in the current study emphasized summative rather than formative assessment as highlighted in the literature review (see, 2.18). Moreover, the research revealed that the way the teachers assess learners was attributed to the inherited traditional methods which lay emphasis on summative assessment which emphasized high stakes assessment measures. The researcher state that summative assessment dominated in the visited primary schools at the expense of alternative assessment methods related to CBA perspectives.

5.2.2 Theme2: The impact of teachers' perceptions on classroom assessment practices

   The teachers' perceptions and beliefs of classroom assessment had a great influence on their classroom assessment practices. A couple of attempts were undertaken to understand how students' learning was assessed. Teachers' individual beliefs of classroom assessment seem to influence their practice and thus impact students' learning quality. The findings support previous findings by Mussawy (2009) and Buyukkarci (2014) who found that teachers' perceptions of classroom assessment affected their classroom assessment practices.

   Teachers beliefs, experiences and understanding about competency-based assessment reflect their interests about the adequacy of quality teaching and assessment. Most of the problems relating to teaching, learning and assessment procedures were experienced by

teachers during their implementation of the new curriculum and reflected through their interview responses. The misconception of assessment notion also represents teachers' continuing struggles to adapt their practices to provide quality teaching and pertinent appraisal. Besides, Lack of relevant understanding and curriculum misinterpretation certainly affect teachers' motivation and performance which deeply impact the students' learning.

5.2.3 Theme3: Teachers' competencies on assessment

Assessment is a many-sided purpose closely related to diagnosing pupil problems, judging their academic performance, providing adequate feedback to pupils, planning and conducting instruction, and establishing the classroom society. Hence, Teachers should be skilful enough in classroom assessment to appraise the status and changes in pupils' development.

The collected data unveiled that most participant teachers lacked the requisite competencies to conduct assessment in the primary schools. The lack of competencies was ascribed to poor training of teachers which give minor treatment to assessment practices. Teachers were enrolled in schools without prerequisite knowledge of assessment methods or statistics to analyse data and presumably, they had to learn assessment strategies during teaching practices. Thus, it would appear that teacher competencies are limited by inadequate training programmes as well as negative attitudes towards curricula reforms.

5.2.4 Theme 4: Assessment methods , tools and strategies used in classrooms

It came out that teachers largely used tests in the assessment of learners' progress. They also used homework and daily activities but the main thrust was on tests. The latter were performed monthly and termly. These tests were typically administered to align with the prescribed number of tests that teachers were supposed to submit due to the performance appraisal threat. The teachers gave these series of tests following the Orientation Law (2008) and the Ministry of Education format of conducting examinations (2014). They hardly attempted to ensure that their learners excelled in the summative Grade Five public examinations, which were given at the end of the five-year primary education period. However, if pupils performed badly, teachers of the poor performing learners would be reprimanded by District Education Officers for poor work.

Accordingly, the interviewee teachers considered assessment as a tool for drilling pupils so that they perform well in public examinations. Thus, primary school teachers chiefly limited their assessment practices to the cognitive domains of learning. Meanwhile, affective and psychomotor domain Bloom (1956) and Anderson and Krathwohl (2001) were considered less important in the learning process. This view contrast with PARE (2006) which incite teachers to assess a full range of the learners' learning (see 2.16).

5.2.5 Theme 5: The role of assessment in developing learners' skills

My respondents seem to converge on the fact that assessment was designed to guide learners in acquiring knowledge and competencies in order to use them correctly in given complex situations. They referred to the importance of assessment for any teacher in appraising learners' competencies and skills to identify the strengths and weaknesses in their classroom.This finding is supported by the works of Jones (2005) and Carles (2005), who affirmed that assessment for learning requires a focus on feedback to inform students of their strengths and weaknesses.

Practically, teachers' assessment activities centred on selective subjects of CBA curriculum. Learners were examined on only three subjects which were French, Arabic, and Mathematics. It was in these subjects where teachers focused their instruction and likewise gave tests to fully prepare their pupils for Grade 5 examinations. This kind of assessment ignored the affective and psychomotor constituents and thus failed to build skilful learners as they only provided them with opportunities and procedures to deal with final tests and examinations. This unlucky situation generated and maintained a status quo where school effectiveness was judged by the obtained results in their summative Grade 5 examinations, as such, all assessments became skewed towards the Grade 5 public examinations.

5.2.6 Theme6: Assessment encourages continuous and fair learning achievements

It emerged from this theme that teachers were aware that a variety of ongoing assessment strategies should be adopted to assess the students' learnings. This is necessary because students have different learning capabilities and so different learning and assessment styles are needed. This is consistent with the CBA assessment practice of building a variety of cumulative assessment such as using techniques of observation,

and peer assessment to facilitate learning (PARE, 2005). Some young graduate teachers claimed that assessment under CBA was practical and realistic on the ground that student learning abilities were fairly and continually assessed. Fair assessment was attributed to the fact that teachers used a variety of assessment techniques and criteria generally known by the students prior to performing their tasks. So, students were engaged consciously towards accomplishing their classroom activities; whereas, others showed strong disapproval to deal with the CBA reforms. This suggests their lack of in-service training and an exposure to in-depth ideas about CBA. Research has revealed that successful implementation of curriculum reform depends largely on informed teachers who are responsible for the implementation of the reform syllabus, assessment practices and standards for students' performances.

5.2.7 Theme7: Insights into teachers' challenges on classroom assessment

The CBA places emphasis on assessment as a major instrument that teachers should use as a means of improving quality teaching and learning in different classroom contexts. Such an emphasis, according to the literature, calls for a paradigm shift in teachers' perceptions of assessment and of the overall relationship between teaching, learning and assessment. It is clear that there are similarities as well as differences in how individual teachers experience, conceptions and practice classroom assessment. I noticed that all educators were experienced, even though older teachers   seemed to be struggling to adapt their assessment practices to the demands of the (PARE, 2005). However, most teachers proclaimed that they were facing difficulties in managing the competency-based assessment policies. This was attributed to teachers' deficiency to deal with the new assessment methods due to the lack of training, large crowded classes, the lack of resources and work overload. Assessment becomes difficult because records were an additional load. Accordingly, teachers lamented and exhibited negative attitudes towards competency-based assessment (see 4.3.7). To meet these challenges, the educational policy makers can contribute significantly to a smooth transition into the new assessment era by coming to understand teachers' anxiety and fear by explaining the benefits of the performance of assessment alternatives. The latter should be adjusted quickly to overcome the obstacles facing the good progress of evaluation practices. The educationists must re-examine the assessment priorities to assist teachers and provide them with the suitable support designed to ensure the quality assessment in our school.

5.3 Conclusion

Teachers all over the world apply a variety of assessment techniques and incorporate measurement principles (Bullough, 2011; Alkharusi, 2016; Jones, 2005; Jabbarifar, 2009) in their instruction(see chapter 2). This study was conducted in an effort to identify and systematically explore the attitudes and major concerns of Algerian primary school educators regarding the implementation of competency-based assessment in their instruction. Findings unveilled that teachers' understanding of assessment appeared to be firmly rooted in their interpretation of the new curriculum and assessment policy. Their ability to cope with assessment-related challenges was also embedded in the assessment knowledge and experience that they had acquired over the course of their classroom practices, particularly under the CBA. In this perspective, three heterogeneous views appeared from this study. The first group of teachers displayed willingness to deal with continuous / formative assessment rather than the examination-driven summative assessment (see 2.4). Others appeared to use a variety of assessment techniques and provided learners with expanded opportunities to perform to the required assessment standards. They claimed for the need of change in the way learners were assessed, and that the focus of this change would be on preparing learners with better analytical, thinking and interpretive skills. The third group interpreted assessment as increasing the workload of teachers, as it required much paperwork and extra preparation time. Their lack of understanding of the inclusive new education policy negatively influenced their classroom assessment practices. They readily admitted that they still needed more training on assessment in general. The findings showed that 70% of my respondent teachers wilfully devise simple assessment tests in order to record high percentage passes in their classes. This behaviour may result from the fact that they are hesitant to conduct regular assessment activities due to their conviction towards traditional assessment.

Assessment in the primary school is afflicted by a range of problems, as indicated in Chapter 4. All these critical forces combined and acted against the correct implementation of effective assessment practices in the primary school based on accountability and re-examination of the students' needs for attaining pertinent learning outcomes. Thus, decision-making is closely linked to teachers' perception which is, in turn, expected to affect students' learning quality. The primary purpose of the current study was to investigate teachers' assessment impact on students' learning in primary schools with special reference to Sidi Bel Abbes District. This was done with reference to the objectives and research

questions as stated in (sections 1.5 and 1.6).   Based on a critical analysis of the findings, a model (Figure5.1) has been proposed to provide insights into the identification and overcoming of assessment problems.

Figure 5.1. Teachers' perceptions on classroom assessment
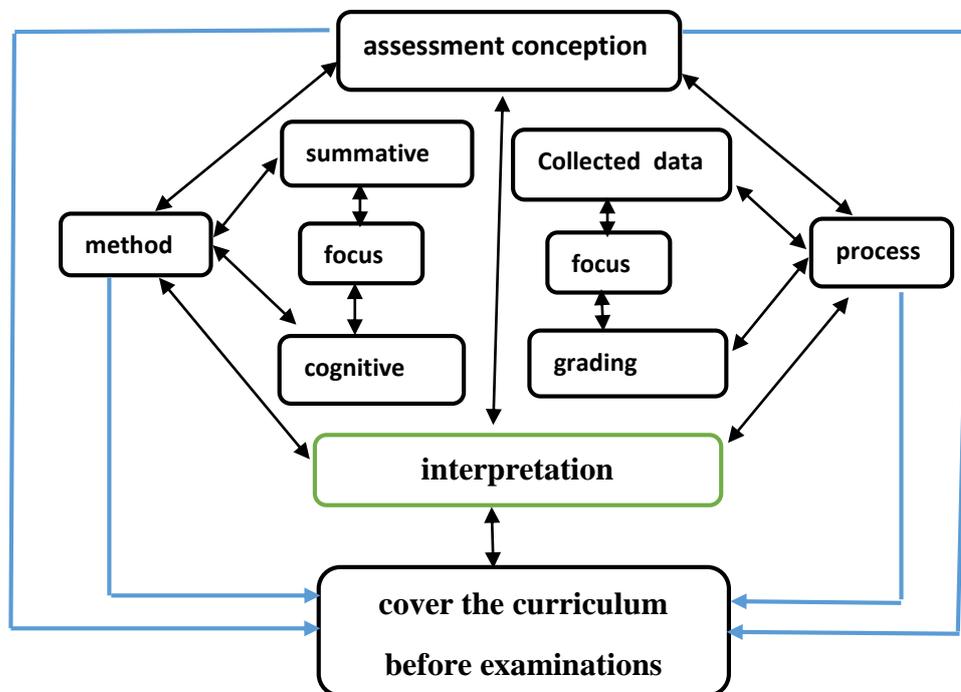
Following teachers' conception, the classroom assessment model seems limited to the traditional method. Figure 5.1 portrays the process adopted by most teachers in carrying out assessment practices. According to this model, assessment can be described in four different ways which are conceptions, methods, process, and interpretation of collected evidence. It is in these dimensions that assessment problems emergent as findings of this study.

The interpretation of assessment methods teachers employed in the monitoring of students' learning progress was decisive in the whole teaching and learning process. This can take place in all the domains of learning Krathwohl (2002), that is; cognitive, psychomotor and affective (see paragraph 2.5.1). Assessment focus needs not only be the cognitive domain of learning, but also needs to include behaviours, personality traits and manual dexterity. Teachers in this research revealed that there is more focus on the lower forms of the cognitive domain to the detriment of all the other domains.

 Moreover, they plainly revealed that they have problems in directing their assessment towards the model-related to competency-based assessment. They focused on summative assessment and neglected formative assessment (see 4.3.4.1). Teachers' grading practices

were widely used in the visited school. Grades communicate students' achievement to parents and communities but fail to communicate useful information to students about their weak areas. Teachers' behaviours seem to suggest that a grade is a form of reward that students deserve for work completed McMillan, Myran & Workman (2002). Such practice pushed students to wonder whether what they are learning will be on the test or not.

Teachers' assessment practices were poorly constructed and focused to favour a low level of cognition that requires learners to recall factual knowledge. These problems were a result of teachers' limited acquaintance and skills in competency-based assessment. Besides, teachers focused mainly on the cognitive domain and neglect the affective as well the psychomotor domains. These assessment procedures have undesirable effects on the other dimensions in the learning process. After identifying the problem areas, a corrective model of assessment is proposed (figure 5.2) as a Comprehensive framework that reflects the CBA reform policy.

Figure 5.2 Corrective model of assessment
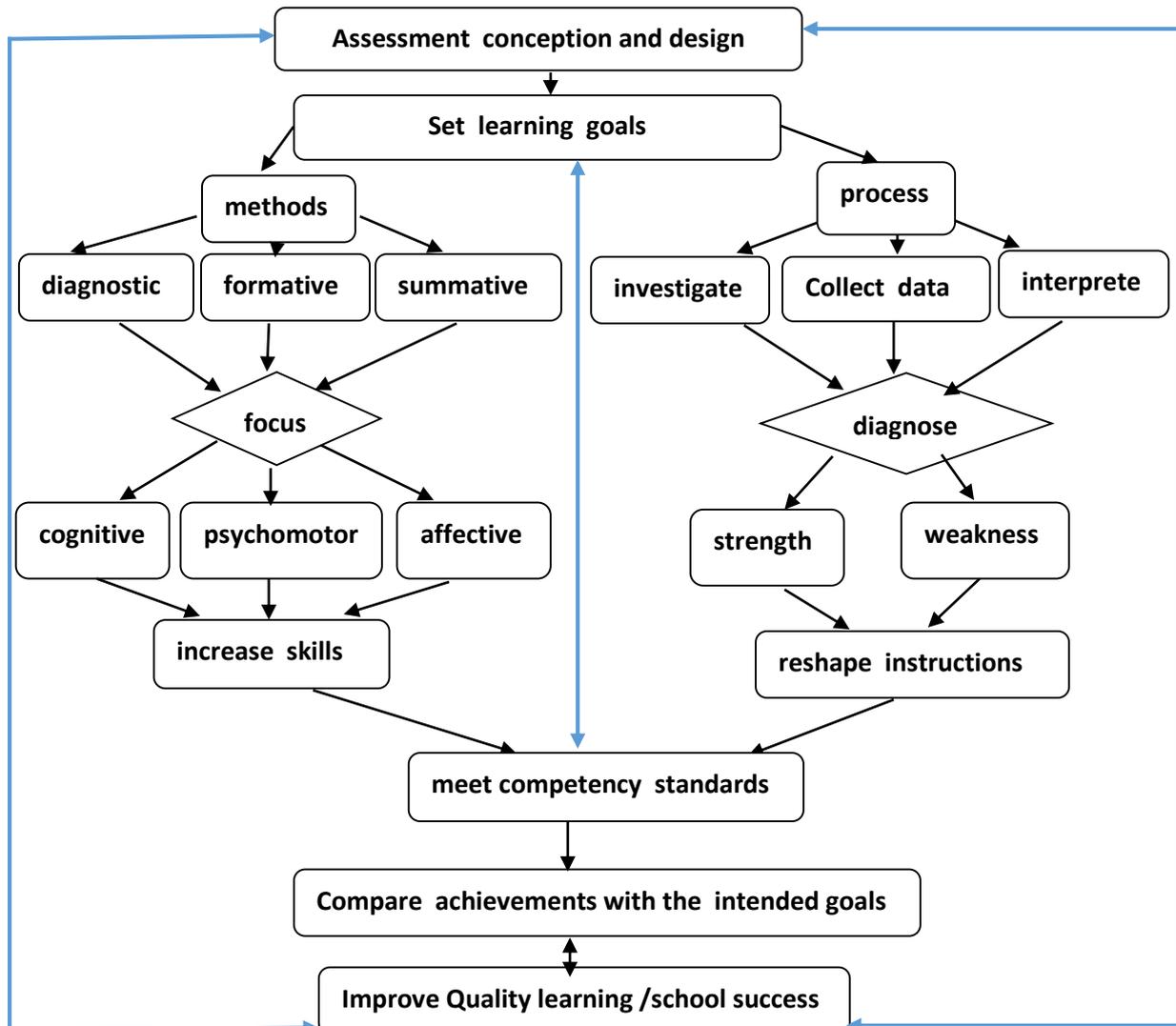
From the literature and the theoretical positions adopted herein, useful recommendations have been made from which the corrective model, schematised in figure 5.2, has been developed. Assessment practices are supposed to generate useful information that supports the continuous improvement of students' skills   and competencies."Well-designed and applied assessments can change the course of education reform" Schiefelbein & Schiefelbein (2003:154). The corrective model has been devised to respond to the Algerian elementary school teachers' specific aspects of the problem as well as to reflect current thinking in the field. The model may be applied in classrooms and its results may have significantly better comprehension than the present summative methods of assessment.

This corrective model proposes possible solutions to classroom assessment problems. It requires teachers to provide quality assessment necessary to meet the intended standards and provides information with the highest degree of validity and reliability.This model can be useful in the identification of assessment issues related to the competency-based approach paradigm. It emphasises four key dimensions in which teachers' conceptions impact classroom assessment. The model depicts that assessment is central to quality learning and school success, as mentioned in the review of related literature.

It is apparent that primary school teachers are still in the learning stages of implementing CBA education reforms. There may be gaps in their understanding and application of various different pedagogies relating to new assessment designs and instructions that are being implemented in Algeria. Teachers may adopt figure 5.2 to develop suitable techniques of comprehension to gear students' activities towards more meaningful and deep learning that goes beyond the information presented. Deep research in this field can inform the design of the training program. It is therefore extremely relevant to attempt to understand teachers' beliefs about assessment and to examine the extent to which these perceptions interplay with their practices.

5.4 Educational Implication

This research emphasizes the theoretical as well as practical assessment issues. Firstly, by amalgamating both summative and formative assessment methods into a unified model (figure 5.2), one was able to bridge the gap between theory and practice. It was in this study and not a question of which method could, in isolation, be demonstrated to be superior to other assessment methods but which support students to better improve their

learning strategies to align with the new era of education reform. The practical implications are many but most salient of all is the attitudinal change in the approach to assessment for guiding students to develop their learning skills. Teachers should take into account the alternative assessment methods by restructuring their practices in such a way that they appreciate that competency-based assessment should be incorporated in their instruction which may create effective teaching/learning climate.

The evidence gathered from this analysis was that the assessment issues are best tackled by helping teachers to update and tailor the teaching and assessment strategies so that direct attempt can be made in the classroom to show pupils how to develop their learning skills and to achieve practical results.This decision is partly justified on the basis of the needs observed in Algerian school and partly by the researcher's own interest.

The research findings from this study provide a great deal of importance and benefits that comes out of the application of competency-based assessment in the practical classroom situation. Teachers are challenged to implement and incorporate assessment reform policy within instruction because of its importance and benefits which both teachers and students can gain. The constraints or challenges observed can be alleviated not only by the teachers themselves but also with the inspectorate assistance to make teachers aware of the challenges that come with the implementation of the new curriculum. In so doing, undue pressure and anxiety would be eased or removed from teachers as they plan to integrate assessment activities within classroom teaching and learning process.

5.5 Recommendation

Based on the findings of this research study, the researcher made the following recommendations towards ensuring an adequate implementation of assessment in Algeria.

1- Compulsory seminars and workshops should be organized for every primary school teacher as a matter of urgency and provide him with proper orientations on the fair implementation of assessment. This should be organized at a more regular interval.

2- The government should make efforts to standardize classroom assessment; this will help to apply authentic and realistic criteria in comparability of students' performance across the different schools.

3-Efforts should focus on constructing more schools and classrooms to decongest the class size. This measure will help teachers to use different assessment techniques in an objective and realizable manner and at the same time allows for effective teaching.

4-Teachers must be informed about the impact of classroom assessment on quality learning. They should be sensitized on the rationale behind assessment. This will help to instil in them that it's not a way to punish them; rather it's a means of achieving the goals of education.

5-The appropriate body in charge of education should mitigate the student-teacher ratio problems by recruiting more teachers.

6-A special committee should be set up to supervise the practical implementation of classroom assessment in each school.

A general revision, related to teachers' attitudes and practices, is necessary for the improvement of assessment procedures, as well as the skills and expertise of teachers. The researcher suggests some procedures to be followed in the implementation of assessment policy efforts in Algeria. For the first objective which seek to determine teachers' perceptions on classroom assessment, the following recommendations were made:

A-Teachers should be provided with adequate opportunities to reach necessary professional improvement. This will inculcate perceptions which facilitate effective assessment practices. The in-service training programmes should be devised to ensure that all teachers have the conceptual knowledge, skills and understanding of assessment as a corpus of instructions that takes an extended span of time to be implemented correctly. Teachers need to be encouraged and spearheaded by the educational stakeholders to keep abreast of the assessment changes and the learners' constantly evolving needs.
B- Teachers should be exposed to a variety of assessment techniques which include statistics since they are necessary in the analysis of assessment data.
C-Inspectors and assessment mentor need to provide short and practical courses on assessment for teachers who are already in the field in order to fit the new assessment requirements
D-Formative assessment needs to be introduced in the Algerian primary schools as part of a final assessment. It is high time that schools should use both summative and formative assessments which reflect the real levels of our learners .Besides, they need pedagogical

resources and even techniques to cope with the assessment methods and become involved in intensive training so as to be able to practice the new strategies and tools in planning and designing future lessons.

It is important to note that teachers are usually expected to engage in a variety of assessment-related activities whilst simultaneously engaged in teaching activities. For instance, they need to know how to cope with the learners' needs and how to plan and use different assessment strategies in their classrooms. Teachers should be considered as major stakeholders and not as passive consumers of pre-packed teaching and learning methods. Their proficiency and craft knowledge need to be appreciated. Meanwhile, inspectors and educational specialists should be able to offer expert advice and support to teachers and to help them conduct and implement the new assessment policy more effectively. Thus, each educational conscription should mount constant in-service workshops on assessment to underpin the teachers' understanding regarding assessment-related aspects to connect teachers' existing knowledge with the current approach by reflecting on their perceptions, assessment practices, and the relationship between their beliefs and their practices. In addition, teachers should provide adequate feedback to learners, indicating their strengths and weaknesses as a measure to improve learning and make them aware of their progress.

Teachers need to collaborate under the proper guidance and support of their inspectors in order to shape their professional improvement and training. This may assist teachers in continually reflecting on their practices to ensure that they are in tune with innovations and current policy requirements. Teachers should be supported to develop effective planning skills, which enable them to adapt and align relevant assessment methods, tools and techniques in their plans.

It is also hoped that the recommendations may be taken into consideration in order to assist in the successful implementation of competency based assessment in schools, and give a boost to the teaching-learning quality. Finally, to provide teachers with useful methods, tools and strategies which may help them in implementing their knowledge about teaching using to the competency based approach, and suggests how assessment practices can generate relevant information for the improvement of education.

5.6 suggestions for further research

The results of this study revealed that there are a lot of potential areas for further studies which would bring a better understanding of competency-based assessment in

Algeria.Whilst this study covered only one District/ Wilaya (Sidi Bel Abbes) in Algeria, there may be different results that surface from different parts of Algeria. An immediate requirement for more thorough research is based on the assessment misconception and its impact on teaching and learning as well. This study covered only primary school teachers' beliefs, attitudes and concerns towards competency-based assessment in relation to classroom practices, and the identification of Essential and Desired Learning Competencies for improving the learning and teaching process.

In this section, I propose possible areas for further research that could provide deeper insight into assessment issues that were outside the scope of my study:

(1) What are the challenges related to teaching, learning and assessment?

(2) How do politic guidelines influence effective classroom assessment practices?

(3) How do external factors affect teachers' classroom assessment practices?

(4) How do learner characteristics influence classroom assessment?

(5)how can assessment be utilized to drive educational improvement?

(6) How can assessment be used as a support for the teaching and learning process?

(7) What designs and methods are required within the education system to provide relevant, reliable and valid information to determine learner strengths and weaknesses?

More field studies are also required to delineate the relationship between teachers' conceptions and their classroom practices. The current methodology may conduct future research to understand teachers' perceptions of informal assessment, summative and formative assessment, as well as assessment in the different learning areas and at different grade levels.

5.7 Synthesis

Assessment is a controversial topic right now in the education world. The term assessment has many connotations; people frequently associate it with evaluation, measurement and test , but this is only one aspect of assessment and their usage wanders, depending on context and researchers' views. Studies have reviewed these concepts in some details. Research has shown that assessment techniques, grading, and feedback have the potential to impact not only the students' learning processes but their affective responses (Brookhart, Walsh, & Zientarski, 2006; Harlen & Deakin Crick, 2003). The literature review has described and contrasted traditional with alternative assessment

purposes and practices, in order to equip the reader with detailed information concerning the variety of possible assessment paradigms. Then it has reviewed the impact of assessment on students, and the current state of assessment in education to set the context for my own research.

It appears, in the Algerian elementary school, to be some gaps in knowledge in so far as assessment understanding is among the teachers. They should be acquainted with the notions underlying assessment and should master their use and interpretation Greaney, and Kellaghan(2004).Thus, teachers must understand new categorizations associated with assessment issues like AfL vs. AoL and assessment vs. testing/evaluation. The recognition of such classification arises from the view of learning that posits the child as an active factor in constructing his/her own learning in the context of socially- based interaction.

The Algerian primary school teachers are most likely unclear about this distinction; hence, the probability is high that they do not really grasp what they are doing during assessment. As such, mis-assessment issues may emerge from their misconceptions which lead to misinterpreting students' achievement. Evidence showed that teachers lack an appropriate understanding base regarding assessment and testing procedures. Teachers seemed reluctant to adhere to the recommended classroom assessment practices to align with instructions of the CBA reforms.Teachers should consider assessment is a process covering both formative assessment (AfL) and summative assessment (AoL) as part of the same process (Taras, 2009). That is , assessment methods should not be seen as isolated practices, but as an integral component in the context of educational systems when teachers make decisions about students' achievements.

Results revealed that some teachers failed to identify particular skills being investigated by individual items that they used for assessing students' achievements and that teachers had more problems in constructing items that measure higher order skills such as essay items but felt more skilled in constructing items that test basic skills. The target teachers exhibited negative ideas regarding the implementation of alternative assessment strategies since it requires a long time for students to complete their duties, and efficiency for teachers to supervise and assess the classroom competencies. These findings are in harmony with Roth (2008) who revealed that teachers showed levels of difficulty and anxiety in the use of alternative assessments.

The long-standing fear of assessment is the most perplexing challenges facing teachers. This fear emerged from their perception about assessment of the intended outcomes of education. The CBA era promises a more thorough assessment. Thus, relevant and helpful professional development programs can enable teachers to have a fair understanding of assessment. The potential for sound assessment understanding obliges educational practitioners to undergone concerted efforts to demystify tensions among teachers and equip them with the necessary tools to assess students' skills objectively.

This study has examined the factors influencing teachers' classroom assessment-related practices and their impacts on students' learning. It explored the way teachers cope with classroom challenges, and highlighted how these challenges influence students' learning effectiveness.

The evidence showed that teachers' assessment conceptions and understanding incorporate a variety of assessment procedures, strategies and tasks. Commonly, the teachers accepted various assessment techniques as valid and important representations of classroom assessment. In the meantime, they claimed for adequate in-service training and workshops on classroom assessment to implement the new assessment policy adequately.

This study adds some details to the literature of classroom assessment. It illustrates teachers' perceptions and challenges with classroom assessment, which assessment strategies they used, and also how the challenges influenced their students' learning quality. This study has provided a field-based description of classroom assessment as experienced by primary school teachers in Algeria. The findings are pertinent for assessment policymakers who ought to mitigate the tensions and sufficiently accommodative assessment policies to the teachers' needs. The teachers faced challenges similar to those highlighted in previous studies: overcrowding, lack of support from education officials, lack of training and lack of understanding of policies (Black et al., 2003; Brown, 2008; Rahim et al., 2009).

The new data generated from this study establishes that teachers' perception and practices of classroom assessment are influenced by the social and educational context within which they find themselves.Teachers' perceptions and interpretations of assessment issues are influenced by their personal experiences, the frame of mind and their feelings of comfort towards their instructional duties. This means that change in

policy implies a change in practice to support teachers and enable them to respond to changes in the conditions and learning needs of students. The participants' personal experiences of assessment shaped their understanding of assessment and influenced the way they gauged the students' skills. Teachers need collaboration, training, commitment and significant dialogue about assessment policies which reflect on practices providing effective teaching and learning. The teachers' accounts clearly showed the problems and challenges of classroom assessment.

Moreover, teachers perceived the new assessment methods went against their beliefs and hindering their efforts to reach quality learning. For instance, learners were given a particular number of assessment tasks because this is what policy required. The assessment policy outlines how many tasks a teacher has to record, and teachers stated that most of the time they gave their learners activities for the sake of record keeping, even when the learners failed to master the content. They only wished to keep up with policy requirements regardless their conceptions and beliefs.

Findings from these studies open a door to points of view regarding whether teachers possess necessary skills needed for using different types of tests and the perceptions they hold regarding the effectiveness of different types of tests in classroom assessment practices. My findings corroborate those of Smith and Gorard (2005) and Zeichner (2008) who established that teachers used assessment to reflect on their way of teaching, to investigate whether the aims of the lesson had been accomplished and also to improve on learner performance.

Finally, I think that a good interpretation of assessment practices can support teachers in achieving the vision set forth in the ideals and outcomes of the curriculum. Assessment is, therefore, neither neutral nor an end in itself, but functions as an instrument for learning and an effective mechanism for the creation of competence.

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Appendixes

Appendix 1

Questionnaire on teachers' assessment perceptions

This questionnaire aims to gather baseline information on teachers' attitudes about classroom assessment. The aim is to come up with an effective way of identifying these perceptions and their effect on students' learning quality. This survey consists of two main parts:

Part I: Background information

Part II: Statements on classroom assessment beliefs and practices

All answers are strictly private and will only be used with the consent of the participants.

Part I: Demographic data (7 items).

Instructions: Please answer all the items by ticking or completing accordingly.

1. Name ....

2. Age ....

3. Gender   Male   ☐   Female   ☐

4. Your educational background. Please tick one box

☐   Certificate
☐   Diploma
☐   BS/BA Degree
☐   Masters Degree
☐   Other please specify_____

5. Your teaching experience. Please tick one box

2-5 years   ☐

6-10 years   ☐

11-15 years   ☐

16-20 years   ☐

21-25 years   ☐

25-30 years   ☐

6. What sort of area is your school located?

Urban ☐   Sub-urban ☐   Rural ☐

7. The average number of students in my class is:

Less than 20 ☐   21-30 students ☐   31-40 students ☐   More than 40 students ☐

Appendixes

Part II: Statements on classroom assessment beliefs, skills and practices

Section A : Teachers' thoughts and beliefs on assessment   (15 items)

Instructions: For each statement below use the following key to indicate how you respond to the statement regarding your perceptions of classroom assessment. Please check '√'in the appropriate box**.**

SD= Strongly Disagree **D**= Disagree **U**= Undecided **A**= Agree **SA**= Strongly Agree

		% SD	D	U	A	SA
1	Assessment identify and diagnose pupils' learning needs					
2	The goal of classroom assessments is to decide whether students have understood the learning objectives.					
3	The purpose of classroom assessments is to determine student grades.					
4	The purpose of classroom assessments is to determine the effectiveness of my instruction.					
5	Tests help me focus on the skills/knowledge needed by my students.					
6	The purpose of assessment is to make students accountable for their learning.					
7	The purpose of assessment is to monitor students' learning progress.					
8	Student effort should be considered when assigning student grades.					
9	Giving individualized comments for student learning is more important than giving grades.					
10	I learned assessment practices that I never use in the classroom.					
11	Assessment should form a natural part of teaching activities.					
12	Assessment training I received was adequate.					
13	Students should consider grades as feedback for improvement.					
14	Assessment provides me with valuable pieces of evidence of my students' understandings, which I use to plan subsequent lessons.					
15	I need more training in student assessment, tests, and measurement					

Appendixes

Section B: Classroom assessment skills (20 items)

Instructions: For each statement below use the following key to indicate your skill level for the following assessment tasks. Please check '√' in the appropriate box.

NS=Not Skilled **LS**=Little Skilled **SK**=Somewhat Skilled **S**=Skilled **VS**=Very Skilled

		NS	LS	SK	S	VS
1	Choosing appropriate assessment methods for instructional decisions					
2	Using a table of specifications to plan assessments					
3	Aligning test items with instructional objectives					
4	Writing essay questions and paper-pencil tests.					
5	Writing multiple-choice questions					
6	Writing true or false questions					
7	Assessing individual hands-on activities.					
8	Using portfolio assessment					
9	Explaining standardized exam scores to others					
10	Assessment of problem solving skills					
11	Using assessment results when planning teaching.					
12	Using assessment results for decision-making about individual students					
13	Determining why students make specific mistakes					
14	Communicating classroom assessment results to others					
15	Including student effort in the calculation of grades					
16	Assessing specific course objectives					
17	Making sure the test adequately covers the material taught in class					
18	Using peer assessments for student assessments					
19	Providing oral feedback to students					
20	Providing written feedback to students					

Appendixes

Section C :Use of classroom assessment practices (20 items)

Instructions: For each statement below please use the following scale to indicate how often you use the assessment practice described by each item. Please tick '√' in the appropriate box.
NU=Not Used **SU**=Seldom Used **UOc**=Used Occasionally **UOf**=Used Often **UVO** =Used Very Often

		NS	LS	SK	S	VS
1	Choosing appropriate assessment methods for instructional decisions					
2	Using a table of specifications to plan assessments					
3	Aligning test items with instructional objectives					
4	Writing essay questions and paper-pencil tests.					
5	Writing multiple-choice questions					
6	Writing true or false questions					
7	Assessing individual hands-on activities.					
8	Using portfolio assessment					
9	Explaining standardized exam scores to others					
10	Assessment of problem solving skills					
11	Using assessment results when planning teaching.					
12	Using assessment results for decision-making about individual students					
13	Determining why students make specific mistakes					
14	Communicating classroom assessment results to others					
15	Including student effort in the calculation of grades					
16	Assessing specific course objectives					
17	Making sure the test adequately covers the material taught in class					
18	Using peer assessments for student assessments					
19	Providing oral feedback to students					
20	Providing written feedback to students					

Appendixes

Appendix 2

Assent Form

I ___(your name)_____ agree to participate in the study entitled "The assessment impact on the quality of the teaching-learning process. A Case Study: primary school." Mr. KERMA Mokhtar has explained to me why he is doing this study and I understand what is being asked of me. If I have any problem, I know that I can contact him at any time. I also understand that I can leave the study any time I want to.

Name of Participant: ....

Signature of Participant: ....

Date: ....

Appendix 3

Pre-Lesson Observation Interview Protocol

1. What has this class been doing the last session?

2. What unit are you working on?

3. What are your objectives for this lesson?

4. What are the strategies and techniques are you planning to assess students' learning?

5. What do you anticipate doing in your class at the time I will be observing?

7. How can you describe the assessment procedures with reference to CBA?

8. How confident do you feel in your own subject knowledge of assessment?

9. Can you make the difference between summative and formative assessment?

10. What is your personal view of the role of assessment?

11. Do you feel that assessment impacts the leaning quality?

12. Any particular things that may be problematic for particular students?

13. Is there anything in particular that I should know about your class that I will be observing?