

## **Investigating the Perception of K-12 Teachers on their Assessment Literacy and Obstacles Hindering the Implementation of Effective Assessments in Dubai private schools**

Ikrame Sbai

*PhD Student, Faculty of Education, The British University in Dubai*

### **Abstract:**

Assessing learners' performance is endemic in learning. Teachers bear the responsibility of assessing their students regularly to confirm that learning has happened. However, many teachers do not use assessment as a tool to improve learning, but only as an evaluation tool to judge students' achievement. Research shows that assessment should be used to improve the learning experience of learners and the assessment results should be interpreted for this sake. Many teachers are not prepared on how to use assessments effectively in their classrooms. Several previous studies have indicated that teachers have weak assessment skills, either skills for designing and developing assessments or interpreting the results. In the United Arab Emirates UAE there is a big emphasis on the effective teaching and assessment to achieve the 2021 UAE educational vision. This study explores k-12 teachers' perception of their own assessment literacy in the UAE, as well as the obstacles that hinder them from conducting effective assessments for their students. The participants are teachers working in different schools in Dubai, with different years of experience and are distributed between females and males. A mixed design questionnaire was used as a data collection method. The research results indicated that teachers have a high perception about their assessment literacy. Teachers are

also using a range of traditional assessment strategies in their classrooms to assess students. However, most of the teachers are using assessment only to evaluate students' performance instead of improving the learning experience. One of the main obstacles that face teachers with assessment is the large number of students in the classroom and the lack of training.

**Keywords:** Assessment, assessment literacy, K-12 teachers, Vision 2021, private schools, Dubai.

## **Introduction**

UAE government is conducting a huge educational reform to promote the learning quality among students under the umbrella of the 2021 vision. UAE educational vision of 2021 aims at providing an equal access to a “first rate educational system”, which will permit students to develop their academic abilities and be well-equipped with the necessary skills to contribute to their society (Vision2021, 2017). To achieve this vision, the UAE educational system witnessed a complete transformation. Eight pillars of educational development were declared to achieve the 2021 vision, two of which are related to the standardised assessments, such as making the UAE one of the top 20 countries with the highest Programme of International Student Assessment (PISA) test scores and one of the top 15 top performing countries in Trends in International Mathematics and Science Study (TIMSS) (Fanack, 2017; Vision2021, 2017). Another pillar from the 8 pillars of the vision 2021 is to ensure that all UAE private and public schools have high-quality teachers. This emphasis on the quality of teachers is derived from the belief that the quality of education and the learning process depends mainly on teachers' skills. Previous literature revealed that teacher skills is one of the main important component for the learning process (Rogler, 2014; Willis, 2010; Yamtim & Wongwanich, 2014). Teachers are the ones who directly assess and evaluate students and their progress; thus they are considered the main factor for delivering successful instruction and conducting effective assessments. The instruction quality

depends on five elements: context, teacher, student, assessment and teaching materials (Yamtim & Wongwanich, 2014). Thomas et al. (2004 cited in Yamtim & Wongwanich, 2014) stressed on the importance of assessment, and stated that teachers' decision making is based on these three component: instructional design, curriculum and assessment.

### ***Statement of the Problem***

Teachers spend almost 50% of their time in the classroom in tasks linked to assessment (Stiggins, 1991 cited in Rogler, 2014). Through assessment, teachers can compile data about students' achievements, interpret assessment outcomes to improve processes and improve learning (Al-Azani & Abdullah, 2015; Jones & Saville, 2016; Popham, 2009). Assessment literate teachers can align teaching and learning to the assessment, use results to generate constructive feedback, and interpret data to improve student learning (Rogler, 2014). Popham (2009), is stressing teachers to acquire more assessment literacy because he believes that assessment literate teachers are better decision makers and better teachers. Thus, it is important that teachers possess the adequate classroom assessment literacy to produce a quality instruction and learning experience. Also some studies proved the importance of classroom assessment in relation to improving the outcomes of standardized assessments. For instance, Stiggins' research (1999 cited in Mertler & Campbell, 2005) investigated the relation between students' academic performance in standardized tests and classroom assessments. His study findings indicated that effective classroom assessments can improve the results of the standardized tests.

Accordingly, teachers' classroom assessment literacy is crucial for a successful educational system. Unsurprisingly, UAE considered assessment literacy as one of the major focus areas of education reform initiatives. Therefore, it is imperative to investigate the UAE teachers' assessment literacy competencies and abilities. The aim of this study is to explore the perceptions of teachers about their assessment literacy.

### ***Purpose and Objectives***

## Investigating the perception of K-12 teachers

This study aims to explore k-12 teachers' perception on their own assessment literacy in Dubai private schools, as well as the obstacles that hinder them from conducting effective assessments for their students. The study will focus on 4 main aspects: - the teachers' perceptions on their own assessment literacy – Main assessment strategies and methods used by teachers – The purpose and use of assessment outcomes – Obstacles facing teachers to conduct effective assessments in the classroom.

### *Research Questions*

This study attempted to answer this key question:

- What is the perception of private schools K-12 teachers on their classroom assessment literacy?

In order to answer the above research question, the below research sub-questions will also be answered:

- What are the main assessment strategies used by teachers to assess students learning?
- To what extent do teachers use assessment results to improve instruction and student learning outcomes?
- What obstacles are facing teachers to conduct effective assessments?

### *Research hypothesis*

Based on previous research (Alkharusi, 2011a; Mertler & Campbell, 2005; Plake & Impara, 1996; Stiggins, 2001; Volante & Fazio, 2007; Yamtim & Wongwanich, 2014), teachers have low levels of assessment literacy, competencies and skills. Thus, it is predicted from this study that teachers will have low-perceptions about their own assessment literacy.

### *Significance and Rational of the Study*

The researcher has a strong believe that classroom assessment is a crucial component for learning to happen. By reviewing old and new literature, the researcher is convinced that teachers' assessment skills play significant role in student achievement and performance. The researcher designed this study to see how teachers view their own assessment skills and rate their assessment literacy. The study will also permit to explore assessment strategies used by teachers as well as the obstacles that face them with assessments in the classroom.

This study may reveal the real teachers' level of assessment literacy and guide educators and teachers to better comprehend the factors that influence the effective implementation of assessment in the classroom. It is hoped that the study conclusions would: 1- make decision makers and school leaders pay more attention to assessment skills of teachers as an important component for learning, 2- guide teachers to the best assessment practices and strategies, 3- make decision makers aware of the obstacles that hinder the implementation of effective classroom assessments, 4- make teachers comprehend the real purpose for conducting assessments.

### ***The Structure of the Study***

#### **Literature Review & Theoretical Underpinning:**

##### ***Conceptual and Theoretical Analysis***

###### ***Assessment:***

Assessment is endemic in learning. It permits for a recognition of achievements and monitoring of student progress. Assessment has always been seen as an end-of-learning activity (Berry, 2008) where the teacher has to evaluate the student performance. However, assessment can take two forms: “assessment *of* learning” Which usually refers to summative assessments and “assessment *for* learning” which is related to the formative type of assessments. Summative Assessments are considered as an accountability measure such as the standardized tests that are taken at a specific point to determine that learning has happened during that period (Chappuis and Stiggins, 2004; Garrison & Ehringhaus, 2007). However, regarding formative assessments,

students are constantly assessed during the learning process to modify instruction and learning methods for the sake of improving the learning outcomes. This continuous learning improvement refers to assessment *for* learning which is based on student involvement in the assessment process. I agree with Chappuis and Stiggins (2004) when they argue that students' involvement in assessment is crucial for students to develop learning goals and achieve future plans. Assessment should be learner-centered where the focus of activity is shifted from the teacher to the learner (Brown, 2005). Thus, the focus of this study will be on the formative assessment type due to its importance to improve learning outcomes.

*Assessment Literacy:*

Collecting and recording student assessment data on individual reports is not what effective assessment is about. Educators should shift from being passive assessors to active assessors who interpret assessment data to make use of it (Scarino, 2013). Teachers should possess what is called "assessment literacy". Richard Stiggins (1991 cited in Bayat & Rezaei, 2015) was the first to coin the term "assessment literacy". The latter is defined as the mastering of the basic principles of sound assessment and knowledge of quality standards in assessment (Popham, 2004). Educators with assessment literacy are very knowledgeable about the principles of sound assessment. These educators know how to develop and conduct effective assessments that improve learning by aligning learning objectives with assessment activities and also incorporate assessment with instruction (McMillan, 2000; Stiggins, 2002). "Assessment literacy" encompasses three key components: principles, skills and knowledge (Fulcher, 2012; Taylor, 2009). According to Taylor (2009) educators with assessment literacy should: understand the principles of sound assessment; have the skills of effective assessment that maximises learning; have the skill to identify suitable assessments for particular purposes; use empirical data for instructional and assessment practices improvement; have the skill of interpreting and applying assessment outcomes; have the capacity of integrating assessment activities and assessment results pedagogies and decision making.

"Assessment Literacy" in this paper means that teachers have clear understanding of assessment and its practices. Teachers should know the purpose of their assessment, the material they assess, the appropriate techniques and methodologies used for assessment. And most

importantly, teachers should interpret the assessment data to improve the teaching-learning process not only to evaluate students.

*Assessment and teachers' skills:*

Teachers' skills are very important to deliver learning. Many studies has revealed that teachers' skills and the quality of instruction are connected and essential for learning to happen (Mertler & Campbell, 2005; Rogler, 2014; Willis, 2010). Yamtim & Wongwanich (2014) identified teacher skills and effective assessment as the main elements of instruction quality. However, findings from various different studies about assessment have revealed an inadequacy of teachers' assessment skills and preparation (Alkharusi, 2011a; Mertler & Campbell, 2005; Yamtim & Wongwanich, 2014; Zhang & Burry-Stock, 2003) as well as inadequacy of professional development in assessment (Rogler, 2014). Birgin and Baki (2009) concluded in their study that primary teachers lack the necessary knowledge and skills to conduct alternative and performance assessments such as (Portfolios, peer assessments, self-assessments, journals and rubrics). While on the other hand, teachers are more skilled with the objective type of assessment, for instance: written feedback, homework activities, short-essay questions, multiple-choice and true-false questions.

Teachers are supposed to be equipped with various skills that will enable them to conduct effective assessments for their students. For instance, assessment should be aligned with learning goals and objectives to confirm the validity of assessment (James, 2005). According to Stiggins et al. (1989), teachers should employ a variety of assessment methods to guarantee attainment and learning. Stiggins et al. (1989) emphasised that students should be aware of the grading procedure. Teachers should also provide continuous constructive feedback to students (Chappuis & Stiggins, 2002; Nikto, 2001 cited in Alkharusi, 2011b). It is argued that students are more motivated to learn and achieve when they are part of the assessment process (Chappuis & Stiggins, 2002; Falchikov, 2013). To be valid, the assessment needs to measure what it intends to measure and what was taught (Brown, 2005, James, 2005).

*Teachers' Self-efficacy:*

Self-efficacy theory is highly applicable to this study; teachers' self-efficacy is a key to effective teaching (Gibbs, 2003; Zee & Koomen, 2016). Bandura (1997) was the first to coin the

term “self-efficacy”. He defined self-efficacy as individuals’ beliefs and thoughts about their own competencies and capabilities to achieve certain tasks. In our study self-efficacy is an important term because it is related to perception. Besides, teachers’ self-efficacy influence their perception about their skills and capabilities. According to the self-efficacy theory, individuals with strong self-efficacy approach complex and hard tasks as challenges not threats.

Ashton and Webb (1986, cited in Soodak & Podell, 1996) argued that teachers-self-efficacy was categorized as a subcategory of one’s self-belief, and that self-efficacy impacts the learning outcomes just like the other factors: teaching ability, knowledge and formal education.

Studies about teachers’ self-efficacy revealed its importance to students’ achievements, learning outcomes and other aspects related the learning. Previous studies indicated that teachers who have higher levels of self-efficacy produce better learning outcomes, because they are self-motivated and are eager to try different teaching methods and techniques (Tschannen-Moran & Woolfolk Hoy, 2001; Uzun, Özkılıç & Şentürk, 2010; Zee & Koomen, 2016). Other studies showed that educators with high self-efficacy influence learners’ motivation as well as their academic achievement positively (Mojavezi & Tamiz, 2012). Zee and Koomen (2016) conducted a study to explore the consequences of teacher self-efficacy, the study findings showed that there is a positive relation between teachers’ self-efficacy and teachers’ psychological well-being such as the sense of job satisfaction and personal accomplishment, and to practices associated with students’ academic adjustment and classroom quality. All of which is related to an effective teaching environment.

### ***Summary and theoretical framework***

From the literature review, we can sum that teachers’ assessment literacy is essential for learning. Teachers require certain skills to conduct effective assessments in the classroom, such as: - designing and developing assessments that are aligned with instruction and course objectives - interpret assessment results for decision making and to improve student learning - choose appropriate assessment methods and techniques for particular purposes - assess what they intend to assess – Involve students in the learning process. These assessment skills will be investigated through the mix design questionnaire. The researcher used this mix design to confirm that understanding is improved. An interpretivist approach is used to interpret the qualitative texts



rather than numbers, and to stress on the social construction nature of reality to get a deep understanding and insight of the issue (Rowlands, 2005). On the other hand, the positivist approach is adopted when analysing the quantitative numbers and undertakes the tangible state of reality which might be defined by independent quantifiable properties (Myers, 1997).

## **Methodology**

### ***Research Design***

A mix of both qualitative and quantitative methods are employed in this study. A survey with a combination of quantitative (closed-ended questions) and qualitative (open-ended questions) are used as data collection instrument. A non-random convenience sampling (or opportunity sampling) will be employed to recruit participants. This type of sampling involves population that is available and close to hand.

### ***Instrumentation***

#### ***Instrument method and administration***

The questionnaire used for this study is developed through the consultation of the literature and mainly followed some of the main 67 items in the Assessment Practices Inventory (API) of Zhang & Burry-Stock (1994 cited in Zhang & Burry-Stock, 2003). Many studies used the API such as Suah and Ong (2012), Zubairi, Sarudin and Nordin (2008), Alkharusi (2011a) and Alkharusi (2011b). The questions were developed specifically for this research. Thus, not all the 67 items were used. The questionnaire consisted of a total of 22 questions: --13 items are ranked using a Likert-style scale from (1 to 5) -- 4 items are open-ended questions -- 5 items are multiple choice and yes or no questions (see Appendix A). The questionnaire was divided into 5 main parts: - General information – Teachers' perception on their classroom assessment literacy – Main assessment strategies that teachers use to assess students learning – Assessment outcomes – Obstacles facing teachers to conduct effective assessments.

Teachers were provided a clear guide on how to rate the statement in the questionnaire ranging scale from 1 to 5 (strongly unskilled to strongly skilled).

The survey was a hard copy self-administered questionnaire. Most of the surveys were delivered by hand to the participants, while 4 of the participants preferred to receive the questionnaire through email. The first reason to choose the paper questionnaire was to guarantee a quick response. The data was analysed manually using an excel sheet.

#### *Piloting the instrument:*

To validate the questionnaire, two teachers were consulted to pilot the instrument before the real study started. The pilot test helped to modify the questions and make them clearer and more concise.

#### *Sampling and Population*

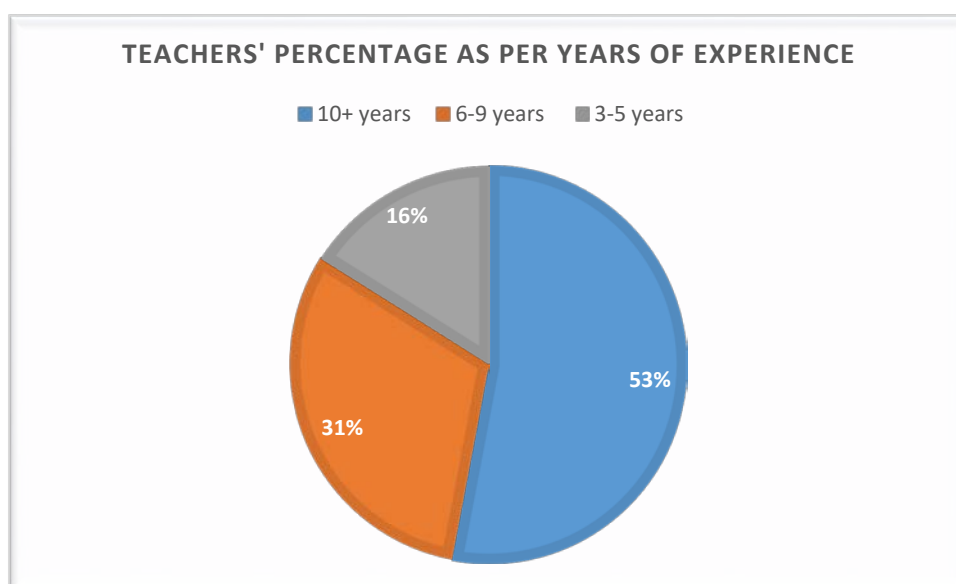
The sample is comprised of 19 teachers. 10 male teachers and 9 female teachers. All participants are from private schools in Dubai. The participants are recruited using a convenience sampling. The 19 participants work in different schools, teach different grade levels and different subjects as well as have different working experience. After the study purpose was explained to participants, either personally or through the phone, participants were handed the hard copy of the questionnaire and emailed to those who are not able to meet in person and asked them to return the surveys in 5 days.

Overall, 68% of participants are teachers in high schools, 26.5 % teachers in Middle schools, and only 5.5 % from primary schools. Participants are coming from 8 different schools. The table below shows the distribution on teachers on the 8 schools:

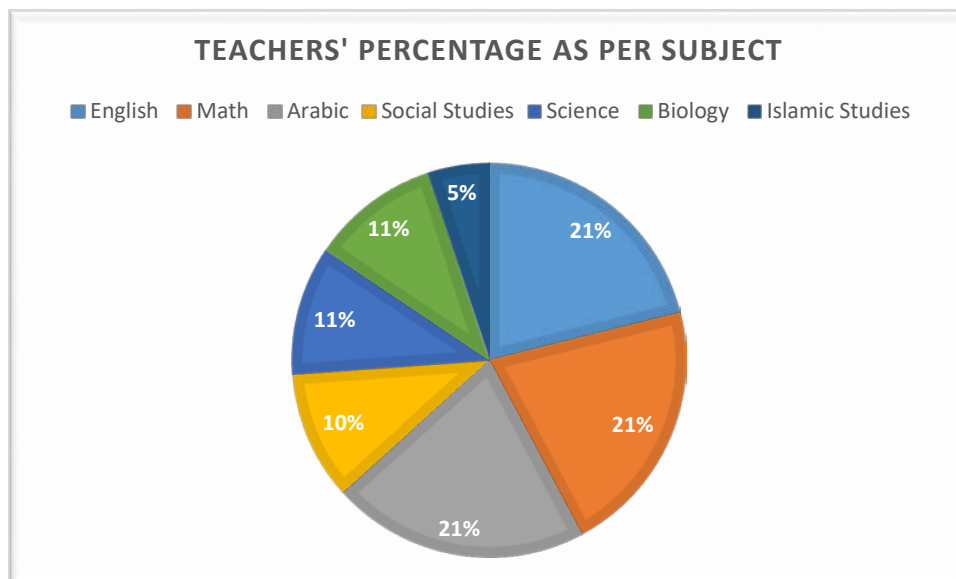
<b>SCHOOLS</b>	<b>TEACHERS N= 19</b>	<b>PERCENTAGE</b>
<b>A</b>	8	42%

<b>B</b>	2	10.5%
<b>C</b>	2	10.5%
<b>D</b>	3	16%
<b>E</b>	1	5%
<b>F</b>	1	5%
<b>G</b>	1	5%
<b>H</b>	1	5%

Around 53% of the teachers indicated that they have more than 10 years teaching experience, 31% stated that they have 6 to 9 years of experience, while 16% have only 3 to 5 years of experience as indicated in the chart below:



Participants teach different subjects. The subjects include: English (21%), Math (21%), Arabic (21%), Social studies (10.5%), Science (10.5%), Biology (10.5%) and Islamic studies (5%):



### **Ethical Considerations**

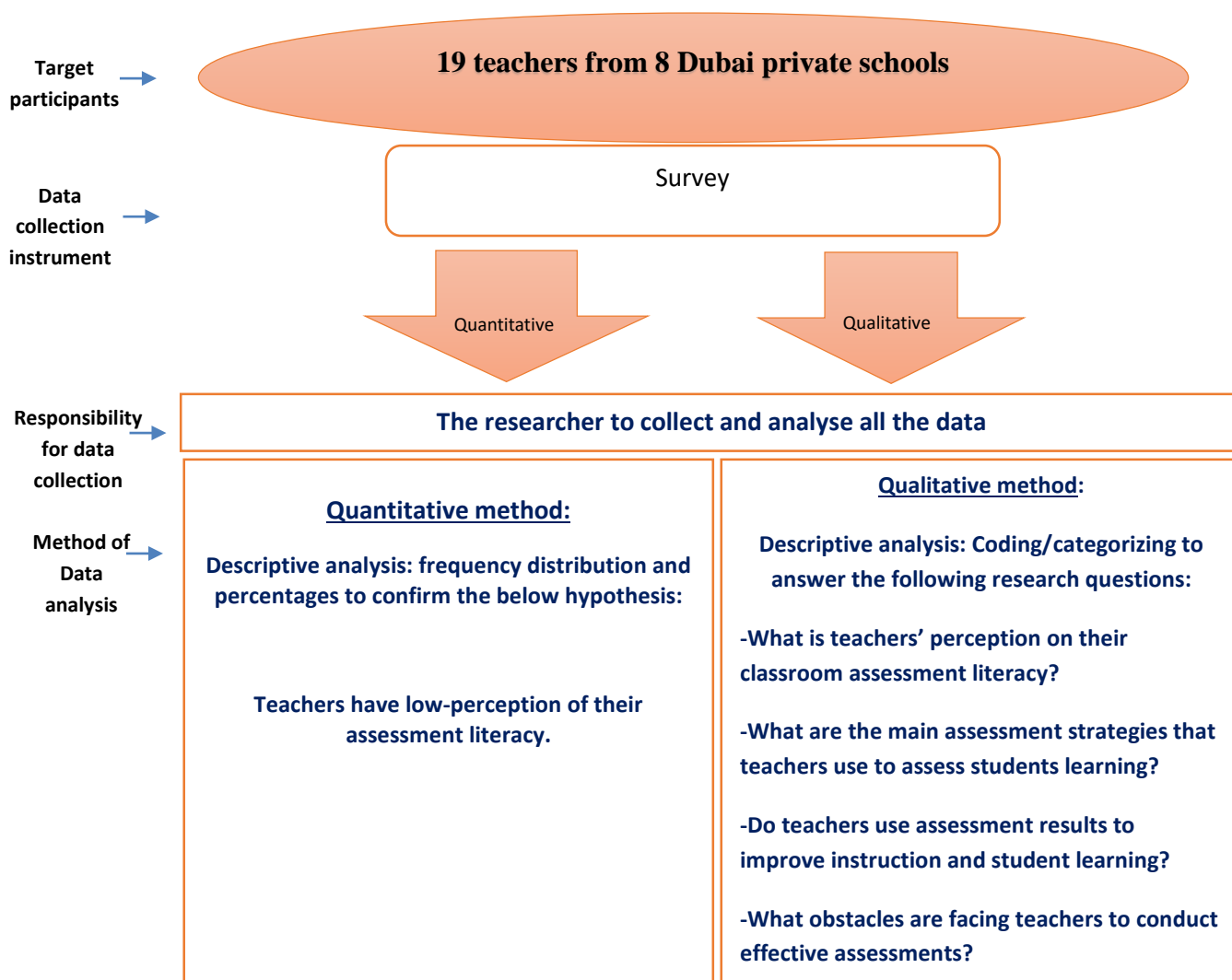
All teachers participating in the study were informed that the survey research is voluntary and that they can withdraw from the study at any point of the study. Though the responses are based on hard copy surveys, the participant responses are confidential during and after the study. The study is about teachers' assessment literacy and this study does not present any personal or professional harm to teachers.

### **Data analysis, Findings, Interpretation and Discussion:**

In this mix design study the researcher used an inductive data analysis approach to analyse the qualitative data and a deductive approach to analyse the quantitative data. Data was interpreted using both descriptive data in terms of frequency distributions and percentages (%), in addition to coding analysis to analyse the open ended questions. This coding process is based on the inductive reasoning through the use of vigilant examinations and comparisons to generate themes and categories (Patton, 2002). First, the researcher read all the responses, examined the data for consistent themes and created codes for the numerous ideas expressed by the participants in the survey. After the codes are created, they were placed under four main categories generated from

the open-ended questions responses: - Most used methods for assessment - Purpose of assessment results - Obstacles hinder teachers from conducting effective assessments - Teachers recommendations to be conduct more effective assessments.

The below diagram shows the analysis approach of the study:



### *Quantitative Results*

The below statistics indicated the participants have a high level of perception of their assessment literacy. The overall teachers' perception of their assessment literacy was 83%. The below table presents the perceived skill level for each statement:

Questions	Skill level
Choosing the appropriate assessment instrument/method to measure the desired learning outcomes	80%
Designing and developing classroom assessments based on the course objectives	86.31%
Managing announced quizzes	80%
Managing unannounced quizzes	76.84%
Developing systematic grading procedures	86.31%
Designing assessment tasks that suits the students' abilities	87.36%
Aligning assessment with instruction: Students are assessed on what I taught them	89.4%
Interpreting learning outcomes	84.21%
Including non-achievement factors in the grades calculation (e.g., attendance, behavior, etc.)	80%
Using standardized tests outcomes to acquire diagnostic information about students	80%
Using assessment outcomes to inform decisions about teaching	81.05%
Using assessment results to determine the learning outcomes levels	83.15%
Communicating assessment results with the concerned parties (educators, parents, students)	80%
Overall	<b>83%</b>

In general, from the results above, teachers have a high level of confidence in their assessment literacy and their skills with assessment. The data revealed that teachers rated their ability to align assessment with instruction as 89.4%. They also rated their ability level to design assessment tasks that suit students' abilities as 87.36%. Teachers saw themselves skilful in developing systematic grading procedures, designing and developing assessments based on the course objectives and interpreting learning outcomes. Teachers had the lowest perception on their ability to administer unannounced quizzes 76.84%.

100% of teachers claim that they ensure that students understand what is needed from them for each assessment. 84% of teachers evaluate their students at the start of the course to confirm if they have improved by the end of the year. Only 5% of teachers said that their students are not aware of the marking procedure. However, only 63% of teachers avoid teaching students to the test.

### ***Qualitative Results***

Responses from the open-ended question were analysed for recurring themes (Creswell, 2013) and the findings are reported descriptively. Below is the emerged themes from the qualitative data:

<b><u>Emergед themes and sub-themes</u></b>	
❖	<b>Most used methods for assessment</b> <ul style="list-style-type: none"> <li>• <b>Traditional assessment strategies:</b> <ul style="list-style-type: none"> <li>-Observations</li> <li>-Homework</li> <li>-Oral feedback</li> <li>-Individual activities</li> <li>- Paper-pencil tests</li> </ul> </li> <li>• <b>Authentic assessment strategies:</b> <ul style="list-style-type: none"> <li>-Students' portfolios</li> </ul> </li> </ul>
❖	<b>Purpose of assessment results</b> <ul style="list-style-type: none"> <li>• <b>Assessment as a judgment tool (assessment of learning):</b> <ul style="list-style-type: none"> <li>-Evaluate students</li> <li>-Grade students</li> <li>-Recognize strengths and weaknesses of students</li> </ul> </li> <li>• <b>Assessment to improve learning (Assessment for learning)</b> <ul style="list-style-type: none"> <li>-Evaluate instruction to inform teaching decisions</li> <li>-Inform teaching methods and approaches</li> </ul> </li> </ul>
❖	<b>Obstacles that hinder teachers from conducting effective assessments</b> <ul style="list-style-type: none"> <li>• <b>Unfavorable classroom environment:</b> <ul style="list-style-type: none"> <li>-Big students number</li> <li>-Lack of time</li> </ul> </li> <li>• <b>Rigid assessment criteria:</b> <ul style="list-style-type: none"> <li>-Imposed assessment criteria from Ministry of Education MOE</li> </ul> </li> </ul>
❖	<b>Teachers recommendations</b> <ul style="list-style-type: none"> <li>• <b>Professional development:</b> <ul style="list-style-type: none"> <li>-Training</li> <li>-Training on online assessments</li> </ul> </li> <li>• <b>Conducive learning environment:</b> <ul style="list-style-type: none"> <li>-Smaller classes</li> </ul> </li> <li>• <b>Flexible assessment criteria:</b> <ul style="list-style-type: none"> <li>-More flexibility with assessments to suit the students learning styles.</li> <li>-A flexible annual assessment plan as per students' preferences are readiness.</li> </ul> </li> <li>• <b>Learner-centered environment:</b> <ul style="list-style-type: none"> <li>-Paying attention to students with weak abilities</li> <li>-Design assessment that suit students' abilities</li> </ul> </li> </ul>

### Explanation of the narratives:

Observations, oral feedback, written feedback, individual activities and paper-pencil tests are the most used methods of assessment by teachers.

Teachers have different views about assessment results purpose. Most of the teachers claimed that they use assessment results to evaluate students and grade them, while other teachers stated that they use assessment results to evaluate the instruction and inform teaching decision, teaching methods and approaches.

Teachers see that the big number of students in the classroom is main factor that hinder their use of effective assessment. They also indicated that there is a lack of time to conduct different assessment strategies. Teachers said also that they are restricted with the assessment criteria that are imposed on them from the Ministry of Education.

Teachers recommended more training and professional development for them to be more effective with assessments especially online assessment. They also recommended to have a smaller number of students in the classroom and more flexibility with assessments to suit students' needs.

## **Discussion of results**

The results indicate that teachers have high perception of their assessment literacy. The results of the study did not confirm the study hypothesis about teachers' low perception of their assessment literacy. Though the consulted literature leads to the assumption that teachers have low-assessment literacy, this study proved the opposite. Their assessment literacy was looked at from four aspects: Teachers' perception on their assessment literacy which covers assessment skills and competencies – Assessment strategies used by teachers to assess student learning – Assessment outcomes – Obstacles that face teachers to be more effective with assessment. Teachers rated their competency to administer the unannounced quizzes as the lowest (76.84%) this might be related to the planning and preparation process. Teachers do well after planning for the assessment, however unplanned assessments might cause some struggle for teachers. This can be fixed through training to equip them with assessment skills to be more proactive.



Teachers expressed that they use homework, individual classroom activities, Oral/written feedback and pencils-paper tests more than other assessment methods. These type of assessments are very traditional and objective. This finding proves Birgin and Baki (2009) study findings that teachers are more skilled in using objective assessment types and lack the skills to conduct performance assessments such as (Portfolios, peer assessments, self-assessments, journals and rubrics). According to the National Council for Curriculum and Assessment NCCA (2008) teacher observation and teacher designed tasks are teacher-centred tasks where the teacher is leading the assessment process, while other alternative assessments such as self-assessments, portfolio and concept mapping are student-centred and empowers students in the assessment process (NCCA, 2008).

Also teachers should learn other techniques to prepare students for assessments instead of teaching students to the test. Teaching to the test is a strategy used by teacher who care only about evaluating students, however, teachers who adopt assessment for learning test what they are teaching without teaching to the test. Raynak and Ramsay (2016) suggested three steps to avoid teaching to the test: Align assessments, course objectives, and learning opportunities - Design SMART objectives - Create test blueprints.

The qualitative data results established that there is a lack of teachers' professional development and training on assessment. Nevertheless, teachers' attitudes about assessment were positive, most of the teachers acquired more training to improve their skills due to their belief in the importance of assessment. Some teachers pointed out that they want training on online assessment. Online assessments are attractive and appealing to students, support authenticity and flexibility, permits immediate/fast feedback, allows for easier and more accurate progress monitoring and creates consistent assessments (Barbosa & Garcia, 2005). In addition to their willingness to attend professional development to improve their assessment skills, teachers are eager to create a constructivist learner-centered environment. They want smaller student numbers in the classroom to be able to design assessments that suit student abilities.

## **Conclusion**

Assessing students on a regular basis is one of the teachers' main responsibilities. However, without the adequate skills and expertise, teachers' cannot achieve the desired outcomes. Teachers' perception on their assessment skills was high. And also their attitude towards assessment was positive. Most teachers required additional training about assessment as well as online assessment which is very important in the 21<sup>st</sup> century. From the study results, it is recommended that teachers get continuous training on how to use assessments effectively in the classroom. Teachers should learn how to design different types of assessments and most importantly to interpret the results to improve learning not just to evaluate students.

### ***Limitations and Delimitations of the study***

This study is limited by sample. The sample size of 19 teachers is not adequate to make generalizations. There might be some biases related to the self-administered hard copy questionnaire and anonymity. The participants might rate themselves higher when they know that the researcher can identify their responses. Also the language of the questionnaire might have an impact on the results. Some teachers might not understand English as others. Another important limitation is the lack of data triangulation in the study. It would make the study more valid if there was another data collection method used along with the survey, such as observations or interviews.

## **Recommendations**

To gain a deeper insight, and understand the importance of teachers' assessment literacy to students' learning, I suggest further studies to examine the relationship between students' performance and teachers' assessment literacy levels. I also recommend to repeat this study with a pure qualitative method such as focus groups and observations to get a deeper insight about the issue.

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## Appendix A

### *Questionnaire for k-12 teachers about their assessment literacy*

This survey is confidential and will not take more than 15 minutes of your time:

General Information	
Emirate	<input type="checkbox"/> Dubai <input type="checkbox"/> Adu Dhabi <input type="checkbox"/> Sharjah <input type="checkbox"/> Ras Al Khaimah <input type="checkbox"/> Al Fujairah <input type="checkbox"/> Ajman <input type="checkbox"/> Umm al-Qaiwain
School type	<input type="checkbox"/> Public <input type="checkbox"/> Private
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
Grade Level	<input type="checkbox"/> Primary school <input type="checkbox"/> Middle school <input type="checkbox"/> High School
Subject	.....
Years of experience as a teacher	<input type="checkbox"/> 0-2 year <input type="checkbox"/> 3-5 years <input type="checkbox"/> 6-9 years <input type="checkbox"/> 10+ years

**Guidelines:** Choose a number from a scale of 1 to 5, where 1 refers to **strongly unskilled** and 5 refers to **strongly skilled**:

#### *Teachers' perception on their classroom assessment literacy:*

Rate the below statements	1	2	3	4	5
1. Choosing the appropriate assessment instrument/method to measure the desired learning outcomes					
2. Designing and developing assessments based on the course objectives					
3. Administering announced quizzes					
4. Administering unannounced quizzes					
5. Developing systematic grading procedures					
6. Designing assessment tasks that suits the students' abilities					
7. Aligning assessment with instruction: Students are assessed on what I taught them					
8. Interpreting learning outcomes					
9. Including non-achievement factors in the grades calculation (e.g., attendance, behavior, etc.)					

10. Do you ensure that students understand what is needed from them for each assessment?

Yes       No

11. Are students aware of the marking procedure of their assessments? Yes No  
 12. Do you usually evaluate/assess your students at the start of the course to confirm if they have improved by the end of the term/year? Yes No

***Main assessment strategies to assess students learning:***

13. Do you avoid teaching students to the test? Yes No  
 14. What are the **top 3** methods from the below you use to assess students?

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Homework              | <input type="checkbox"/> Individual activities | <input type="checkbox"/> Fill-in-the-blank or short |
| <input type="checkbox"/> Oral/written feedback | <input type="checkbox"/> Group activities      | <input type="checkbox"/> Multiple-choice questions  |
| <input type="checkbox"/> Presentation          | <input type="checkbox"/> Observation           | <input type="checkbox"/> True/false questions       |
| <input type="checkbox"/> Portfolio             | <input type="checkbox"/> Paper-pencil tests.   | <input type="checkbox"/> Matching questions         |

15. What are other strategies (not mentioned above) you use to assess students?  
 .....

***Assessment outcomes:***

Rate the below statements	1	2	3	4	5
16. Obtaining diagnostic information from standardized tests					
17. Using assessment outcomes to inform decisions about teaching					
18. Using assessment results to determine the learning outcomes levels					
19. Communicating assessment results with the concerned parties (educators, parents, students)					

20. What do you think is the main use of assessment results?  
 .....

***Obstacles facing teachers to conduct effective assessments:***

21. What obstacles are hindering your use of effective assessments in the classroom?  
 .....  
 .....  
 22. What would you recommend to improve your skills as an assessor?  
 .....  
 .....

**Thank you for your cooperation**