An Investigation of Assessment Literacy among Native and Non-Native English Teachers*

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Abstract
The present study was intended to examine the perspectives of EFL native and non-native English teachers towards assessment literacy. Besides, it was within the scope of this study to see whether could affect on native and non-native English teachers’ view on assessment literacy. To achieve such goals, 100 native and non-native English teachers from ESL and EFL contexts were picked out on the basis of a combination of availability sampling and snowball sampling procedures. They were asked to take part in the study by filling out Classroom Assessment Literacy Inventory developed by Cynthia Campbell and Craig Mertler (2004). The results highlighted that there was a statistically significant difference in mean scores for native English teachers and mean scores for Non-native English teachers and native English teachers showed a better performance on assessment literacy items. Furthermore, the results revealed that there was not any statistically significant difference between mean scores of male teachers and mean scores of female teachers. In other words, gender has not been effective on the teachers’ perception respecting to assessment literacy.

Keywords: Assessment Literacy, Native Teachers, Non-Native Teachers, Teaching Experience

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Introduction

Assessment literacy, as one of almost newly developed concepts, has become a widely accepted term in educational research, and this has recently extended to the field of language testing through the term language assessment literacy (LAL) (Inbar-Lourie, 2008). While definitions vary depending on the context of use, language assessment literacy may be understood as indicating a repertoire of competences that enable an individual to understand, evaluate and, in some cases, create language tests and analyze test data.

A simple definition of assessment literacy is that it refers to an understanding of the principles of sound assessment (Popham, 2004). However, as we shall see, assessment literacy is more multifaceted than this brief definition indicates. As instructors we often underestimate the power of assessment to shape the courses we teach and to maximize, rather than just measure, student learning. We often do not appreciate or understand the major influence assessment has on students’ learning by directing attention to what is important, by acting as an incentive for study, and the powerful effect it can have on what students do in our classes and how they do it (Boud & Falchikov, 2007).

A number of authors in the fields of language testing and teaching (Boyles, 2005; Inbar-Lourie, 2008; Taylor, 2009) have recognized the importance of assessment knowledge among language instructors and suggest that such knowledge must be imparted through more than just pre-service teaching efforts. Recently, many researchers and scholars paid much more attention to and discussed the importance of assessment literacy for teachers. According to Newfields (2006), at the beginning, teachers should know why language assessment literacy is important because of three captivating reasons which are elaborated below.

First, assessment is a widespread (if not intrinsic) feature of most educational systems. Teachers are estimated to spend from 10% - 50% of their work time on assessment-related activities (MacBeath & Galton, 2004, p. 31) In many schools, a good portion of the budget also goes into formal testing. With so much time and money devoted to assessment, it's worth critically understanding how assessment decisions are made.

The second reason is referred to the necessity of understanding of educational literature regarding assessment literacy. In fact, knowing the fundamental statistical concepts is crucially required for reading critically both specialized journals and a great deal of general articles in academic publications. Ignoring this radical point leads to the difficulty of evaluating the evidences support or even reject any point described in an article; consequently, research moves further away from the realm of science and closer towards unfounded sophistry.

Finally, assessment literacy provides a situation in which teachers can communicate their own classroom outcomes with others. According to Hopkins (1985), in order to improve a community that fosters learning,
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Teachers should share their inquiries with peers. In fact, teachers should become proficient at the fundamental basics of qualitative and quantitative inquiry in order to make classroom research more understandable to a wide audience. Besides, assessment literate scholars should allocate a time criticizing and analyzing their own studies and sharing the consequences in ways that are technically convincing. A great deal of articles with thought-provoking insights lack adequate analysis and/or evidence to allow readers to critically interpret the ideas.

Due to significant role that assessment literacy plays in the educational system and, to be precise, teachers’ classroom assessment and/or even students’ language achievement, it is needed to conduct an investigation trying to inspect critically the viewpoints of teachers toward assessment literacy. In fact, many teachers may not know the underlying points of assessment literacy including what to assess, why to assess, and how to assess. Therefore, it is through this study that the researcher tries to fill this gap by investigating the perspectives of both native and non-native English language teachers with respect to the assessment literacy.

This study aims to answer the following research questions:

- To what extent, are native and non-native English language teachers different regarding their assessment literacy perspectives?
- Is there any statistically significant difference between the male and female native and non-native English language teachers as far as assessment literacy is concerned?

**Background on Assessment Literacy**

Indeed, the term assessment literacy was first coined by Stiggins (1991) as an understanding of the principles of sound assessment. According to Stiggins (1991), teachers who are assessment literates for the twenty-first century classroom should know how to meet the following five standards of high-quality classroom assessment:

- Starting with clear purposes of assessment,
- Understanding the importance of assessing different kinds of interrelated achievement targets (i.e., mastering of content knowledge, developing reasoning proficiencies, attaining performance skills, and developing high-quality products),
- Selecting proper assessment methods for the different kinds of achievement targets,
- Sampling and collecting student achievement based on representative performance tasks, and
- Avoiding assessment bias and distortion that arise from technical and practical problems (p. 257).

Although the term authentic assessment has not been used directly in his article, all the five standards spelt out by Stiggins (1991) correspond to the ideas and principles of authentic assessment. In short, teachers’ assessment
literacy involves being prepared to define, teach, and assess the different kinds of competencies that match the higher order instructional goals for the twenty-first century. In order to be assessment literate, teachers must not only be competent to develop and use high-quality authentic assessments and scoring rubrics, but also be able to master evaluative skills to make sound judgments about student performance (Saddler, 1998).

Additionally, assessment literacy, as one of the newly coined concepts in alternative assessment, has been defined differently by different researchers. As an example, language assessment literacy refers to stakeholders’ familiarity with measurement practices and the application of this knowledge to classroom practices in general and specifically to issues of assessing language (Inbar-Lourie, 2008; Taylor, 2009).

Moreover, based on Mertler and Campbell (2005) and Volante and Fazio (2007), assessment literacy can be defined as the solid and sound educational assessment knowledge and skills that required by teachers in assessing students’ mastery of learning outcome. Thus, it is one of the most important responsibilities of teachers in classroom teaching and learning. Besides, according to Stiggins (1999), the effectiveness of teaching methods used in classroom is reflected by the quality of the assessments used. Therefore, the results gathered from classroom assessments should be reliable and valid (Brookhart, 1999).

Similarly, Chappuis, Stiggins, Chappuis, and Arter (2012) stated that classroom assessment literacy is the necessary knowledge and skill for compiling data about students’ achievement and for effectively utilizing the assessment process and the assessment outcomes to enhance students’ achievement. In addition, they believed that the key to quality classroom assessments included the following:

- Designing the assessment to meet the specific needs of data users,
- Basing the assessment on concrete and appropriate achievement goals,
- Accurately determining students’ achievement,
- Yielding assessment outcomes that effectively communicate to users, and
- Involving student participation in self-assessment, goal setting, monitoring, reflection, and sharing of learning among students.

Meanwhile, Rohaya and Mohd Najib (2008) defined assessment literacy as the competency of teachers’ knowledge in the assessment field. Based on such knowledge, teachers can practice the principles, procedures, strategies, and assessment methods appropriately to assist the learning process. Thus, it would enable teachers to make more accurate and fair decision about students, curriculum, and educational programs. There are five main constructs of assessment literacy as follows:

- Literacy concept,
- Measurement method,
- Testing,
- Scoring and grading, and
- Statistics and reporting.

Most recently, Fulcher (2012) comprehensively defined assessment literacy for language teachers in the following terms:

- The knowledge, skills and abilities they require to work with standardized or classroom based tests,
- Their familiarity with test processes and awareness of the principles and concepts guiding practice, and
- Their ability to place knowledge about language assessment within wider historical, social, political and philosophical frameworks to better understand and evaluate its practices.

**Literature Review**

The first study on language assessment courses was done by Bailey and Brown (1996). The purpose of the study was to investigate the instructors’ backgrounds, the topics they covered, and their students’ apparent attitudes toward those courses. Brown and Bailey’s (2008) study, later on, was a starting point in the research of language assessment. It gave information on how the courses were taught and which topics were covered and to what degree. Unlike Brown and Bailey’s survey, which reported that almost all of the respondents had experience in language testing, 50% (15 out of 30) of the instructors from Jeong’s (2009) syllabi review did not have experience related to the field. This difference may be due to the characteristics of the mailing list Bailey and Brown used for their study, the LTRC (Language Testing Research Colloquium) mailing list, as LTRC members are likely to come from a language-testing background.

An important study by Kleinsasser (2005) covered challenging aspects of language assessment courses from the instructor’s perspective. Kleinsasser (2005) stated that one of the major difficulties in teaching a language assessment course is connecting theory with practice: The bridge between the (theoretical) class discussions and the final (practical) test/assessment product, however, was not well constructed. Challenges in getting the students to move from theoretical issues to practical ones often surfaced. Kleinsasser (2005) reported that students felt the time spent defining constructs, developing and piloting assessment materials, and rewriting and rethinking the various assessment tasks and items was quite burdensome, since many felt this is not the typical process they go through in a real classroom situation. However, the group work process encouraged them to include various stakeholders’ perspectives in test development and widen their views of testing.

Boyles (2005), focusing on foreign language education in the United States, described a set of competencies that foreign language teachers need to acquire in order to develop assessment literacy. These competencies include
the ability to understand appropriate testing practices, utilize various means of assessment, interpret and analyze assessment results, respond appropriately to the results and their meanings, and use the results in their teaching. Boyles (2005) also recommended that teacher development be ongoing, take place through both online and face-to-face formats and occur in a variety of contexts, such as conferences, at language resource centers, and at meetings of various associations and organizations, and be instituted as part of teaching preparation programs. While Boyles (2005) specifically focused on foreign language teachers, Boyle’s recommendations are relevant for other teachers as well. Furthermore, in relation to developing language assessment literacy on the part of teachers, it is necessary to consider not only the knowledge base in its most contemporary representation, but also the processes through which this literacy is developed. In line with contemporary, sociocultural learning theories, these processes should recognize the inner world of teachers and their personal frameworks of knowledge and understanding and the way these shape their conceptualizations, interpretations, decisions and judgments in assessment. As Scarino (2005) stated, the understanding of the interplay of the intellectual, the social and ethical positioning that characterizes teachers’ knowing and the notion of ethical knowing is a kind of knowledge that extends beyond the knowledge base and capabilities of teachers to include their values and dispositions.

In 2008, Inbar-Lourie coped with the requirements of a language assessment literacy knowledge base and put her work on the basis of Brindley’s (2001) work dealing with professional development programs in assessment for teachers. These included: the social context of assessment (as a core unit), defining and describing proficiency (as a core unit), constructing and evaluating language tests, assessment in the languages curriculum and putting assessment into practice. Inbar-Lourie (2008) concurred with him that one module needs to provide background to the social, educational and political aspects of assessment. She sees this as including “the social turn” in language assessment (McNamara & Roever, 2006) as well as critical views on the role of language tests in society (Shohamy, 2001). She noted, appropriately, that Brindley’s proposal does not specifically address the concepts of language (to which I would also add culture) and language assessment. She also concurs with Brindley’s inclusion of a module that considers the theoretical bases for assessment, specifically the concepts of validity and reliability, and a discussion of the prevailing models of language knowledge. Inbar-Lourie (2008) also highlighted the importance of particular conceptual relationships in language learning that need to be considered in language assessment literacy. These include the relationship between language and pedagogies that pertain to the teaching of particular aspects of language learning, and the integration of language and content.
Methodology

Sample
In order to gather the required data, 100 native and non-native English teachers from ESL and EFL contexts were picked out on the basis of a combination of availability sampling and snowball sampling procedures. Moreover, the sample consisted of both male and female teachers.

Instrument
The instrument of the present study was Classroom Assessment Literacy Inventory developed by Cynthia Campbell and Craig Mertler (2004) which consisted of five Scenarios, each followed by seven questions. The items of this questionnaire were related to seven Standards for Teacher Competence in the Educational Assessment of Students. In other words, it consisted of 35 multiple-choice items that are given under the five classroom-based scenarios. Each scenario has seven items which are aligned to the used standards. Each item has four options containing one correct answer and three distracters.

Moreover, as the Assessment Literacy Inventory was applied to the new group of samples and in a different context, it was necessary to modify its scenarios and items to make it appropriate and useful. However, in modifying the scenarios and the items, only some names and irrelevant situations were changed or rephrased to contextualize the Assessment Literacy Inventory. Besides, in rephrasing the inappropriate situations, a care was taken to ensure that rephrased situations were parallel to the original scenarios to preserve the integrity of the instrument. Furthermore, some of the items were intended to measure general concepts related to testing and assessment, including the use of assessment activities for assigning students grades and communicating the results of assessments to students and their parents. Besides, some items were related to knowledge of standardized testing, and the remaining items are concerned with classroom assessment.

Moreover, to validate the instrument, the researcher first consulted a specialist in TEFL regarding the statements constructed in the questionnaire so that these statements would be concise statements. Then, to check the internal reliability of the questionnaire concerning classroom assessment literacy, the questionnaire was piloted on fifty participants, and their reliability which were estimated based on Cronbach's Alpha Level were (α =.79) which indicated a good level of conceptual relatedness among items. Also, according to Campbell and Mertler (2004), the reliability of the original instrument was (KR20) of 74.

Results

To what extent, are native and non-native English language teachers different regarding their assessment literacy perspectives?
The first research hypothesis addressed that native and non-native English language teachers are not different regarding their assessment literacy perspectives. To reject or retain this hypothesis, the independent sample t-test
was implemented to analyze and compare the mean scores between the two
groups. Table 1 and 2 exemplified the results of group statistics as well as
independent samples t-test respectively, and explanations related to the results
are presented as follow.

Table 1. Group Statistics of Native and Non-native teachers’ perspectives on
Assessment Literacy

<table>
<thead>
<tr>
<th>Nativity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native</td>
<td>50</td>
<td>.6554</td>
<td>.14721</td>
<td>.02082</td>
</tr>
<tr>
<td>Non-Native</td>
<td>50</td>
<td>.5606</td>
<td>.17093</td>
<td>.02417</td>
</tr>
</tbody>
</table>

The analysis of data revealed that the mean score of native teachers was
M=.65 and the mean scores of non-native teachers was M=.56. Table 1 also
revealed the standard deviation of each group which was SD=.14 for native
teachers and SD=.17 for non-native teachers. It can be stated that native
English teachers showed a better performance on assessment literacy items.

Table 2. Independent Samples T-Test between Native and Non-native
English teachers

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>3.336</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.973</td>
</tr>
</tbody>
</table>

Results of t-test highlighted that there was a statistically significant
difference in mean scores for native English teachers and mean scores for
Non-native English teachers (t (98) = 2.97, p< 0.05). Then, in order to know
how big the difference between the means of two groups was, the researcher
calculated the effect size or the strength of association which showed the
relative magnitude of the difference. The following formula was utilized to
calculate the means difference.

\[ \text{Eta squared} = \frac{t^2}{t^2 + df} \]

Therefore, by putting the values in the formula, the obtained effect size was
(0.08). In other words, only 0.08 percent of the variance in the teachers’
assessment literacy perspectives could be explained by the variance in their
nativity. In fact, the mean differences are significant but the strength of
association between two values is low.
Is there any statistically significant difference between the male and female native and non-native English language teachers as far as assessment literacy is concerned?

The second research hypothesis indicated that there is not any statistically significant difference between the male and female native and non-native English language teachers as far as assessment literacy is concerned. To reject or retain this hypothesis, group statistics was first obtained for each group and their assessment literacy perspectives. Thereafter, the independent sample t-test was employed in order to scrutinize and compare the mean scores between the two groups. Table 3 proved the results of group statistics.

**Table 3. Group Statistics of Male and Female teachers’ perspectives on Assessment Literacy**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>54</td>
<td>.6138</td>
<td>.16481</td>
<td>.02243</td>
</tr>
<tr>
<td>Female</td>
<td>46</td>
<td>.6012</td>
<td>.16833</td>
<td>.02482</td>
</tr>
</tbody>
</table>

Table 3 displayed the group statistics for two groups which revealed that the mean scores of male teachers was M=0.61 while the mean scores of female teachers was M=0.60. Table 3 also demonstrated the standard deviation or each group which respectively was SD=0.164 and SD= 0.168. Moreover, to find the statistical difference between the means, an independent samples t-test was run. Table 4 represented the results.

**Table 4. Independent Samples T-Test between Male and Female teachers’ perspectives on Assessment Literacy**

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.478</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.374</td>
</tr>
</tbody>
</table>

As shown in Table 4, there was not any statistically significant difference between mean scores of male teachers and mean scores of female teachers (t (98) = 0.375, p>0.05). Furthermore, the researcher also calculated the independent samples t-test between male and female teachers according to their nativity. Table 5 depicted the group statistics of native male and female teachers, and explanations related to the results are presented below.
Based on the results presented in Table 5, the mean scores of native male teachers were $M=0.66$ while the mean scores of native female teachers were $M=0.65$, and the standard deviation of each group was respectively $SD=0.151$ and $SD=0.145$. Besides, to check if there is difference between mean scores of native male and female teachers, an independent samples $t$-test was run. Table 6.9 characterized the results. As revealed in Table 6, there was not any statistically significant difference between mean scores of native male teachers and mean scores of native female teachers ($t (48) = 0.242, p>0.05$).

Additionally, the researcher also calculated the independent samples $t$-test between non-native male and non-native female teachers. Table 7 portrayed the group statistics of non-native male and female teachers, and descriptions connected to the results are offered below.

According to Table 7, the mean scores of non-native male teachers was $M=0.57$ while the mean scores of non-native female teachers was $M=0.53$, and the standard deviation of each group was respectively $SD=0.167$ and $SD=0.177$. In addition, in order to examine the difference between mean scores of non-native male and female teachers, an independent samples $t$-test was employed. Table 8 considered the results.
As discovered in Table 8, there was not any statistically significant difference between mean scores of non-native male teachers and mean scores of non-native female teachers ($t \ (48) = 0.788, p>0.05$).

### Discussion

The present study was intended to examine the perspectives of EFL native and non-native English teachers towards assessment literacy. Besides, it was within the scope of this study to see whether could affect on native and non-native English teachers’ view on assessment literacy. To achieve such goals, 100 native and non-native English teachers from ESL and EFL contexts were picked out on the basis of a combination of availability sampling and snowball sampling procedures. They were asked to take part in the study by filling out Classroom Assessment Literacy Inventory developed by Cynthia Campbell and Craig Mertler (2004).

Based on the results of the study, there was a statistically significant difference in mean scores for native English teachers and mean scores for Non-native English teachers and native English teachers showed a better performance on assessment literacy items. In fact, native English-speaking teachers are immersed in cultural background knowledge of English and have an advantage over non-native English-speaking teachers who may have not had the opportunity to go to an English-speaking country and be exposed to the target culture.

Additionally, only 0.08 percent of the variance in the teachers’ assessment literacy perspectives could be explained by the variance in their nativity. In fact, the mean differences are significant but the strength of association between two values is low. These findings confirmed the studies conducted by Bol, Stephenson, O’Connell, and Nunnery (1998) and Stiggins and Conklin (1992). They claimed that several teachers are inadequately trained and ill-prepared to develop, administer, and interpret the results of various types of assessments. They added that teachers who were less prepared and skilled in
developing authentic assessments perceived the assessments as being more difficult to develop than traditional paper-and-pencil tests.

Furthermore, the results of the present study revealed that there was not any statistically significant difference between mean scores of male teachers and mean scores of female teachers. In other words, gender has not been effective on the teachers’ perception respecting to assessment literacy. In fact, the results showed that both male and female teachers have almost the same perspectives towards assessment literacy. Actually, because of existing national cultural differences in which men have more freedom and courage in expressing their own personal ideas and from sociological perspectives in which women are seen as cowards, conservative and the ones who accept society as it is, it was supposed that there was a significant difference between male and female teachers’ perspectives with respect to assessment literacy; however, the results rejected this notion.

The findings were in line with the study conducted by Xu and Brown (2017) who examined the assessment literacy level of Chinese university English teachers and the effects of their demographic characteristics on assessment literacy performance. They found that there was not any statistically significant difference between male and female teachers regarding assessment literacy. However, Alkharusi (2011) aimed at investigating teachers’ self-perceived assessment skills as a function of gender, subject area, grade level, teaching experience, and in-service assessment training. Results indicated statistically significant differences on the self-perceived assessment skills with respect to teachers’ gender, subject area, grade level, teaching experience, and in-service assessment training.

**Conclusion**

In accordance with the native and non-native teachers’ perspectives, assessment literacy has different meaning for different educational persons as the results there was a statistically significant difference in mean scores for native English teachers and mean scores for Non-native English teachers and native English teachers showed a better performance on assessment literacy items. In fact, native English-speaking teachers are immersed in cultural background knowledge of English and have an advantage over non-native English-speaking teachers who may have not had the opportunity to go to an English-speaking country and be exposed to the target culture. Moreover, there was not any statistically significant difference between male and female teachers, and gender has not been effective on the teachers’ perception respecting to assessment literacy.

Furthermore, this study can bring about fruitful results for EFL teachers, policy makers, curriculum developers and administrators to come to a better understanding of the importance of the role of assessment literacy in educational system.
References


