Using a Performance-Based Learning Program to Enhance EFL Professional Diploma Students'Assessment Literacy

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Abstract

The present study aimed at investigating the use of a performance-based learning program (PBL) for enhancing EFL professional diploma students ' assessment literacy skills at the Faculty of Education. The study adopted a pre-post group design. The study sample was twenty five students. The whole group was submitted to an intensive training in PBL program. The instruments of the study included a needs assessment questionnaire, a checklist to determine the Assessment Literacy (AL) domains and their sub skills most needed by EFL prospective teachers, and a pre-post assessment literacy test. Analysis of data obtained by students (using t- test) revealed that the PBL program was so efficient and effective in promoting EFL professional diploma students' literacy skills in the post-performance of the test. Discussion of these findings, recommendations and suggestions for further research are presented.

<u>Key Items</u>: Assessment Literacy, Performance-based learning

الـملخص الـعربـى
استخدام بـرنـامـج قـائـم عـلى مـدخل الأداء فـى تـنمية مـهـارات الـتقـييم لـدى طلاب الـدبلـوم الـمـهنية "تخصص الـلغة الإنجليزية "

هدفت الدراسة الحالية إلى استخدام برنامج قائم على مدخل الأداء فى تنمية مهارات التقييم لدى طلاب الدبلوم المهنية تخصص اللغة الإنجليزية بكلية التربية جامعة المنيا. استخدمت الدراسة المنهج شبه التجريبي(عينة تجريبية واحدة) حيث قامت الباحثة بتطبيق البرنامج المقترح على عينة الدراسة لمعرفة أثره فى تنمية مهارات التقييم لتحقيق أهداف البحث. وتكونت عينة الدراسة من عـدد خمس وعشرون طـالبا وطـالبة من طـلاب الـدبلوم المهنيـة –   شعبة اللغـة الإنجليزيـة. واشتملت أدوات الدراسة

على استبيانات واختبار مهارات التقييم والبرنامج التدريبي. وقد أوضح تحليل النتائج فاعلية البرنامج القائم على مدخل الأداء فى تنمية مهارات التقييم لدى عينة البحث ؛ حيث وجدت فروق ذو دلالة إحصائية بين متوسطى درجات عينة الدراسة في التطبيقيين القبلى والبعدي لصالح التطبيق البعدى. وقد تم عرض النتائج ومناقشتها. أوصت الدراسة بإستخدام مدخل الأداء فى تنمية مهارات التقييم لدى طلاب الدبلوم المهنية تخصص اللغة الإنجليزية والمعلمين ما قبل وأثناء الخدمة. كما اشتملت الدراسة على أهم التوصيات والمقترحات لبحوث مستقبلية.

- <u>الكلمات المفتاحية</u> : التعلم القائم على الأداء

Introduction

Recognizing and implementing effective classroom assessment are essential to improving students' learning and teaching practices. It is so important that teachers understand the different roles of assessment and how they effectively select assessment methods and tools to meet particular needs of their students (Welsh and D'Agostino, 2009). Classroom assessment can primarily modify the way teachers can teach. "If assessment is to be a positive force in education, it must be implemented properly. It cannot be used to merely sort students or to criticize education. Its goals must be to improve education, rather than 'teach to the test,' we must 'test what we teach'"(Lockwood & Mclean, 2013). Skills in choosing proper, constructive, various and fair assessment methods are prerequisites for teachers to provide effective teaching and to support instructional decisions. They need to be well-acquainted with some background information about assessment alternatives and their strengths and weaknesses (Mertler, 2009). Classroom assessment should be deliberately designed to develop and promote students' performance, not merely to "audit" as most tests currently do (Wiggin, 1993).

However, assessing student performance is considered as one of the most critical responsibilities of classroom teachers which many teachers do not feel adequately prepared for as clarified by Popham

(2008). Fadel, Honey, & Pasnik, (2007) suggested that assessment of students need to be largely performance based so that students can show how well they are able to apply knowledge and to demonstrate skills to carry out analytical tasks throughout their learning.

- Performance-based learning assessment

Performance- based learning has become a significant topic for researchers in recent years because of the trend of teacher educators to concentrate on students' performance rather than achievement tests. Cheng, Rogers & Wang (2008) clarify that performance-based learning (PBL) is a type of learning where students are engaged in tasks and activities that require representing their knowledge and skills through executing a response or a product. It is an ongoing process that assists teachers to discover students' ability to think and reason. PBL promotes a process of continuous learning and improvement where students learn from the assessment process and develop skills of self-evaluation. A performance based assessment requires students to prove or demonstrate that they have mastered the skill being evaluated. The advantage of performance based assessments is that they can be observed and evaluated, based on a completed project (Arter & McTighe, 2001).

Advocates of performance-based learning (Clegg & Bryan, 2006, Palm, 2008, Chun, 2010, McTighe, 2015, Bran, 2017) state that this type of learning assists students to develop a deeper understanding of the knowledge and content they are learning and develops higher-order thinking skills, such as evaluating the reliability of sources of information, synthesizing information to draw conclusions. It measures students' ability to apply the practical skills and knowledge learned before and challenges them to create a product or complete a process. It is considered as a beneficial process to develop independent and collaborative work habits and lets a student demonstrate evidence of understanding through a transfer of skills. This form of learning should be something that shows authentic product and performance (e.g. the creation of a newspaper or

class debate) as when students are more actively involved in the learning process, they will absorb and understand the material at a much deeper level. PBL preliminary purpose is to evaluate the actual process of doing a task or activity of learning.

There is a growing agreement among researchers (Chun, 2010, Pecheone, Kahl, Hamma &Jaquith, 2010, Darling-Hammond & Adamson, 2013, McTighe, 2015, Bran, 2017) on some characteristics of PBL:

1. It is authentic and connected to everyday life.
2. It provides opportunities for students to show what they can do as well as what they know.
3. It involves students in the process of learning, evaluation and making decisions.
4. It integrates tasks involving multiple skills and knowledge of culture.
5. It helps all learners to do their best and aims to improve overall performance.
6. It supports deeper learning and allows students to demonstrate their competency.

A balanced set of assessments offers evidence of student performance on challenging tasks that evaluate applications of knowledge and skills. Assessment knowledge and practical skills that a teacher should possess mirror the ability to select, develop, apply, use, communicate and evaluate student assessment information. The mastery of these skills is so important to improve teachers' assessment literacy. In order to evaluate students appropriately, it is crucial for teachers to have an adequate level of assessment literacy (Popham , 2008)

- Assessment Literacy

Assessment literacy is a term that is first coined by Stiggins (1991)who noted that teachers with assessment literacy should know the main questions about assessment: what to assess, why we assess, how to assess, what assessment tools to use, what problems of assessment are, and how to prevent them from occurring Bayat & Rezaei (2015). DeLuca (2014) states that assessment literacy is a

"core professional requirement across educational systems. Hence, measuring and supporting teachers' assessment literacy have been a primary focus over the past two decades". Assessment literacy is considered so crucial to modern teaching that teacher preparation programs should give priority. Teachers must be assessment literate in order to be effective teacher. However, becoming assessment literate requires a complete understanding of theory and application of various assessment practices and skills to manage and interpret assessments at classroom properly (Deneen & Brown, 2016).

The importance of assessment literacy lies on the fact that "not only do teachers need to understand the conceptual bases of different approaches of assessment; they also need to relate such knowledge to their professional practice in their particular context" (Scarino, 2013). A key element of assessment literacy is teachers' ability to connect student assessment to the learning - teaching process to be able to interpret data generated from a test to make useful modifications to their teaching and to use different assessment tools to improve student learning (Rogier, 201 4).

- Assessment Literacy Domains

In a pursuit of gathering information about the kinds of skills and knowledge teachers need to successfully plan classroom assessment practices, Abell and Siegel (2011) and Gottheiner and Siegel (2012) suggest that assessment literacy is basically composed of three main aspects: view of learning, assessment principles, and four areas of knowledge i.e. knowledge of assessment purposes, knowledge of assessment strategies, knowledge of assessment interpretation and action taking, and knowledge of what to assess. Fulcher, (2012) provides five essential competencies of sound classroom assessment practices: 1) Assessment procedures; 2) Assessment purposes that reflect clear and valued learning targets 3) Learning targets are translated into assessments that give accurate results. 4) Communicate assessment results and 5) Involve students in assessment processes. Whereas, O'Loughlin (2013) refers to a range of skills related to test production,

test score interpretation and use, and test evaluation in conjunction with the development of a critical understanding of the roles and functions of assessment.

DeLuca, LaPointe-McEwan and Luhanga (2014) analysed several documents to provide some assessment themes and domains some of them are: 1) Assessment Purposes; 2) Assessment Processes; 3) Communication of Assessment Results; 4) Assessment Fairness; 5) Assessment Ethics; 6) Measurement Theory;7) Assessment for Learning; 8) Assessment Education and Support for Teachers; and 9) Administration of test scores. Xu &Brown (2016) propose what teachers should know to be assessment literates: a mastery of educational assessment knowledge, which includes the fundamental principles of the 'what', 'why', and 'how,' 2) an internalized set of understanding and skills of assessment, teaching, and learning; 3) a self-directed awareness of assessment processes; and 4) translating assessment policies and principles into classroom realities while driving them to reflect on their assessment practices and to gain new insights.

- **Literature Review**

An ample number of studies call for exploring and evaluating the body of knowledge and skills encompassed by assessment literacy for teachers and also the different methods and techniques which enhance assessment literacy. For example, Fadel, Honey & Pasnik (2007) tried to investigate the impact of performance-based assessment on participants' learning views and attitudes. They used a ten questions questionnaire to find out how effective this type of assessment for them. Results of the study proved that performance-based assessments were so effective in enhancing participants' learning as their perceptions and attitudes were so positive and suggested that student teachers need assessment literacy training in order to assess their students effectively.

Fan, Wang & Wang (2011) conducted a study to examine the effect of a web-based model, named 'Practicing, Reflecting, and Revising with Web-based Assessment and Test Analysis system

(P2R-WATA) Assessment Literacy Development Model,' on enhancing assessment knowledge and perspectives of secondary in-service teachers. Results generally confirm the effectiveness of the WATA system in improving teachers' assessment literacy perspectives. In the same line, Montee et al. (2013) used a blended learning program to enhance language teachers' language assessment literacy and it was found so effective in increasing participants' knowledge of assessment concepts and in involving them in assessment tasks to apply that knowledge.

In another study, Abdullah (2017) investigated the effectiveness of using task-based learning program for promoting EFL in-service teachers' assessment literacy. Results of the study revealed that the proposed program was so effective on improving teachers' knowledge and skills on assessment and could be used as an efficient and effective tool. She calls for more empirical studies on improving pre-service and in service teachers' assessment literacy through applying different methods and techniques.

A number of studies manipulated teachers' assessment literacy from different aspects i.e. levels of assessment literacy (Davidheiser, 2013& Yamtim & Wongwanich, 2014), Teachers' Ideology of assessment literacy (Hakim, 2015), Psychometric properties of assessment literacy(Alkharusi, 2014), using alternative assessments(Afsah, 2017), assessment literacy concepts ((Deneen & Brown, 2016), perceptions (Jannati, 2015), assessment practices (Djoub, 2017).Other studies designed different assessment literacy measurements e.g. classroom Assessment literacy Inventory (CALI) and classroom Assessment Literacy Questionnaire (Mertler,2003).

Despite the increasing concern about assessment literacy and its importance for teachers' professional development, investigating this issue is in "its infancy" (Fulcher, 2012). Many pre-service teacher's education programs still cannot benefit from the research evidence that link professional efficiency with a critical reflection of assessment (Greenberg&Walsh2012) and the fact that building assessment

literacy could dramatically improve teacher effectiveness and student success (Kahl, Hofman, & Bryant, 2013).Thus, more studies are needed to explore aspects of assessment literacy through applying different techniques e.g. performance-based learning in EFL context.

- Background of the problem

Through years of teaching a course entitled "Comprehensive Evaluation" for EFL professional diploma students, the researcher noticed that they did not demonstrate any assessment knowledge and skills and many of them know little about educational assessment. To document the problem, three preliminary ways of collecting data were used to investigate EFL teachers' knowledge, skills and belief on assessment literacy (AL). The first source was a review of related literature to examine the acquisition of AL of pre or in- service EFL teachers in Egypt. Assessment and testing practices in the Egyptian context did not meet internationally academic standards. Most teachers are not asked to prepare or write tests whether public ones or even in their directorates. Most teachers are excluded from assessment and testing process which means that they lack the basic knowledge and skills of assessment as stated by Ali (1999). Wahba (1999) also asserted that the education system in Egypt is basically concerned with standardized tests in all public tests which lead to lack of training programs on assessment. Although these results were from a long time ago, the situation is still the same as stated by Mahmoud, 2011 and Abullah, 2017).

The second source was an informal interview conducted with a number of in-service EFL teachers in different schools in Minia Governorate and prospective teachers in the Faculty of Education. Data revealed that neither in-service teachers nor prospective teachers have any training programs particularly on assessment. Prospective teachers also clarified that throughout their years of study they did not have any specific courses on assessment; they only have general background about its definitions and purposes as part of the methodology course.

The third source was the questionnaire applied on professional diploma students (the participants of the study) to explore their knowledge and skills of AL. Data from the questionnaire confirmed the results obtained from the above sources. Consequently, it was obvious that EFL prospective teachers need training in performance assessment to demonstrate knowledge and skills. Previous considerations necessitated conducting the present study that attempted to tackle the problems of the students' weakness in AL skills through using PBL as an effective technique to develop these skills.

- Piloting

The pilot study was conducted two weeks before implementing the program to test the validity and reliability of the instruments. Participants of the pilot study were twenty 4th year English Majors. Face validity of all tools was determined by consulting a panel of experts, whereas the internal validity was decided by internal consistency or Cronbach Alpha Coefficient. The reliability of all tools was determined by one or more of the following: Cronbach Alpha Coefficient, test-retest, or the inter-rater method. The pilot study revealed that all tools were valid and reliable for the actual experimentation.

- Statement of the Problem

Based on the results obtained from the pilot questionnaire, it became evident that EFL professional diploma students need to develop their assessment literacy skills. Reviewing literature, performance-based learning (PBL) program is found to be effective for achieving this purpose. Therefore, the present study was an attempt to answer the following question:

- "How far is the effect of using performance-based learning (PBL) program on enhancing assessment literacy skills of EFL professional diploma students at the Faculty of Education, Minia University?

More specifically, this major question was branched into the following questions:

- What are the basic features of the suggested PBL program?

- How far is the effect of using PBL program on enhancing the overall assessment literacy of EFL professional diploma students at the Faculty of Education, Minia University?
- How far is the effect of using the PBL program on enhancing assessment literacy of EFL prospective teachers with respect to the domain of choosing proper assessment methods?
- How far is the effect of using the PBL program on enhancing assessment literacy of EFL prospective teachers with respect to the domain of choosing proper assessment types?
- How far is the effect of using the PBL program on enhancing assessment literacy of EFL prospective teachers with respect to the domain of applying sound assessment practices?
- How far is the effect of using the PBL program on enhancing assessment literacy of EFL prospective teachers with respect to the domain of using assessment results appropriately?
- How far is the effect of using the PBL program on enhancing assessment literacy of EFL prospective teachers with respect to the domain of recognizing language assessment criteria?

- Objectives of the Study

The present study was conducted to achieve the following objectives:

1. Identifying the effectiveness of using a PBL program on enhancing the overall assessment literacy of EFL prospective teachers at the Faculty of Education, Minia University.

2. Identifying the effectiveness of using a PBL program on enhancing assessment literacy of EFL prospective teachers at the Faculty of Education, Minia University with regard to the domain of choosing proper assessment methods.

3. Identifying the effectiveness of using a PBL program on enhancing assessment literacy of EFL prospective teachers at the Faculty of Education, Minia University with regard to the domain of choosing proper assessment types.

4. Identifying the effectiveness of using a PBL program on

enhancing assessment literacy of EFL prospective teachers at the Faculty of Education, Minia University with regard to the domain of applying sound assessment practices.

5. Identifying the effectiveness of using a PBL program on enhancing assessment literacy of EFL prospective teachers at the Faculty of Education, Minia University with regard to the domain of using assessment results appropriately.

6. Identifying the effectiveness of using a PBL program on enhancing assessment literacy of EFL prospective teachers at the Faculty of Education, Minia University with regard to the domain of recognizing language assessment criteria.

- Hypotheses of the Study

The following hypotheses were tested:

1-There would be statistically significant differences between mean scores of the Experimental group in the pre and post administrations of the overall assessment literacy test in favor of the post administration.

2-There would be statistically significant differences between mean scores of the Experimental group in the pre and post administrations of the assessment literacy test in favor of the post administration in each assessment literacy domain.

The second hypothesis could be branched as follows:

- There would be statistically significant differences between mean scores of the Experimental group in the pre and post administrations of the assessment literacy test in favor of the post administration regarding the domain of choosing proper assessment methods.

- There would be statistically significant differences between mean scores of the Experimental group in the pre and post administrations of the assessment literacy test in favor of the post administration in regarding the domain of choosing proper assessment types.

- There would be statistically significant differences between

mean scores of the Experimental group in the pre and post administrations of the assessment literacy test in favor of the post administration regarding the domain of applying sound assessment practices.

- There would be statistically significant differences between mean scores of the Experimental group in the pre and post administrations of the assessment literacy test in favor of the post administration regarding the domain of using assessment results appropriately.

- There would be statistically significant differences between mean scores of the Experimental group in the pre and post administrations of the assessment literacy test in favor of the post administration regarding the domain of recognizing language assessment criteria.

- Significance of the Study

The present study was expected to be significant in constructing a program particularly directed to prospective teachers to enhance their basic assessment literacy skills. The study might be significant to pre-service students as it provides an instructional strategy based on using different tasks and activities. The findings of the present study could be both theoretically and practically significant for EFL in-service teachers, curriculum designers and researchers.

- Delimitations of the Study

1- The study was delimited to 25 (the total number of students) EFL professional diploma students at the Faculty of Education, Minia University. Professional diploma was chosen, particularly, because they had a particular course entitled "Comprehensive Evaluation". They also had some background information, a prerequisite for the program. They were prospective teachers who need to demonstrate some basic assessment literacy skills to make use of them in their teaching.

2- The treatment lasted for the whole term (from 20 September till

21stDecember) in the first term of the academic year 2017-2018, four hours per week.

3- The assessment literacy domains were limited to the sub skills that are most needed by EFL prospective teacher and these were decided upon after administering a questionnaire on a sample of those students, TEFL staff members and experts. These domains were: 1-Choosing proper assessment methods, 2-Choosing proper assessment types; 3-Applying sound assessment practices; 4-Using assessment results appropriately and 5-Recognizing language assessment criteria

- Definitions of Terms

- Performance-based learning

Performance-based learning represents "a set of strategies for the acquisition and application of knowledge, skills, and work habits through the performance of tasks that are meaningful and engaging to students" (Bran, 2017).

Performance-based learning is the process of using student activities, rather than tests or surveys, to assess skills and knowledge (Sturgis, 2017)

Performance-based learning is operationally defined as the process of engaging students in specific activities to assess their performance.

- Assessment Literacy

Assessment Literacy is "the ability to gather dependable and quality information about student achievement and the ability to use information effectively to maximize student achievement" (Stiggins, 2008).

Popham (2009) defined it as "an individual's understandings of the fundamental assessment concepts and procedures deemed likely to influence educational decisions".

Assessment Literacy is operationally defined as the students' state of being competent, skilful and knowledgeable in different assessment aspects.

- Research Design

The study adopted a one group design. Twenty five EFL professional diploma students were submitted to an intensive PBL program. Students were trained to use different assessment literacy skills. The data were gathered by a pre -post assessment literacy.

- Variables of the Study

- Independent Variable

- A Performance -Based Learning program.

- Dependent Variables

1- Developing students' overall assessment literacy skills.

2- Developing students' assessment literacy sub-skills.

- Control Variables

-All students were EFL professional diploma students.

- Instruments of the study

1-An Assessment Literacy checklist

II-An Assessment Literacy questionnaire

III-An Assessment Literacy test

1-An Assessment Literacy checklist

The assessment literacy checklist aimed at identifying the different domains of the assessment literacy that mostly needed by professional diploma students. For the validity of the checklist, it was submitted to a panel of 7 qualified and experienced TEFL specialists. They were asked to assess its validity and appropriateness for the purpose of the research and to choose the basic assessment literacy skills. The jury members confirmed the suitability and applicability of the checklist. The checklist consisted of eighteen items to which students responded with either 'Needed, 'Not Needed' or 'Not sure'. The checklist was modified to be five main assessment literacy skills according to the jury members and the students' choice and comments (For final form, see appendix A).

II-An Assessment Literacy questionnaire

The assessment literacy questionnaire aimed at assessing prospective teachers' assessment literacy sub-skills. It consisted of five

basic domains under which there were many sub-skill related to each one. It was administered to a panel of five TEFL specialists who were asked to evaluate the relatedness of these sub-skills with regard to each domain. Sub-skills were tailed into ten ones under each domain according to the viewpoint of the TEFL experts. The jury members, approved the face validity of the questionnaire, its suitability and necessity for the participants (For final form, see appendix A).

III-An Assessment Literacy test

Objectives: This test was designed to:

1- assess EFL professional diploma students' performance in assessment literacy skills.

2- measure the degree of improvement after the program is over.

The test consisted of fifty multiple choice items. Questions were written in the form of different situations. Each situation is followed by a question. The total score of the test is (100) points. Testing time was 90 minutes (For final form, see appendix A).

- Validity of the Test

-Face Validity:

The test was submitted to a jury of 6 qualified and experienced TEFL specialists. They were requested to evaluate the linguistic stating of the items, appropriateness, clarity of instructions, difficulty level, length, applicability, and fitness of the items for the participants, and how far the items measure the skills they are intended to measure. Their suggestions were taken into consideration. They confirmed the suitability, validity and applicability of the test.

- The Internal Consistency of the Test Items

The validity of the test was determined by computing internal consistency of each question. This was calculated by using (Pearson correlation formula). Correlation coefficients ranged from 0.577 to 0.758 and Eta-Squared ranged from 0.972 to 0.991as shown in Table (1) below. This indicates that the test has high validity.

Table (1) Correlation Coefficients & η^2 between each domain and the total score of the Assessment Literacy Test   No=20

Domain	Q N	R	Alpha	η^2
1- Choosing proper assessment methods	Q1	0.633*	0.632*	0.985*
2- Choosing proper assessment types	Q2	0.804*	0.626*	0.991*
3- Applying sound assessment practices	Q3	0.758*	0.660*	0.984*
4- Using assessment results appropriately	Q4	0.662*	0.626*	0.986*
5- Recognizing language assessment criteria	Q5	0.577*	0.708*	0.972*

*Significant at 0.05 level

- The Reliability of the Test

The reliability coefficient of the test was determined by two ways: Cronbach Alpha which was (0.935) as shown in Table (3) and test-re-test method in which the correlation coefficient was 0.982 and t-value was 0.13 as shown in Table (2). This shows that the assessment literacy test enjoys a high degree of reliability.

Table (2) Test-Retest correlation coefficient of the Assessment Literacy test   No=20

No	Group	Mean	SD	DF	t-value	R
20	Test	37.60	4.50	38	0.134**	0.982*
20	Re-test	37.80	4.64			

*Significant at 0.05 level   **Not Significant at 0.05 level

Table (3) Cronbach Alpha's reliability Coefficient of the Assessment Literacy Test   No=20

Variable	Alpha
Assessment Literacy	0. 935*

*Significant at 0.05 level

- Procedures Followed in Teaching the Experimental Group

- The session, lasting for 4 hours, was divided into three basic phases: the preparation phase, the performance phase and the assessment phase.

- In the preparation phase, the session began with watching a video about the target topic followed by an open discussion.

- Then, the instructor started giving students an idea about "Performance-Based learning and assessment literacy. The instructor tried to stimulate students' prior knowledge about PBL and assessment literacy through some leading questions.

- The session, in the preparation phase, was devoted to introducing information and knowledge for students on different issues related to assessment literacy (e.g. assessment tools, assessment methods, language assessments, communicating results, assessment practices). Students were engaged in planning for their tasks to carry them out in the next phase.

- In the performance phase, students were engaged in the actual performance and applied the previously learnt knowledge to carry out their activities. Students were asked to perform the target tasks which were authentic, meaningful and challenging for the them (e.g. conducting an interview, collecting a portfolio, designing rubrics for different language skills; designing table of specifications for language skills test, making conferences, writing reports, making observation) etc.

- Students were allotted 10 minutes to present their work in front of class. Teachers and students both used observations to provide students with feedback to improve performance.

- To enhance their participation, they were given an opportunity to make an open discussion for 10 min about their ideas, skills and knowledge.

- In the assessment phase, in order to grade their presentations and performances, students were provided by a checklist. They were trained to do self and peer-assessment of their performance. Finally, the instructor provided them with feedback concerning their knowledge and skills acquired through performing the activity.

- Findings

The present study was conducted to explore the effect of teaching assessment literacy skills through PBL. The "t-test" was used to analyze data obtained from the assessment literacy test. Scores of the participants on the pre-post tests were analyzed and compared.

- Hypothesis (1)

Hypothesis (1) predicted that the experimental group would achieve higher in the post assessment literacy test. Results indicated that the experimental group's mean scores on the post administration of the whole assessment literacy test were higher and statistically significant as compared to the pre administration. T-value (25.21) is significant at 0.05 level. Eta- squared is (0.99). Consequently, the first hypothesis is confirmed and accepted. See Table (4)

Table (4) t-value & η2 between mean scores of the Treatment group in the Pre-Post- Assessment Literacy Test   (No=20)

No	Treatment	Mean	SD	Df	t-value	η^2
25	Pre	37.76	4.09	24	25.21*	0.994*
25	Post	72.32	5.33			

*Significant at 0.05

-Hypothesis (2)

Hypothesis (2) predicted that the experimental group would score higher on the post application of the assessment literacy sub skills. Results revealed that the Experimental group achieved a significant improvement on each domain of the post assessment literacy test as the difference in the mean scores between the pre and the post administrations was statistically significant. Results also showed that students got high marks on particular assessment literacy skills, i.e. (as t-values were high as shown in table (5).These results illustrate that the improvement of the Experimental group's performance was due to learning through the PBL program which was found to be effective in enhancing assessment literacy skills of the participants. Consequently, the second hypothesis and its branches are confirmed and accepted.

Table (5) t-value & η2 between mean scores of the Experimental group in the Pre-Post assessment literacy test Domains

Domain	Mean Pre	Mean Post	SD Pre	SD Post	η^2	t-value
1- Choosing proper assessment methods	8.16	١٦.32	1.25	١.35	0.979*	٢١.71*
2- Choosing proper assessment types	7.84	13.76	1.12	1.73	0.981*	14.09*
3- Applying sound assessment practices	6.88	13.44	1.27	1.83	0.966*	14.38*
4- Using assessment results appropriately	7.84	11.2	1.12	1.50	0.967*	8.81*
5- Recognizing language assessment criteria	7.04	17.6	1.40	0.98	0.970*	30.28*

*Significant at 0.05

- Discussion

As noted previously, there is an evidence that the proposed performance-based learning (PBL) had a significant effect in enhancing assessment literacy of EFL professional diploma students. This is clear in the formerly presented statistical analysis where scores of the experimental group on the pre-post administrations of assessment literacy test were compared using t-test. The researcher attributes these results to the use of PBL program which was found to be efficient and useful for the experimental group. This is consistent with the results provided by previous studies that proved the effective role of PBL program on enhancing students' assessment literacy (e.g. Fadel, Honey& Pasnik, 2007).

Actually, the program was very useful and efficient for students as it provided them with an adequate bulk of knowledge and information about different issues and topics related to assessment process which is considered as one of the basic responsibilities of teachers. Providing students with the opportunity to plan their activities and tasks in advance –in the preparation phase- encouraged

them to organize their work and content and this had its great impact on them during the actual task performance. It also helped them handle any kind of pressures before carrying out their performance. This preparation phase encourages students to be more involved in planning and organizing their future learning and they no longer feel shy or afraid of expressing their ideas or view points. Preparing students in advance helped the instructor to get an accurate insight of their real abilities and skills. This phase was considered as the paved way for the next.

With reference to the performance phase, students were executing their target tasks and activities they planned in the previous phase. They did not depend on course book to get knowledge and information to carry out their performance, alternatively, they attempted to apply the knowledge they got while discussion and interaction, within the groups and with the instructor in the previous phase. They were encouraged to keep up collaborative exchange of knowledge and information where they supported each other in their performance. The kind of activities that the program offered helped the students discover new abilities and skills in themselves which, consequently, increased their self confidence as stated by students, e.g."*I become more confident to deal with difficult and challenging tasks"; "I discovered new things in myself that I did not recognized before"*. These meaningful and enjoyable activities and tasks not only assisted students acquire deeper understanding and develop interpersonal skills but also gave them authentic experiences that will help them be successful in their future. Students actively and lovely participated in all the activities of the Program. They were interested in practicing new activities different from the regular ones they used to do. They were so excited to plan for the next performance and presentation as every time they learnt a new skill and information.

Furthermore, encouraging students to evaluate their own and others performance-in the assessment phase-enabled them to direct and control their own learning as they paid more attention to their

points of strength and weakness. This also motivated them to become more willing to self-correct and gain the skill of constructing and rebuilding their knowledge and making modification and improvements in their performances. Actually, providing students with feedback , whether teacher or collegial, on how they use these skills and apply the acquired knowledge not only helped to create more positive relationships among students, but it also helped to increase their achievement, skills and knowledge. It is remarkable that PBL program was so effective and significant in enhancing professional diploma students' skills and knowledge of the issue of assessment.

Concerning the different assessment domains and their sub-skills introduced in the program, statistical results indicated that students typically enjoyed some domains and gained a deep understanding of their different sub-skills whereas they found difficulty to deal with others. This was evidently clear from the significant differences in t-value among the domains presented in the findings of the study. Students' progress on different domains can be described descendingly as follows: 1) Recognizing language assessment criteria, 2) Choosing proper assessment methods, 3) Applying sound assessment practices, 4) Choosing proper assessment types, 5) using assessment results appropriately. The greatest performance of students was on recognizing language assessment criteria, which indicates that tasks and activities were highly enjoyable, interesting and motivating for them. The least performance was on using assessment results appropriately, which indicates that students did not enjoy it and found difficulty when performing it as presented in students' reflections on the program in the following section.

In general, PBL program provided opportunities for students to learn new knowledge and empirical skills effectively, actively and in natural context. This is the essence of the call for developing not only pre-service but also in-service teacher' assessment literacy through

applying new techniques as advocated by researchers (Rogier, 201 4, Hakim, 2015, Abdullah , 2017).

- Students' reflections:

- *"I liked the course very much; I wish to apply what I've learned in my future"*
- *"I enjoyed the presentation phase, because we were at ease which helped to be comfortable when facing our friends and the professor"*
- *"I become familiar to such terms in assessment which we did not know such as assessment literacy; assessment tools and methods"*
- *"I enjoyed so much designing table of specifications for each test that is my first time to do and also I enjoyed designing rubrics to assess writing*
- *"I've gained a lot of information from this program and I practiced doing a lot of tasks in an interesting atmosphere". For more reflections, see appendix (C).*

- Conclusion

The findings of the study reflect the utility of the PBL program in enhancing professional diploma students' assessment literacy skills. Students highlighted the benefits of using the PBL program as they gained a bulk of knowledge about certain terms and issues related to assessment which was so useful for them as prospective teachers. They indicated that they enjoyed the different phases of the PBL program which were very motivating and interesting. They were satisfied with learning through performing their activities and tasks in front of the whole group which gave them more confidence and challenge to get rid of tension and pressure when facing the same situation. They appreciated the PBL as a learning and a training tool for enriching their skills and knowledge of assessment.

The PBL program encouraged students to conduct assessment, keep records, and communicate with each others. It increased collaboration among students as it gave them opportunities to effectively share and discuss ideas and topics, feelings, opinions and

to prepare plans for their next performance. The study concludes that the use of the PBL program has a significant impact on the students' performances in assessment literacy. Undoubtedly, results gained from the quantitative data are clear empirical evidence that the program works effectively.

However, more research is needed on assessment topics and issues. Undergraduate teacher preparation programs should include separate courses focusing on assessment, embedded assessment topics in content and methods courses, and provide real-world opportunities to enable students to apply what they have learned in order to feel comfortable with their skills in making assessment decisions as suggested by advocates of developing assessment literacy of pre and in-service teachers (Kahl, Hofman & Bryant, 2013, Abdullah, 2017).

- Suggestions for further studies

Studies could be done to investigate:

1. The effect of using PBL on developing students' different language assessment skills.
2. The effect of using PBL on developing students' critical thinking skills.
3. The effectiveness of using PBL on improving students' attitudes towards assessment.
4. The effectiveness of using PBL on enhancing students' assessment awareness.
5. The effectiveness of using PBL on enhancing students' professional development.

References

Abdullah, M. H. (2017) Promoting Assessment Literacy for EFL In-service Teachers through a Proposed Task Based Learning Program. *Curriculum & Instruction Journal*, n.219. Ain Shams University.

Abell, S. K., & Siegel, M. A. (2011). Assessment literacy: What science teachers need to know and be able to do? In D. Corrigan, J. Dillon, & R. Gunstone (Eds.), *The professional knowledge base of science teaching*, 205–221. http://dx.doi.org/10.1007/s10972-012-9278-z

Afsah, E.S. (2017). Iranian EFL Teacher's Assessment Literacy and Inclination towards the Use of Alternative Assessment. *Journal of Applied Linguistics and Language Research Volume* 4, Issue 4, 2017, pp. 283-290

Alkharusi, H. (2014). Psychometric properties of the teacher assessment literacy questionnaire for pre-service teachers in Oman. Procedia - Social and Behavioral Sciences 29 (2011)

Aly, M. (1999). Investigating Teachers' and Supervisors' Testing Knowledge. *The Faculty of Education Journal.* Cairo: Ain Shams University. No.23, part 3. P.7.

Arter, J. & McTighe, J. (2001) Scoring rubrics in the classroom: using performance criteria for assessing and improving student performance. https://www.google.com.eg/search?dcr=0&ei=2j-

Bayat, K. &Rezaei, A(2015). Importance of Teachers' Assessment Literacy. *International Journal of English Language Education* 2015, Vol. 3, No. 1

Beziat, T. L. R., & Coleman, B. K. (2015). Classroom assessment literacy: Evaluating pre-service teachers. *The Researcher, 27*(1), 25-30. https://www.google.com.eg/search?q=Beziat%2C+T.+L.+R.

Bran, L. (2017). What is the role of rubrics in performance-based

education? https://www.google.com.eg/

Bruce B., Schmitt, Vicki L., & Justin P. Allen (2012). Defining Authentic Classroom Assessment. *Practical Assessment, Research & Evaluation*, 17(2). http://pareonline.net/getvn.asp?v=17&n=2

Cheng, L., *Rogers*, W. T., and *Wang*, X. (*2008*). Assessment & Evaluation in Higher Education. Assessment purposes and procedures in ESL/EFL classrooms. https://www.researchgate.net/deref/

Chun, M. (2010). "Taking teaching to (performance) task: Linking pedagogical and assessment practices." *Change: The Magazine of Higher Education*. https://www.edutopia.org/blog/performance-based-assessment-reviewing-basics-patricia-hilliard

Clegg , K & Bryan, C (2006). Innovative assessment in higher education. https://www.amazon.com.

Darling-Hammond, L., & Adamson, F. (2010). Beyond Basic Skills: The Role of Performance Assessment in Achieving 21st Century Standards of Learning. Stanford, CA: Stanford Center for Opportunity Policy in Education

Darling-Hammond, L., & Adamson, F. (2013) Developing Assessments of Deeper Learning: The Costs and Benefits of Using Tests that Help Students Learn. 3_18_2013.pd https://www.hewlett.org/wp.

Davidheiser, S. A. (2013). Identifying Areas for High School Teacher Development: *A Study of Assessment Literacy in the Central Bucks School District* https://www.google.com.eg/search?

Deneen, C.C. & Brown, G.T.L. (2016). The impact of conceptions of assessment on assessment literacy in a teacher education program. *Cogent Education*. http://dx.doi.org/10.1080/

DeLuca, C., & Klinger, D. A. (2010). Assessment literacy development: identifying gaps in teacher candidates'

learning. Assessment in Education: Principles, Policy & Practice, 17(4), 419–438.
https://www.google.com.eg/search

DeLuca, C. LaPointe-McEwan, D.; Luhanga, U. (2014). Teacher assessment literacy: a review of international standards and measures. *Educational Assessment, Evaluation and Accountability, v28 n3* https://www.google.com.

Djoub, Z. (2017). Assessment Literacy: Beyond Teacher Practice.
https://www.researchgate.net

Fadel, C., Honey, M., & Pasnik, S. (2007, May 18). Assessment in the age of innovation. Education Week, 26(38), 34, 40. Retrieved August 26, 2008
http://www.edweek.org/ew/article. html

Fan, Y.C., Wang, T. H. & Wang, K.H. (2011). A Web-based model for developing assessment literacy of secondary in-service teachers. *Computers & Education*
.https://www.sciencedirect.com

Fulcher,G.(2012).Assessment literacy for the language classroom. *Language Assessment Quarterly*, 9(2), 113–132.

Gottheiner D. M. & Siegel M. A. (2012). Experienced Middle School Science Teachers' Assessment Literacy: Investigating Knowledge of Students' Conceptions in Genetics and Ways to Shape Instruction. *The Association for Science Teacher Education, 23*, 531–557.

Graham, P. (2005). Classroom- based assessment: Changing knowledge and practice through pre-service teacher education. *Teaching and Teacher Education,* 21, 607- 21

Greenberg,J. &Walsh,K.(2012) What teacher preparation programs teach About assessment: A review Washington, DC. National Council on Teacher Quality.
https://www.google.com.eg/search

Guskey (Ed.), *Practical solutions for serious problems in standards-based grading* (pp. 75-104). Thousand Oaks, CA.

Jannati, S. (2015). ELT Teachers' Language Assessment Literacy: Perceptions and Practices. *The International Journal of Research in Teacher Education.*

Kahl, S ., Hofman, P. & Bryant, S (2013). Assessment Literacy Standards and Performance Measures for Teacher Candidates and Practicing Teachers. https://www.measuredprogress.org

Lockwood, E. R. & Mclean, E. J (2013). What is Assessment? What Do Well-Aligned Assessments Look Like? https://www.google.com.eg/search. .

Lockwood, Robert E., McLean, James E. (2017) "*Why We Assess Students -- And How: The Competing Measures of Student Performance*. https://books.google.com/book .html?

Mahmoud, S. (2011). The Effectiveness of Using Learning Circles on Developing Preparatory Stage Teachers' Teaching Skills. Unpublished Ph.D. *Institute of Educational Studies,* Cairo University.

McTighe, J. (2015, April). "What is a performance task?" https://www.google.com.eg/search

Mertler, C.A. (2009). Teachers' assessment knowledge and their perceptions of the impact of classroom assessment professional development. Improving Schools. (12)2, pp. 101-113. Sage Publishing.

Montee, M., Bach, A., Donovan, A. & Thompson, L. (2013). ICTL Teachers' Assessment Knowledge and Practices: An Exploratory Study. *Center for Applied Linguistics*. www.ncolctl.org/files/LCTL-

O'Loughlin, K. (2013). Developing the assessment literacy of university proficiency test users. *Language Testing, 30*(3), 363–380.

Palm, T. (2008). "Performance assessment and authentic assessment: A conceptual analysis of the literature." *Practical*

٥٤٩

Assessment Research and Evaluation, 13(4).

Pecheone, R., Kahl, S., Hamma, J., Jaquith, A. (2010). *Through* a *Looking Glass*: *Lessons Learned* and *Future Directions* for *Performance Assessment*. Stanford, CA: nford Center for Assessment, *Learning*, and Equity (SCALE). https://epaa.asu.edu/ojs/article/.

Popham,W.(2009). Assessment Literacy for Teachers: Faddish or Fundamental? Theory into Practice. *Language Testing,* 48 (1), 4-1

Rogers, D. (2014). Assessment Literacy: Building a Base for Better Teaching and Learning. *English Teaching Forum.*

Scarino, A. (2013). Language assessment literacy as self awareness: Understanding the role of interpretation in assessment and in teacher learning. *Australia Language Testing 30*(3) 309–327. http://dx.doi.org.

Siegel, M.A., & Wissehr, C. (2011). Preparing for the plunge: Pre-service teachers' assessment literacy. *Journal of Science Teacher Education*, 22 (4), 371-391.

Stiggins, R. (2008). *Assessment manifesto: A call for the development of balanced assessment systems.* Portland, OR: ETS Assessment Training Institute.

Stiggins, R., & Chappuis, S. (2008). Finding balance: Assessment in the middle school classroom. *Middle Ground.* Portland, OR: ETS Assessment Training Institute.

Sturgis, C. (2017). The Teacher Association Perspective on Performance-Based Learning. https://www.competencyworks.org/

Ukrayinska, O. (2018). Developing Student Teachers' Classroom Assessment Literacy: The Ukrainian Context. In S. Hidri (ed.), Revisiting the Assessment of Second Language Abilities: From Theory to Practice, Second Language Learning and Teaching.

Welsh, M.E., and D'Agostino, J. (2009). Fostering consistency

between standards-based Grades and large-scale assessment results. http://www.google.com.eg

Wiggins, G. (1993). Assessment to improve performance, not just monitor it: Assessment reform in the social sciences. *Social Science Record, 30*(2), 5-12.

Xu,Y. & Brown,G.T.(2016) Teacher assessment literacy in practice: A reconceptualization. *Teaching and Teacher Education* 58:149-162

Yamtim, V. & Wongwanich, S. (2014). A study of classroom assessment literacy of primary school teachers. *Procedia Social and Behavioral Sciences 116 (2014) 2998 – 3004*