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HOTS-based language assessment literacy: Challenges and prospects in English language teaching

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ABSTRACT

The issues of inaccurate and invalid language assessment were mainly due to teachers' lower level of assessment literacy and teachers' inadequate skills to design higher-order thinking skills (henceforth HOTS) based language assessments. Thus, this paper aims to mainly portray teachers' HOTS-based language assessment literacy in English language teaching (ELT) classrooms after they participated in training on HOTS-based language assessment. A case study was employed, and forty-three ELT teachers from secondary schools voluntarily participated in the current study. Some of them were interviewed, and the test items they constructed were analyzed to examine if their HOTS-based language assessment literacy was reflected in the quality of the test items. The findings showed that ELT teachers who engaged in training gained the basic level of knowledge and comprehension of HOTS-based language assessment. However, their knowledge and comprehension are not parallel with their skills in constructing HOTS-based test items. The paper ends with recommendations for the stakeholders (school principals, educational authorities, and training providers) responsible for designing future training programs to enhance ELT teachers' language assessment literacy.

Keywords: ELT teachers; HOTS; language assessment literacy; need analysis; training programs

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INTRODUCTION

Assessment is an important component of instructions because through assessment, a teacher might improve the quality of the instructions (Cho, & Troia, 2022, Lan & Fan, 2019; Sah, 2021; Truckenmiller et al., 2022), and with an assessment, students might also be encouraged to learn better (Cheng & Watanabe, 2008). In other words, assessment has a pivotal impact on the whole instructional practice (Mansouri et al., 2021; Rea-Dickins, 2000). A well-designed assessment could provide teachers the accurate information on students' process of learning and their learning outcomes as well. Moreover, the results of the assessment will ultimately provide information to stakeholders (teachers, schools, parents) on what

students have learned, how well they have learned, and in what areas students still have to struggle to master the learning contents (Lan & Fan, 2019; Rea-Dickins, 2001; Rea-Dickins, 2008). To sum up, assessment aims to collect relevant information on the student's performance in terms of their knowledge, abilities, understanding, attitudes, and motivation (Ioannou-Georgiou & Pavlou, 2003; Pfingsthorn & Weltgen, 2022) and to identify the effectiveness of instructional methods used by teachers to facilitate students to learn better (Lan & Fan, 2019). This is why assessment has a noteworthy role in educational landscapes.

Research on teachers' language assessment literacy has attracted the attention of many practitioners (e.g. Roslan et al. 2022; Singh &

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Shaari, 2019; Tian et al., 2021; Tsagari & Vogt, 2017; Vogt & Tsagari, 2014; Yoke et al., 2015). However, little attention has been paid to investigating HOTS-based language assessment literacy. This issue is crucial to investigate as HOTS-based assessment has been mainstream in language instructions. Besides, the previous studies concluded that the language assessment literacy of ELT teachers was still questionable. The findings indicate that ELT teachers' HOTS-based language assessment literacy needs to be enhanced extensively through systematic training programs. Thus, this paper address mainly three different research objectives (1) to explore the training contents of language assessment received by ELT teachers from the earlier training and to identify the training contents of language assessment they need for further training; (2) to identify the level of HOTS-based language assessment literacy do ELT teachers report after they participated in a training program; and (3) to describe the challenges and prospects of HOTS-based language assessment in ELT classrooms. Finally, the recommendations are offered for the construction of HOTS-based language assessment literacy among ELT teachers through a training program so that they are able to better address HOTS-based language assessment in their classrooms.

Language Assessment Literacy

In a specific context, the principles of language assessment put great emphasis on two important things, i.e. an assessment must be able to improve the process of student language learning and is a valuable tool for teachers to decide whether or not the language instructional practices have achieved the expected goals (Van de Walle, 2007). In addition, a language assessment needs to be directed to encourage students to possess critical and logical thinking (Brookhart, 2010). This characteristic of thinking is part of higher-order thinking skills (Jansen & Moller, 2022; Kubiszyn & Borich, 2013; Ramasamy et al., 2016). The consequence is that ELT teachers have to possess a sufficient level of HOTS-based language assessment literacy so that they can effectively design and execute HOTSbased language assessments. Therefore, Mohamed and Lebar (2017) point out that having an adequate level of HOTS-based assessment literacy is urgent because, with a good level of language assessment literacy, teachers might direct students to think at a higher level and to improve the international standard of education as well.

The concept of assessment literacy is originally proposed by Stiggins (1991) and refers to the ability to understand, analyze and apply students' learning styles to improve the quality of instruction. Furthermore, Pill and Harding (2013) elucidate specifically that language assessment literacy refers to a series of competencies that allows language

teachers to design and evaluate assessments in the context of language instructions. Assessment literacy in language instruction also involves a variety of skills by language teachers to develop tests, interpret test results, and use the interpretation to improve the quality of language instruction and evaluate the quality of the test itself. Therefore, Inbar-Lourie (2008) points out that language assessment literacy refers to teachers' ability to ask and answer critical questions from students. What Inbar-Lourie illuminates refers to the HOTS-based language assessment literacy.

There are five levels of assessment literacy that ELT teachers may have (Bybee, 1997; Kaiser & Willander, 2005; Pill & Harding, 2013), such as (1) illiteracy, which refers to a condition where the teachers demonstrate their ignorance on language assessment concepts and methods; (2) normal literacy, which means the teachers have an understanding of certain terms related to language assessment, but there may factually be some misunderstandings related to some of these terms; (3) functional literacy, in which teachers have a better understanding of basic terms and concepts of language assessment; (4) procedural and conceptual literacy, which refers to teachers understand the main concepts in the area of language assessment and apply their knowledge into language assessment practices; and (5) multidimensional literacy, which means that teachers have knowledge that goes beyond ordinary concepts of assessment, including the dimensions of philosophical, historical and social assessment. Among the five literacy levels, teachers are expected to be at least at the level of procedural and conceptual literacy so that they are able to carry out language assessments properly to measure students' language proficiency.

HOTS-based language assessment literacy is another matter and is defined as the ability of language teachers to design, develop and evaluate critically the language assessment tools that have been developed; to understand a variety of language assessment procedures; and to monitor, evaluate, assess, and score student learning outcomes based on theoretical knowledge of higher-order thinking (Bohn, 2018; Fulcher, 2012; Lam, 2014; Moeiniasl et al., 2022; Vogt & Tsagari, 2014). However, the HOTS-based language assessment literacy by many ELT teachers needs to develop as their knowledge of the concept of HOTS-based language assessment itself and how to put it into practice are still questionable (Budiman & Jailani, 2015; Jansen & Moller, 2022; Widana, 2017) and so far Kvasova and Kavytska (2014) and Lan and Fan (2019) point out that ELT teachers' HOTS assessment literacy has not yet reached the expected level.

Need Analysis for Training Contents

It is known that to improve the HOTS-based language assessment literacy, a training program is

needed (Tsagari & Vogt, 2017; Yphantides, 2021) and is carried out to update the challenges and expectations that arise during the implementation of classroom-based language assessments (Lan & Fan, 2019) and is comprehensively designed to meet the needs of ELT teachers (Assalahi, 2021; Battistone et al., 2019; Vogt & Tsagari, 2014). The training programs cannot be carried out haphazardly without considering what is needed by the ELT teachers. Therefore, the major challenges implementation of a training program in the area of language assessment lie in whether or not the training contents are delivered to meet the needs of ELT teachers. To cope with the challenges, a holistic and comprehensive needs analysis is first required to identify their needs before the training program is commenced. Related to the training contents, Davies (2008) proposes three dimensions of training contents, i.e., knowledge (knowledge of linguistics, theories, and concepts of language acquisition, language instruction, and assessment); skills (instructional skills, skills to design language assessment and measurement); and principles of assessment (awareness of ELT teachers regarding critical issues in language assessment). An effort to align the contents of training with teachers' needs is necessarily carried out by involving the authorized parties, such as trainees, trainers, and policymakers, who have to pull together collaboratively. Furthermore, Stiggins (2001) suggests that training on language assessment needs to be carried out collaboratively by involving policymakers and teachers to increase the effectiveness of the training to achieve the expected goals.

METHOD

This is a case study which means research focuses on a single unit to produce in-depth, rich, and holistic descriptions (Ary et al., 2010). Furthermore, McMillan (2008) illuminates that a case study is an in-depth analysis of one or more events, settings, social groups, individuals, or communities that use qualitative methods to gather the data and obtain a detailed description. The current study aims to portray teachers' HOTS-based language assessment literacy and to explore the prospects and challenges in implementing HOTS-based assessment in ELT classrooms. The ELT teachers participated in a training program in which the construction of HOTS-based language assessment literacy was the predominant focus of the program.

Participants

This research involved forty-three ELT teachers from secondary schools in Indonesia who had participated in a training program on HOTS-based language testing and assessment. They were recruited for a seven-day training program that was intended to strengthen their content-knowledge of HOTS-based language assessment in English language teaching. After taking part in the training, they had to develop HOTS-based test items. The test items they constructed were then analyzed to examine if their HOTS-based language assessment literacy was reflected in the quality of the test items. Among the ELT teachers, 81.8 percent of them hold an undergraduate degree, and 18.2 percent are a master's degree. They have 5 - 30 years of experience in teaching English as a foreign language at secondary schools. It means that each participant had adequate experience conducting assessments to measure student learning outcomes.

Data Collection and Analysis

Twenty questions were designed for an online questionnaire, and the questionnaire was developed based on the one by Hasselgreen et al. (2004) with some adaptations and modifications.

Table 1 *The blueprint of the questionnaire*

| No. | Indicators | Items |
|-----|---|-------|
| 1. | Questions about teachers' general information. | 5 |
| 2. | Questions about classroom-based language assessment. | 5 |
| 3. | Questions about HOTS-based language assessment. | 5 |
| 4. | Questions about contents and concepts of language assessment. | 5 |

The questionnaire initially explored the informants' background, such as their qualifications, teaching experience, etc. The questionnaire consisted of three sections focusing on three i.e., classroom-based different components, HOTS-based language language assessment, assessment, and contents and concepts of language assessment. Each component was further subdivided into one section that enquires about the training contents the informants had received, and another section was about the training needs the informants felt necessary. The questionnaire was then followed by semi-structured interviews with ELT teachers through a video conference system (VCS). To analyze the acquired data, the current study employed an interactive model of data analysis (Miles et al., 2014) with four fundamental stages, i.e., data collection, data condensation, data display, and drawing and verifying conclusion. The data condensation refers to the process of selecting, focusing, simplifying, abstracting, and transforming data on HOTS-based language assessment literacy collected from the different techniques. The next step is that the data display is meant to present a set

of data arranged coherently and related to HOTS-based Language assessment literacy to draw conclusions. The ultimate step is to draw conclusions from the analysis that has been carried out and to re-check with the evidence that has been found previously.

FINDINGS

To address the questions of the study, the findings from the open-ended interview and questionnaire are organized into three central issues: 1) training contents that have been received by teachers from previous training programs; 2) ELT teachers' level of HOTS-based language assessment literacy; and 3) Challenges and prospects of HOTS-based

assessment in ELT classrooms. The ideas are presented in order.

Training Contents Received by ELT Teachers from the Earlier Training Programs

A need analysis was conducted to identify the scope of training contents that ELT teachers had received and mastered from the earlier training programs in which they had participated. Based on the results of the needs analysis, it can be known what contents should be mastered by ELT teachers, but these contents have not been mastered well or have not yet been delivered in the earlier training. In general, an overview of the contents related to the assessment ELT teachers had already received is described in the following table.

Table 2

Contents related to assessments that have been received by teachers from training programs

| No. | Training contents | Not at all | Yes, a little (1-2 days) | Yes, more advanced (more than 2 days) |
|-----|---|------------|--------------------------|---------------------------------------|
| 1. | I attended training on techniques for developing test items for classroom-based assessment. | 27.2 | 70.5 | 2.3 |
| 2. | I attended training on using ready-to-use questions in the textbook. | 41.1 | 54.4 | 4.5 |
| 3. | I received training on techniques to provide feedback on student learning outcomes. | 34.1 | 61.4 | 4.5 |
| 4. | I attended training on self-assessment and peer-assessment techniques. | 34.1 | 59.1 | 6.8 |
| 5. | I attended training on how to carry out authentic assessments. | 31.8 | 63.7 | 4.5 |

^{*}Numbers are in percentages

Table 2 displays that many ELT teachers have never received training on the assessment that can be applied in ELT classrooms. In general, they attended training in a limited quantity and with a duration of approximately two days. It means that the competencies of ELT teachers to undertake better and more meaningful assessments of student learning need to be enhanced extensively, for example, through training programs. It is in line with a statement by one of the teachers.

"It is necessary. Training on assessment, in my opinion, will be very useful for teachers to determine the type of test that is under the material or skills being tested. Teachers will also learn about how to make good and correct questions, how to assess the test, provide feedback, and proper evaluation. (T-1).

The training is needed so that ELT teachers take charge of various types of tests and are skilled in developing them. This statement is in line with the concept of language assessment literacy, which refers to a series of competencies that allows ELT teachers to be able to design and evaluate assessments in the context of ELT classrooms and also to analyze the data of the assessment results.

Thus, the training is carried out to enhance the language assessment literacy that ELT teachers are supposed to possess. Similar statements were made by another teacher as follows.

"Training on assessment is always needed by ELT teachers so that they can enhance their abilities to assess student learning... they are no longer trapped in traditional assessment methods that separate instruction with that of assessment and (traditional assessment) just assess what students know without involving students' critical thinking in everyday contexts where the language is usually used." (T-5)

ELT teachers put great emphasis that training is necessary to carry out not only to equip ELT teachers on how to develop a traditional assessment that accentuates the measurement of students' rot memories of the contents they learned but also to develop HOTS-based assessment language literacy, i.e., assessment that requires students to involve their logical and critical thinking. Although HOTS-based language assessment has become mainstream in ELT instructions and has been a curriculum demand, many ELT teachers have not yet received any training on it, sotheir literacy level is still low.

 Table 3

 ELT teachers' participation in particular trainings on HOTS-based assessment

| No. | Teachers' participation in a particular training | Not at all | Yes, a little (1-2 days) | Yes, more advanced (more than 2 days) |
|-----|---|------------|--------------------------|---------------------------------------|
| 1. | I participated in training on how to conduct HOTS-based assessments in ELT classrooms. | 86.4 | 9.1 | 4.5 |
| 2. | I participated in training on the steps of how to develop HOTS-based test items. | 93.2 | 2.3 | 4.5 |
| 3. | I participated in training on how to develop a HOTS-based table of specifications. | 81.8 | 13.7 | 4.5 |
| 4. | I participated in training on how to develop the indicators of HOTS-based test items. | 81.8 | 13.7 | 4.5 |
| 5. | I participated in training on how to identify students' cognitive levels (level 1, level 2, and level 3) as the basis for developing HOTS-based test items. | 81.8 | 13.7 | 4.5 |

^{*}Numbers are in percentages

Table 3 shows that many ELT teachers have not yet received any training on HOTS-based language assessment. It means that to enhance the HOTS-based assessment literacy for ELT teachers, it is necessary to carry out a systematic and measurable training program.

"Pieces of training on HOTS-based assessment, how to formulate HOTS-based grids, and how to develop test items as well as how to determine whether or not a test item is valid and reliable are indispensable for ELT teachers and teachers in general. The pieces of training will be very helpful and refresh teachers' abilities and skills and will have a positive impact on the quality of teaching and learning". (T-6)

The training program needs to start with a needs analysis so that the training contents match the ELT teachers' needs. Thus, the design of training and the training contents themselves must be in line with the efforts to enhance HOTS-based language assessment literacy. Furthermore, it is necessary to evaluate the effectiveness of the training program in achieving the expected goals, i.e., increasing HOTS-based language assessment literacy. The enhancement of ELT teachers' HOTS-based language assessment literacy will eventually have an impact on the quality of the assessment itself for the sake of exploring accurate information on student learning outcomes.

HOTS-Based Language Assessment Literacy of ELT Teachers

Regarding the nature of the HOTS-based assessment, ELT teachers generally have a better insight into it. They argue that HOTS-based assessment does not merely refer to the difficult test items, but the test items must allow students to have logical and critical thinking.

"HOTS is a thinking skill that is more than memorizing facts or concepts. HOTS requires students to do something about the facts. Students must understand them, analyze each other, categorize, manipulate, create new ways logically and apply them to find solutions to new problems." (T-2)

The ELT teachers well-understood the concept of HOTS-based language assessment to measure students' language proficiency. HOTS-based language assessment not only requires students to memorize particular facts and concepts but also requires them to demonstrate critical and logical thinking skills. In other words, HOTS-based language assessment is an assessment with the characteristics of directing students to undertake a process of higher-order thinking skills.

Although ELT teachers already have a better insight into the HOTS-based language assessment, their skills in developing the HOTS-based test items were still questionable. The stages they undertake to develop HOTS-based test items are still random and unstructured.

"At first, I made the assessment instruments in the form of test items to test aspects of students' knowledge of language and language skills. The instruments I use to test student learning outcomes are sometimes taken from various books or item banks ..., or I compile HOTS items independently. The items I used in HOTS can be in an essay or multiple choice format." (T-2)

They do not yet have good skills related to the procedures to develop the test items to measure students' higher-order thinking skills. The items taken from the particular English books are mostly the items to measure merely students' knowledge of the learning contents. Thus, the majority of items have no characteristics to measure students' critical and logical thinking skills. The construction of

HOTS items needs to be undertaken through good procedures so that the test items constructed by ELT teachers have good characteristics of test items. The construction of items should begin with first analyzing students' basic competence, writing a table of specifications, writing items equipped with stimuli and answer keys, and analyzing the quality of items. If the results of the analysis show that the items have been of good quality and have had the characteristics of HOTS items, then the items can be used as the instrument to measure the student learning outcomes. However, if the analysis found that the test items were not of good quality and had no characteristics of HOTS items, the test developers had to make some improvements on the items based on the table of specifications.

HOTS-Based Language Assessment Literacy: Challenges and Prospects in English Language Teaching

The data shows that many teachers have not attended any training on a HOTS-based assessment, so their literacy level is still in the low category. In general, they gained insight into HOTS-based assessment from reading the myriad of references and imitating the practices of HOT-Based language assessment by their peers.

"I have never attended complete training on the assessment of HOTS. Not all teachers have the opportunity to attend the training on it. I know how to carry out the HOTS-based assessment precisely from other teachers and read the PPT that I got from other teachers as well". (T-10)

Not all teachers have the opportunity to take part in the variety of training that might equip them with the knowledge and skills to carry out HOTSbased language assessments. It has affected many teachers unable to change the assessment routines that are traditional assessments that emphasize merely measuring the ability of students to simply remember and understand the contents of being tested. Providing opportunities for many teachers to be involved in a variety of training is a big challenge for policymakers. The absence of teachers' engagement in a variety of training programs will undoubtedly result in their HOTS-based language assessment literacy that tends to lower. This assessment does not merely attempt to measure what the students have learned (assessment of learning), but it provides an opportunity for teachers to provide direct feedback on the student's process of learning as well so that students might reflect more comprehensively on their learning strategies (assessment for learning).

"... if the critical solution he (a student) offered was not in line with other students, he then asked me to explain why the solution he

offered was not acceptable. Then I give feedback, and the student learns from that feedback to give a better argument. They learn better from the feedback given." (T-7)

Although HOTS-based assessment has not yet become mainstream in English language teaching conducted by teachers, this assessment model has the potential to encourage students to learn better. With this model of assessment, teachers might provide feedback on the student's process of learning, monitor students' progress of learning, and set their students' progress of learning. Thus, HOTSbased language assessment might be used by teachers to bring assessment for learning (AfL) into reality. AfL might also be used by teachers to facilitate students to learn better. In addition, this model of assessment has also the potential to lead teachers to design, plan, and execute HOTS-based instructional practices. This happens because the HOTS-based language assessment might not be carried out properly without being preceded by that of HOTS-based instructional practices.

DISCUSSION

The training contents have a central role in a particular training program. Therefore, Tsagari and Vogt (2017) and Vogt and Tsagari (2014) underline that the training contents must be properly prepared and set carefully so that they might be used by the trainee (teachers as participants of training) to improve and enhance their pedagogical and professional competencies. In general, good training contents are the contents that might help teachers enhance their competencies under the current instructional practices and up-to-date instructional technology. The contents presented in a particular training or professional development program must be under the real-life needs of the teachers so that they might assist teachers to execute meaningful practices of instructions and assessment. Therefore, a need analysis is necessarily carried out before the training program is executed to enhance teachers' competencies. That is why Vogt and Tsagari (2014) and Tsagari and Vogt (2017) explicitly elucidate that needs analysis is the first step to provide an overview of teachers' competencies and is carried out to identify what is expected and what has been mastered by the language teachers. Furthermore, the parties who are responsible for designing the training programs might set the contents which meet the needs of the trainees.

So far, the dimensions of the training contents obtained by ELT teachers are restricted to the knowledge dimension, which emphasizes more on how ELT teachers get a better understanding of the concepts of language assessment. Therefore, Davies (2008) asserts that the training contents on assessment are supposed to encompass three major

dimensions, i.e., knowledge, skills, and principles of assessment so that ELT teachers have better assessment literacy and they are eventually able to develop test items, execute an assessment, score the students' learning outcomes, and report the results of the assessment to sundry parties who concerned with student learning. Even Battistone et al. (2019) point out that to improve assessment practices, training for teachers is needed, and it does not solely focus on providing teachers the content knowledge on assessment. However, it should be highlighted more on equipping teachers on how to put content knowledge on assessment into classroom practices. In other words, training on assessment needs to be designed not only to equip ELT teachers' knowledge at the theoretical level but also to enhance their skills on how to apply their knowledge to a practical level.

Better HOTS-based language assessment literacy is crucial because, with this literacy, ELT teachers might be able to develop tests, interpret test results and use the interpretation results to improve instructional quality, and also evaluate the quality of the test itself (Gotch & McLean, 2019). In addition, HOTS-based assessment is also able to lead students to achieve logical thinking and critical reasoning as well (Brookhart, 2010). With better HOTS-based assessment literacy, teachers might carry out accurate assessment practices to measure the ability of students to transfer information, think critically, and provide accurate solutions to the problems that students may be facing (Heong et al., 2012). Although HOTS-based assessment has become mainstream in English language teaching and is a curriculum demand (Brookhart, 2010, Budiman & Jailani, 2015; Ramasamy et al., 2016), many ELT teachers' HOTS-based assessment literacy is still inadequate. It occurs because many ELT teachers have not received much training on executing HOTS-based language assessments in English language teaching; developing HOTS-based test items; developing a table of specifications and its indicators for HOTS-based test items; identifying the cognitive level of students. ELT teachers' better knowledge of HOTS-based language assessment is not enough, but ELT teachers need to bring their knowledge into assessment practices in the classroom. Therefore, Bohn (2018) claims that the better practices of HOTS-based language assessment encourage ELT teachers to manage the assessments that enable students to develop their ability to analyze, reflect, and evaluate their knowledge and skills.

In the current research, it was empirically found that after attending the training program, the knowledge of ELT teachers regarding what HOTS-based language assessments are and why these assessments need to be applied in ELT classrooms have enhanced better. However, their knowledge is not parallel with the assessment practices they

implemented in the classrooms. Many teachers are stuck with traditional assessments and are limited to measuring students' knowledge and understanding of the subject matters being tested. It indicates that the literacy level of HOTS-based assessments owned by ELT teachers is still at the level of functional literacy (Bybee, 1997; Kaiser & Willander, 2005; Pill & Harding, 2013), which means teachers have a better knowledge of basic terms and concepts of HOTS-based language assessment (Retnowati et al., 2018), but the knowledge has not been applied empirically in the classroom. An ELT teacher must possess at least a procedural and conceptual assessment literacy level. which is to know the major concepts of the assessment and put their knowledge into classroom assessment practices. Furthermore, Ramasamy et al. (2016) accentuate that ELT teachers do not sufficiently know and understand what HOTS-based language assessments are in language teaching, but they must have a better level of language assessment literacy. Furthermore, Coombe et al. (2012) and Tsagari and Vogt (2017) point out that HOTS assessment literacy at the theoretical and practical levels contributes empirically to the construction of a dynamic and contextual assessment culture in English as a foreign language instruction.

As many ELT teachers have not attended adequate training on HOTS-based assessment, their literacy level is still in the lower category. In general, they gained an understanding of HOTSbased assessment from reading a myriad of references and also copying the best practices of HOTS-based assessment conducted by their peers. These findings indicate that not all ELT teachers have the opportunity to participate in a variety of training that might equip them with knowledge and skills in implementing HOTS-based language assessments. This condition has induced many ELT teachers to be unable to change the assessment routines they commonly carry out, that is, traditional assessments that accentuate merely measuring the ability of students to simply remember and understand the learning contents. Providing opportunities for many ELT teachers to engage in various training is a big challenge for policymakers (Lan & Fan, 2019). The absence of teachers' engagement in various training programs might certainly bring about their literacy of HOTS-based language assessments tend to be inadequate (Hasellgreen et al., 2004; Scarino, 2013; Tsagari & Voght, 2017). In other words, the major challenges of the English teacher professional development program in the area of assessment lie in the uneven distribution of teachers to attend a variety of training and the lack of delivery of training content that meets the needs of many ELT teachers. Therefore, the solution to the challenges requires a need analysis that is carried out holistically and comprehensively before the training is commenced

so that the training contents meet their needs to carry out HOTS-based language assessments in ELT classrooms. To reach this end, the training programs need to be carried out collaboratively by involving policymakers (training providers) and teachers as trainees (Stiggins, 2001) and it will increase the effectiveness of the training programs to achieve the expected goals.

HOTS-based language assessment is a model of assessment that differs from the traditional assessment model. The HOTS-based language assessment model does not only attempt to measure what has been learned by students (assessment of learning), but also provide an opportunity for teachers to impart direct feedback on the students' process of learning so that students might reflect comprehensively on their learning strategies (assessment for learning). It means that this assessment model has the prospect of becoming an integrative assessment (Yu, 2013) so that information on the process and product of students' learning can be understood comprehensively. The integration of the assessment of and for learning might bring together the information on the achievements and social attitudes of students and might ultimately assist teachers in making accurate decisions on how students learn and to what extent students have achieved the instructional objectives. In addition, integrative assessment strategies enable language learners to demonstrate the desired highlevel learning behaviors, such as the application of language learners' knowledge and skills through analysis, synthesis, and critical questioning.

CONCLUSION

ELT teachers who had engaged in a program of training on HOTS-based language assessment gained a basic level of knowledge comprehension. Having taken part in the training, they have a high level of knowledge of how HOTSbased language assessments are supposed to be constructed and executed in ELT classrooms. However, in actual practice, many ELT teachers are still unable to construct the test items that truly portray the HOTS-based language assessment. In short, ELT teachers' knowledge and comprehension of HOTS-based language assessment are not parallel with their skills to construct HOTS-based test items to measure the language proficiency of the students. This model of assessment has the prospect of becoming an integrative assessment in ELT classrooms. It allows ELT teachers to carry out an assessment of learning and an assessment for learning simultaneously. On the other hand, the major challenges of a training program are that ELT teachers have no adequate opportunity to attend the training, and the training contents do not meet the needs of ELT teachers. These challenges may be an obstacle to the success of training to achieve the

expected goals. That is why training providers must find solutions to overcome the challenges through needs analysis which is coupled with systematic planning of training. Finally, this study provides much for the relevant studies and training providers to enhance ELT teachers' assessment literacy. We recommend that training on HOTS-based language assessment needs to be designed by establishing effective communication between training providers and trainees before the training starts so that the training providers can deliver the contents needed by the trainees. Accommodating the needs of ELT teachers in a bottom-up rather than top-down manner might effectively enhance the pedagogical competencies of EFL teachers.

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