Framework Of Teacher's Competences For Formative Assessment Of English Majors According To The Outcome-Based Education At Higher Education Institutions

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Abstract: Formative assessment has been admitted as a key assessment model for the improvement of education quality. The enhancement of assessment competence to teachers is essential to assure the implementation of a successful evaluation of student performance during the training process. To make a contribution to facilitating teacher's insight and practice of formative assessment, we carried out research on the reality of formative assessment implementation according to the Outcome-Based Education (OBE) at higher education institutions which provide English language training in Vietnam and suggested a competence model of formative assessment for teacher assessors. To investigate this reality, we used a questionnaire including 10 items which focused on the formative assessment competences of teachers at university and interviews of a large scale of teacher assessors at Vinh University, University of Languages and International Studies (ULIS)- Vietnam National University, Hanoi, and Ho Chi Minh City University of Education. Participants include 121 teachers at three forementioned universities. The results of the study were analysed by means of SPSS software and qualitative evaluation of interview responses. The findings show a disparity in teacher assessor's competences at different universities and these competences have not been set as a common model for integral formative assessment management of English majors. As a result, the paper suggested an integral formative assessment competence model for teachers of English at university.

Keywords: competence, formative assessment, English majors, competence framework.

I. Introduction

The innovation of education has been carried out comprehensively in the world in response to the change of the world of work which turns workers into flexibly adaptable individuals in different situations of employment. World integration, interaction, and sharing have become crucial, which requires education providers to focus on their training of highhuman resources. Worker's competencies must be given priority and tested carefully and diversely before university graduates enter the world of work. As a result, higher education institutions have conducted the OBE as a part of education and training innovation in order to train dynamic and competent future workers. The Government of Western Australia defines competence as the capability to apply or use the set of related knowledge, skills, and abilities required to successfully perform 'critical work functions' or tasks in a defined work setting. Competences

often serve as the basis for skill standards that specify the level of knowledge, skills, and abilities required for success in the workplace as well as potential measurement criteria for competence attainment. More specifically in the field of language training, the Council of Europe stated that Competences are the sum of knowledge, skills and characteristics that allow a person to perform actions. Thus, the assessment during the training process which favours the development of competence goes for formative assessment because it supports the adjustment of learning and teaching activities through feedback by students (Michael Scriven, 1967; Sadler, 1989; Black and William, 1998; Jean Laight, Mandy Asghar & Avril Aslett-Bentley, 2010; Brookhart, 2007; Bui Minh Hien et al, 2019; Tran Thi Tuyet Oanh, 2016). Although the theories of formative assessment have been studied by several researchers in order to support successful implementation of formative assessment, the practice of this

assessment form has experienced shortcomings. Results of formative assessment depend essentially on teachers who create the content, organise all tests, collect feedback and adjust teaching activities including curriculum review. Thus, they are considered as the main factors of the formative assessment process and determine how well this process is implemented. Their competence plays a vital role in the success and should be formed and described as a standard for use. Shulman (1987) suggested a framework of teacher's knowledge and skills for formative assessment including seven criteria of which four general knowledge points and three knowledge categories attached to content, curriculum, and pedagogical content knowledge. His work triggered studies on the competence framework for teacher assessors.

The reform of education has led to the innovation of formative assessment, several research works proposed teacher competence frameworks at specific times when they conducted their study. Over time, the competence framework evolves depending on training purposes. Education of English in a new context leads to changes in formative assessment in such a way as to promote student performance. The question of how to improve teachers' competences linked to performing the formative assessment is not new, however, it remains superficial in Vietnam and needs further study. This research aims at analysing the reality of formative assessment building teacher competence framework for formative assessment of English majors in Vietnam.

2. Literature review

2.1 Formative assessment

The construct of formative assessment was first formed in the 1960s and has been defined by many researchers with a focus on its nature and purposes. Many authors such as Black and Wiliam (1998), Lorna Earl and Steven Katz (2006), Brookhart (2007), Ahmed, Nisreen and Teviotdale, Wilma (2008), Aranda S. Yates P. (2009), Kathleen M. Cauley, and James H. McMillan(2010), Eccleston and Davies (2010), Laight Jean, Asghar Mandy and Aslett-Bentley Avril (2010), Ian Clark (2010, 2011, 2013), etc. believed that formative assessment is not just about recording the results achieved after a learning process but also aids in improving learning outcomes. Formative assessment is conducted throughout the teaching process. Kathleen M. Cauley and James H. McMillan from Virginia Commonwealth University

recognized formative assessment as a process through which assessment-elicited evidence of student learning is gathered and instruction is modified in response to feedback. Nguyen Cong Khanh in his book "Syllabus on competency-based assessment and testing in education" defined formative assessment as a tool that aims to find mistakes, provide feedback, promote the learning process, orient/instruct students to study as well as orient/instruct teachers to teach. Formative assessment also helps monitor and improve education quality.

The definitions of formative assessment are diverse, however, researchers agree that formative assessment, like other assessments, happens in the training process and is recognised as an informal assessment to measure the performance of students at a certain period of the training process. The goals of formative assessment are to improve teaching and learning activities, to help students and other stakeholders adjust their activities to meet the learning outcomes of training programmes, and ameliorate training quality.

2.2. Competences

The definition of competence varies according to how and in what context it is used. In the field of formative assessment in education, it is conceived more concisely. Competence relates to what teachers need as abilities to assess during the training student performance process. According to the integrated conception, competence is conceptualised in terms of knowledge, abilities, skills, and attitudes displayed in the context of a carefully chosen set of realistic professional tasks which are of an appropriate level of generality (Gonczi et al., 1990; Hager, 1994; see also Biggs, 1994).

It is recommended that university teachers develop the competence of formative assessment so that they are in a position to redirect scientific discourse to a scenario in which the educational process unfolds (Omar Iván Gavotto-Nogales et al., 2015)

Teachers who practice formative assessment are also expected to support students to acquire the skills needed to enhance learning (Dixon & Haigh, 2009) designed a professional development programme to change teachers' conceptualisation and practice of assessment and feedback (Charlotta Vingsle,

2014). It is crucial for teachers to improve their competences to carry out formative successfully according to the development of education over time. Competence is the capacity of mastering the system of knowledge, skills and attitude, and operating (connecting) them appropriately to successfully perform

assignments, and effectively solve the problems in life (Nguyen Cong Khanh, 2015).

Competence is the combination of three attributes of knowledge, skills, and attitude, which can be described in figure 1.

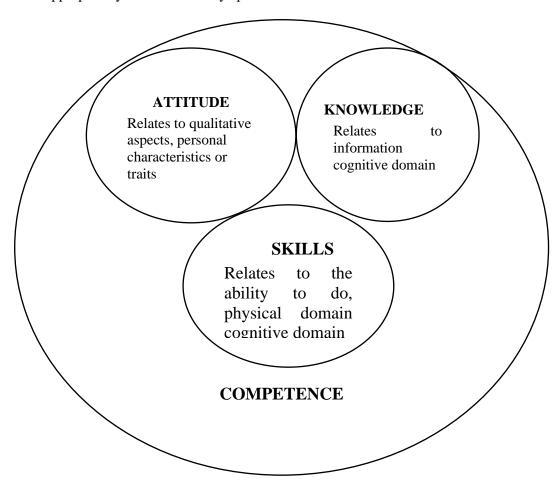


Fig.1. Competence's components

2.3. Outcome-based education

Outcomes based education (OBE) is a system that includes the restructuring of curriculum, evaluation and reporting practices in training to mirror the achievement of excessive order gaining knowledge and mastery in place of the buildup of path credit (Devasis Pradhan, 2021). OBE has become one of the essential factors of educational accreditation in Vietnamese higher education institutions as well as those in developed countries. It is taken as a reference for outcomes of a training programme. OBE

was designed to obtain the anticipated study effects, which means the learning goals that students have to achieve at the end of the study programme. OBE is regarded as a process that involves the restructuring of curriculum, assessment and reporting practices in the education to reflect the achievement of a high order learning and mastery rather than the accumulation of course credits (Tucker, 2004). Thus, OBE includes master-based education and competency-based education as described in figure 2.

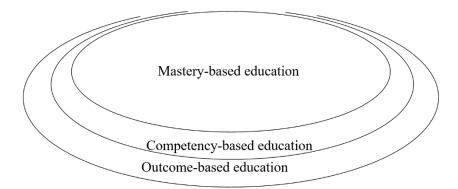


Fig.2. Outcome-based education in relation to other models

OBE is a type of education in which the focus is on a clearly articulated understanding of what students should know and be able to accomplish when they leave school. It's also known as performance-based education, and it is an attempt to evaluate educational efficacy based on outcomes rather than inputs like class time. The criteria by which curriculum is produced or modified, instructional materials are chosen, teaching methods are implemented, and evaluation is carried out are the student learning outcomes.

3. Research methodology

3.1. Participants

The survey was conducted at Vinh University, University of Languages and International Studies—Vietnam National University, Hanoi, and Ho Chi Minh City University of Education in 2021. There are 193 lecturers, to determine the survey population, the author used Yamane Taro's simplified formula. The Yamane sample size states that:

$$n = \frac{N}{1 + N \times e^2}$$

where n is the minimum sample size of lecturers, N is the underlying population size and e is the acceptable sampling error that was 0.1 (10%) with a confidence level of 95% and p = 0.5.

So the determination of the minimum sample size of teachers surveyed was calculated as follows:

$$n = \frac{193}{1 + 193 \times 0.1^2} \approx 65.87$$

The minimum sample size of teachers must be 66 people to assure the confidence level. As result, we decided to select randomly 121

lecturers from three universities from three areas of Vietnam (North, Centre, and South).

3.2 Interpretation of survey and analysis methods

We used a questionnaire to investigate the reality of teachers' competences of formative assessment of English majors. The questionnaire consists of ten questions representing ten essential competences that teachers mobilised to assess their students known as awareness of formative assessment characteristics and purposes; competences of content design, method and tool use, feedback. organisation, giving student motivation, formative assessment innovation updating, and technology application. The questionnaire is given to 121 teachers from three universities known as Vinh University, University of Languages and International Studies- Vietnam National University, Hanoi, and Ho Chi Minh City University of Education. The data is analysed using SPSS software to determine how teacher competences are presented and used during the training process. The questionnaire is accompanied interviews with randomly selected teachers in order to obtain a deeper understanding of the issues in question.

4. Results

The results of our investigation are accumulated from a survey of 121 teacher assessors and interviews of nine teachers from three selected universities.

The survey investigated the implementation and effectiveness of ten indicators as competences of teacher assessors based on OBE. Figure 3 indicates the recognition of the importance of teachers' competence in formative assessment at various degrees. As shown in this figure, the majority of teachers agreed that teachers' competences are

very important to formative assessment at 62.8 percent, compared to 34.7 percent of respondents who thought that they are just

important. Only 2.5 percent of respondents did not admit that their competences of formative assessment are important.

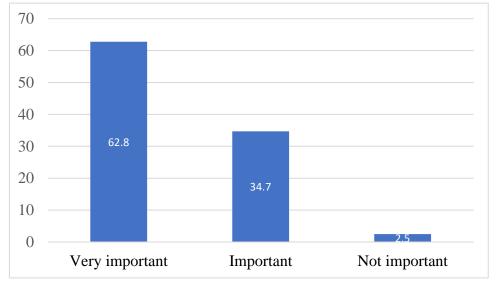


Fig. 3. Teachers' competences of formative assessment

By studying the theory of formative assessment and factors that affect teacher's formative assessment, we built 10 indicators for teacher's competences including two awareness indicators and 8 competence indicators. To know about the reality of continuous training and effectiveness of all these indicators, we conducted a survey and interview of teacher assessors at three universities. Answers indicate that there are some gaps in teachers' competence formation.

Ten questions were asked to investigate the continuous training of competences by teachers to assess students' performance and their effectiveness (Table 1). Results show that teachers mostly focused on the first seven indicators related to the awareness of formative assessment characteristics and purposes, the competences of content design, method use, tool use, organisation, and feedback with the mean score above 2 from 2.11/3 to 2.57/3 for continuous training activity and 2.00/4 to 3.00/4 for effectiveness. The deviation varies from 0.45 to 0.67 for continuous training and 0.29 to 0.74 for effectiveness, which shows a small disparity between choices by respondents. In detail, the best representative of all indicators goes for content design competence with a mean score of 2.57/3 and a derivation of 0.57 for continuous training, and awareness of formative assessment characteristics with a mean score of 3/4 and a derivation of 0.74 for effectiveness. All these results demonstrate that teacher assessors have achieved some levels of competences needed for formative assessment. However, looking at the three last indicators, it is obvious that teachers lack the training in the competences of student motivation, formative assessment innovation updates, and technology application in formative assessment. The weakest competence is student motivation which has not drawn much attention to educational managers in terms of continuous training. In the survey, the mean score of this competence for continuous training is only 1.58/3, the effectiveness of this competence is accordingly the lowest with a mean score of 1.73/4 and this indicator got the most similar choices which are represented by relatively low standard deviations of 0.57 for continuous training and 0.45 for effectiveness. Two other indicators such as formative assessment innovation tendencies and technology application got the same answer scales with mean scores of 1.79/3, 1.67/3 for continuous training, and 1.73/4 and 1.82/4 for effectiveness respectively. The standard deviations vary from 0.58 to 0.71, at medium degree.

Table 1. Degrees of continuous training and effectiveness of competences

No	Indicators	Continuous Training	Effectiveness
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			SD	M	SD	
1	Awareness of FA characteristics	2.30	0.61	3.00	0.74	
2	Awareness of FA purposes	2.17	0.55	2.82	0.39	
3	Competence of FA content design	2.57	0.57	2.82	0.58	
4	Competence of FA method use	2.11	0.67	2.91	0.29	
5	Competence of FA tool use	2.47	0.65	2.82	0.72	
6	6 Competence of FA organisation 2.28 0.45 2.55 0.50					
7	7 Competence of FA result feedback 2.12 0.66 2.00 0.61					
8	Competence of student motivation through FA	1.58	0.57	1.73	0.45	
9	Competence of international FA innovation updating	1.79	0.71	1.73	0.62	
10	Competence of technology application in FA 1.67 0.61 1.82 0.5				0.58	
	FA: Formative assessment					
	M: Mean					

SD: Standard deviation

Table 2 shows the percentage of responses favouring each level of training implementation and effectiveness competence mobilisation formative in assessment. It is clearly seen that the first seven indicators got a higher rating of which the lowest level goes for the lowest frequency of training implementation and effectiveness. In detail, the rate of the never answers oscillates from zero percent to 17.4 percent for continuous training and not effective answers from zero percent to 18.2 percent for effectiveness, especially the first six indicators got zero percent. That means teachers' competences are effective at different degrees. The fact that the

highest level of evaluation from participants is noticeable for training (from 24.7 percent to 61.2 percent) and the moderate effective level is obviously seen for the effectiveness of teacher's competences (from 18.2 percent to 91 percent).

Always three last indicators were rated lowest in terms of training and effectiveness. In fact, the lowest degree of implementation of training reached from 37.2 percent to 46.3 percent, and effectiveness from 27.3 percent to 36.3 percent. These percentages are high compared to the rate of other levels. Notably, the rate for very effective level stays none (zero percent).

Table 2. Implementation of continuous training and effectiveness of competences

		Continuous Training (%)			Effectiveness (%)			
No	Indicators	Never	Sometimes	Regularly	Not effective	Slightly effective	Moderately effective	Very effective
1	Awareness of FA characteristics	8.3	53.7	38	0	27.3	45.4	27.3
2	Awareness of FA purposes	8.3	67	24.7	0	18.2	81.8	0
3	Competence of FA content design	4.1	34.7	61.2	0	27.3	63.6	9.1
4	Competence of FA method use	17.4	54.5	28.1	0	9.1	91	0
5	Competence of FA tool use	8.3	36.4	55.4	0	36.4	45.4	18.2
6	Competence of FA organisation	0	71.9	28.1	0	45.4	54.6	0
7	Competence of FA result feedback	16.5	55.4	28.1	18.2	63.6	18.2	0

8	Competence of student motivation through FA	46.3	49.6	4.1	27.3	72.7	0	0
9	Competence of international FA innovation updating	37.2	46.3	16.5	36.3	54.6	9.1	0
10	Competence of technology in FA	40.5	52.1	7.4	27.3	63.6	9.1	0

In the second part of the study, we conducted interviews with nine teachers from three aforementioned universities. Questions focused more profoundly on the ten indicators raised in Accordingly, interviewees survey. evaluated the implementation of training for seven first indicators and their effectiveness fairly well. The formative assessment was initially trained during tertiary education with basic knowledge and practice. Teachers can recognise easily the characteristics, purposes of formative assessment, use methods and tools to assess their students. They master well the organisation and give timely feedback to students. A teacher at Ho Chi Minh City University of Education said that teachers organise formative assessment on a daily basis, they are aware of the importance of formative assessment and its role in enhancing education quality, they use a wide range of methods and tools to maximise the results and give feedback appropriate to students. She emphasised that formative assessment has been conducted upon regulatory documents without pertinent detailed guidelines. In terms of the three last indicators, she admitted that they are among their weaknesses. These indicators are not systematised and trained by the institution to get the consensus and common use of these competences. Another teacher from Vinh University highlighted that there were training programmes for teachers within institutional projects to improve their assessment competences, but specific training programmes for formative assessment have not been profoundly conducted. He pointed that the suggested competences are really helpful but some of them were not good enough such as the three last indicators. The same viewpoint was revealed when discussing formative assessment competence with three teachers at ULIS-Vietnam National University, Hanoi, "We have to study the documents related to formative assessment written by famous educators and researchers improve our formative assessment skills, there has been a limited

number of specific training for only formative assessment", they said.

5. Discussion

The reality of formative assessment implementation at higher education institutions shows that we need a framework of formative assessment competences for teachers so that the latter can carry out formative assessment better and this framework helps education managers evaluate their teacher assessors. Good assessment competences contribute to assuring the achievement of OBE as prescribed by the education institution.

A lack of guidelines on how to implement formative assessment and a set of formative assessment competences has led to a disparity in the organisation, implementation, and evaluation of this activity due to the difference in awareness and competence levels. The survey demonstrated that teachers have focused on assessment content, methods, and tools and communicated their feedback to stakeholders - students mostly. It is also seen that they motivated students to learn better, persevere, and improve their progress, but the overload of work may sometimes force them to just finish their task of assessment, not to use the results and feedback to help students perform their study better.

Assessors are the most important to assuring good formative assessment. However, they have not been currently trained in essential competences to do their job. This gap should be banned as soon as possible in favour of education quality. enhancing Such requirement needs to be considered and treated radically. That is the reason we suggested a framework of ten competences to be formed for teachers (Table 3). It is understandable that the three last indicators should be improved urgently to assure a successful formative assessment because they were not underlined during the assessment process. The framework includes descriptions of each competence to better define what teachers should acquire.

Table 3. Framework of formative assessment competences

No	Indicators	Descriptions
1	Awareness of FA characteristics	The teacher has to understand well all characteristics of formative assessment before assessing their students, notably its continuity and feedback to students.
2	Awareness of FA purposes	The teacher has to master the purposes of formative assessment as to collect/provide feedback from/to students to adjust learning and teaching activities, which aims to improve education quality.
3	Competence of FA content design	When designing the content of the formative assessment, the teacher has to base on learning outcomes at a specific period of training. The content covers what students have learned and meets the requirements of feedback collection.
4	Competence of FA methods using	The teacher has to use a wide range of methods to collect feedback from students accurately and timely. Upon the requirement of feedback data needed, the teacher knows what methods to use as a priority.
5	Competence of FA tools using	According to the methods that the teacher chooses, he/she has to use appropriate tools.
6	Competence of FA organisation	The teacher is able to organise formative assessment in different ways to attract students' active participation so that the teacher can collect maximum useful feedback for teaching/learning activity adjustment. The organisation should be compatible with the purpose, content, methods, and tools of formative assessment.
7	Competence of FA result feedback	The teacher is to carry out the formative assessment in such a way as to get as much useful and relevant feedback as possible and provide it to students. He/she cooperates with students to analyse results and make suitable adjustments to their activities.
8	Competence of student motivation through FA	Assessment is naturally hard for students, the teacher has to make them understand that formative assessment is informal, which helps them adjust inappropriate learning activities and improve their learning results. Testing content, methods, and tools should be attractive and supportive to students' responses.
9	Competence of international FA innovation updating	As with many other activities, formative assessment changes every day, educators and researchers find new solutions to solve the limitations of formative assessment to maximise its positive effects. The teacher has to update new tendencies and findings by experts to better conduct the formative assessment during their training process.
10	Competence of technology application in FA	The teacher is able to use technology, notably information technology, to design the content and diversity activities to attract students' full participation and get the most accurate feedback possible.

Conclusion

The process of formative assessment requires assessors to not only master their knowledge but also competences to organise activities

successfully, which represents a combination of several professional, interpersonal and personal skills. Although teachers are well trained in overall teaching skills including assessment skills, formative assessment requires more specific competences to make it happen in the way we need it to be. These competences should be improved over time in response to the requirements of formative assessment purposes. As it does not aim at grading students nor classifying them in different contexts, students may not be aware of its importance and take it superficially, which leads to faulty results and then adjustments are meaningless.

As a result, this paper focused on investigating teacher assessors' competences of formative assessment and found some gaps and disparities when teachers conduct the assessment. We define the objects of study as teachers of English at teacher training universities and the framework of competences refers to their practice on English majors. The framework contributes to enhancing teachers' assessment practice and improving education quality. It is also a theoretical base for further training and can be used as a reference for teacher assessment.

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