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Teacher Professional Development
in Developing English Assessments Through Tpack

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Abstract

Exploring teacher professional development requires two main teaching factors in the digital era. They are internal factors and external. In internal, the teacher plays an essential role in developing professionalism in teaching. In shallow, it is teaching instruments – lesson plans. The appropriate English teacher and lesson plan development contribute significantly to teaching achievement. Therefore, this study explores how English teachers implement technological pedagogical and content knowledge to improve their English instructional assessments in teacher professional development. Implementing technical pedagogical and content knowledge in teacher professional development can gradually enhance their English instructional evaluations. They have different language competencies backgrounds by progressively implementing technological pedagogical and content knowledge in teacher professional development. Still, they can improve their English instructional assessments. The study uses survey: questionnaire, interview, and observation are applied to find the data. The subjects are English teachers who joined teacher professional development in Surabaya 2020. The research results showed that implementing technological pedagogical and content knowledge can improve English instructional assessments in teacher professional development. Three factors contribute to integrating English instructional assessment with technical pedagogical and content knowledge. English teachers are more comfortable making English instructional assessments, alternative instructional English evaluations are available, and improved English instructional reviews. Therefore, English instructional evaluations are more exciting and challenging. Thus, integrating English instructional assessments with technological pedagogical and content knowledge in teacher professional development is crucial in improving teaching English in Indonesia.

Keywords: English assessments development, teacher professional development, and technological pedagogical and content knowledge.

INTRODUCTION

Professionalism in teaching English is compulsory in the digital era. The teacher's educational background, pre-and in-service English teacher training program, and literacy in digital technology significantly contribute to professionalism in teaching English. The teaching skills and quality of English teachers are various. They graduated from three levels of accreditation: A, B, and C in English Department. Renandya et al., in 2018, stated that the results of English teacher professional development are 20% appropriate and 80% inappropriate. So, they need to improve their competencies in English teaching. This study has three main elements: technological pedagogical and content knowledge, English instructional assessments, and teacher professional development. To become experienced English teachers, participants in teacher professional development should have four competencies: professional, educational (pedagogical), social, and personal. Among four competencies, this study focuses on two competencies: professional and academic (pedagogical). To have professional competencies, English teachers should have the ability to develop lesson plans appropriately. In pedagogic competence, English teachers must have proper English instruction. Developing English lesson plans appropriately, English teachers can develop five elements: learning

indicators, materials, method, sources, and assessment (The Regulation of Ministry of Education and Cultural No. 81 A, 2013). Learning assessment development is the focus of the study.

This study has two purposes: to explore how English teachers develop English assessments in Teacher Professional Development through Technological Pedagogical and Content Knowledge. The purpose one is relating to how English teachers make healthy preparation before they are teaching English. English teachers develop lesson plans. There are some elements in the lesson plan; one is assessment. Study two explores how English teachers implement English instructional checks in Teacher Professional Development through Technological Pedagogical and Content Knowledge. Implementing English instructional assessment means how English teachers can integrate English instructional review with technological pedagogical and content knowledge in class.

Based on the purposes of the study, two research questions are how do English teachers develop English instructional assessments in Teacher Professional Development through Technological Pedagogical and Content Knowledge? Moreover, how do English teachers implement English instructional checks in Teacher Professional Development through Technological Pedagogical and Content Knowledge?

Teacher professional development (TPD) in English and non-English department have been extensively studied. Some studies examined from a diverse perspective. Several studies examined several reasons in teacher professional development: extending experiential learning in teacher professional development (Girvan, Conneely & Tangney, 2016), teachers' collective professional development in school: a review study (Hauge, 2019), enhancing Huber's evaluation framework for teacher professional development program (Hiew & Murray, 2021), digital tools to support teacher professional development in lesson studies: a systematic literature review (Hrastinski, 2021), transformation and framework of teacher professional development in Taiwan (Huang, 2016), a systematic research review of teachers' professional development as a policy instrument (Kirsten, 2020), coherence and the positioning of teachers in professional development, a systematic review (Lindvall & Ryve, 2019), shifting digital, shifting Context; (re)considering teacher professional development for online and blended learning in the COVID-19 Era (Lockee, 2021), exploring Mathematics teachers' professional development: embracing the fourth industrial revolution (Naidoo & Pillay, 2020). a systematic meta-aggregative review (Portillo & Serna, 2021), teachers' professional development in school: a review study (Postholm, 2018), applications of Vygotsky's sociocultural approach for teachers' professional development (Shabani, 2016), learning outcomes of teacher professional development activities: a meta-study (Thurlings & Brok, 2017), and moving Education into the digital age: the contribution of teachers' professional development (Twining et al., 2013),

This study explores how English teachers develop and implement English instructional assessments in Teacher Professional Development through Technological Pedagogical and Content Knowledge. Therefore, the gap is that this study focuses on English instructional review in teacher professional development, not in a regular class.

Literature Review
The study consists of two central literature reviews, teaching-learning assessment development and pedagogical technological and content knowledge. Learning assessment development in the teaching-learning program has been extensively studied. Some studies examined from a diverse perspective. Several studies examined several reasons in learning assessments development: development and assessment of the English grammar asynchronous online learning module before being applied in real lesson (Anthony & Satria, 2020), development of an English speaking skill assessment model for grade six (6) students by using portfolio (Daruwan et al., 2015), designing ICT competences-integrated assessment instruments of English language assessment and language assessment instrument

development courses for English language education study program (Devitri & Sulistyaningrum, 2019), English as a lingua franca: implications for pedagogy and assessment (Fan, 2017), developing an alternate English language proficiency assessment system: a theory of action (Gholson & Guzman-Orth, 2019), a call for language assessment literacy in the Education and development of teachers of English as a foreign language (Herrera & Macias, 2015), the development of sustainable assessment during the COVID-19 pandemic: the case of the English language program in South Korea (Joo & Choi, 2021), identifying the areas for English language teacher development: a study of assessment literacy (Kağan, 2016), multilingual assessment of early child development: analyses from repeated observations of children in Kenya (Kanuer et. al., 2019), developing classroom language assessment benchmarks for Japanese teachers of English as a foreign language (Kimura et al., 2017), the assessment of successful emotion regulation skills use: development and validation of an English version of the emotion regulation skills questionnaire (Michaela, Salsman & Berking, 2018), assessment-for-learning teaching mode based on interactive teaching approach in college English (Sun et al., 2020), issues, challenges, and future directions for multilingual assessment (Yangting & Li, 2020), and analysis on the reliability and validity of teachers' self-designed English listening test (Zhencong, Li & Diao, 2020),

Technological pedagogical and content knowledge in English and non-English Language Learning have been extensively studied, too. Some studies examined from a diverse perspective. Several studies examined why technological pedagogical and content knowledge is necessary. The studies: does technical, pedagogical content knowledge impact the use of ICT in pedagogy? (Andayani et al., 2020), mathematics teacher's self-efficacy of technology integration and technical pedagogical content knowledge (Bakar, Maat & Rusli, 2020), a study on technological pedagogical and content knowledge among teacher-educators in Punjab Region (Beri & Sharma, 2019), exploring the factor structure of the constructs of technical, pedagogical, content knowledge (TPACK) (Chai, et al., 2011), a meta-analysis of research on specialized pedagogical content knowledge by gender (Ergen, Yelken, & Kanadli, 2019), mathematics teachers' levels of technological pedagogical content knowledge and information and communication technology integration barriers (Freitas & Spagenberg, 2019), technical pedagogical and content knowledge of ESP teachers in blended learning format (Mulyadi, et al., 2020), intelligent data analysis of interactions and relationships among technological pedagogical content knowledge constructs via rough set analysis (Ozgen & Narli, 2020), technical pedagogical content knowledge of mathematics teachers and the effect of demographic variables (Ozudogru & Ozudogru, 2019), a technical pedagogical content knowledge (TPACK) assessment of pre-service EFL teachers learning to teach English as a foreign language (Saricoban, Tosuncuoglu, & Kirmizi, 2019), developing a short assessment instrument for technological pedagogical content knowledge (TPACK) and comparing the factor structure of an integrative and a transformative model (Schmid, Brianza & Petko, 2020). factors affecting teachers' technological pedagogical and content knowledge: a survey on economics teacher knowledge (Sojanah et al., 2021), designing TPACK-based course for preparing student teachers to teach science with technological pedagogical content knowledge (Tanak, 2020), the practice of specialized pedagogical content knowledge of teacher educators in education colleges in Myanmar (Thinzarkyaw, 2020), and the development process of a mathematic teacher's technical, pedagogical content knowledge (Yildiz & Gokcek, 2017).

METHODOLOGY

The design of the research is exploratory, and the method of the study is qualitative. The Clinical studies – step by step - state what the study processes look like and what needs to be considered when conducting clinical studies (research). This study uses the qualitative method because the study aims

to explore two English teachers' performances: developing English assessments in lesson plan and demonstrating English assessment in teaching practices.

Setting and Informants

The location of teacher professional development is one of the State Universities in Surabaya. This university has two main university-based areas: areas one and two. Area two has some university buildings, one of them is the teacher professional development building. Teacher professional development's building has nine (9) floors with complete facilities for teacher professional development activities.

The informants are English teachers who joined teacher professional development in one of the State Universities at Surabaya 2020. English teachers consist of junior school, senior, and vocational. Among fifty informants, this study selected fifteen (15) informants. Fifteen (15) informants come from three kinds of schools. Five (5) English teachers represented each school (junior middle school, senior, and vocational).

Instruments (instruments and procedures should be combined)

Two research purposes are developing English instructional assessments through Technological Pedagogical and Content Knowledge and implementing English instructional checks in Teacher Professional Development through Technological Pedagogical and Content Knowledge. Based on two (2) research purposes in the Introduction, the research instruments are a questionnaire, interview guidelines, and an observation sheet. The survey, interview guidelines, and observation are adapted from Apple Education – Elements of Learning in 2018. The survey and interview guidelines of English instruction assessments in lesson plan development have three (3) criteria: the text's social function or content, generic structure, and linguistic features. Three criteria are guidelines for examining their lesson plans and interviewing the informants. Based on three criteria, the researcher can develop rubrics of lesson plans, and the next is the survey lesson plans development. Before the interview, the researcher can develop and improve interview guidelines based on three criteria: the text's social function or content, generic structure, and linguistic features. It refers to interview guidelines; the researcher delivers items of question to the informants. Therefore, he can develop and elaborate interview items based on interview guidelines.

The observation sheet is the second instrument to find out the data of implementing English instructional assessment in teacher professional development through technological pedagogical and content knowledge. The researcher used structured observation consisting of three (3) steps: English instructional assessment in pre-activity learning, core-activity learning, and post-activity learning. The researcher observed and wrote down the informants' English instructional for evaluation in three steps chronologically.

Procedures

This study used three steps to find out the data: collecting the data, selecting the data, and analysing the data. Before collecting data, the researcher develops research instruments. To have an appropriate research instrument, he must read research questions comprehensively and carefully. The researcher should comprehensively state the research design, method, and instruments based on reading research questions. In research procedures, the researcher focuses on developing a research instrument and implementing it in this research. Three research instruments are survey guidelines, interviews, and observation sheets.

The researcher visited teacher professional development in one of the State Universities in Surabaya 2020. He finds lesson plans from the survey document by doing a survey. In lesson plans,

there are six (6) elements: indicators development, learning purposes, materials, media, activities, and assessments. Among six (6) aspects of lesson plans, the researcher selects learning assessments as to his research data. He then collects the data from fifteen informants. While the researcher is surveying informants of teacher professional development in one of the state universities in Surabaya 2020, he delivers some questions to fifteen (15) informants. The questions refer to their learning assessments after the researcher read and observed them. The questions consist of three domains: the content or social function of learning materials (texts), structure, and language features. The answer of informants is two kinds, consisting of verbal and non-verbal. Oral solutions and non-verbal are research data from interviewing the informants.

Before observing teaching practices, the researcher develops structured observation sheets as research instruments. After having appropriate research instruments, he watched fifteen (15) informants when they practised teaching in class. The researcher observed fifteen (15) informants for as long as three days. When the researcher observed the teaching practices of fifteen (15) informants, he made notes relating to their teaching-learning activities in class. The results of teaching-learning practices are the researcher's notes as data.

After collecting data from surveying, interviewing, and observing fifteen (15) informants in teacher professional development, the researcher selects the data. The researcher used two research questions as references to choose which data are relevant and irrelevant for research purposes. After finding the relevant data, the researcher classifies them as relevant and irrelevant data. The applicable data are accurate; the researcher can manipulate them in analysing data.

Data analysis

The researcher implemented survey guidelines and interviews to analyse fifteen (15) English lesson plans. Three criteria of teaching-learning assessment development are social function or content of the text, generic structure, and linguistic features. Three criteria should become survey guidelines and interviews. Based on the survey and discussion results, the researcher identifies and classifies which lesson plan development has complete criteria (three criteria) and is not finished (one and two criteria).

The researcher observed English instructional assessments in teaching practices to analyse fifteen (15) English teachers. The analytical title has three (3) ability levels: English instructional assessment in pre-activity learning, core-activity learning, and post-activity learning. English teachers distributed the English instructional assessment in three stages comprehensively and adequately. The teaching-learning assessment process is integrated and interrelated.

The study results show that English teachers have three teacher ability levels: low, medium, and high. Teachers' low ability level is that teachers can develop English instructional assessments in the lesson plan and integrate English instructional reviews and technological pedagogical content knowledge with one learning activity in teaching practices. Teachers' medium role level is to develop English instructional assessments in the lesson plan and integrate English instructional reviews and technological pedagogical content knowledge with two learning activities in teaching practices. Finally, teachers' high level is to develop English instructional assessments in the lesson plan and integrate English instructional reviews and technological pedagogical content knowledge with three learning activities comprehensively in teaching practices.

RESULTS AND DISCUSSIONS

This section covers two (2) sub-results: developing English assessment in lesson plan and demonstrating English assessment in teaching practices. Two (2) sub-results are delivered in chronology.

Developing English Assessment in Lesson Plan

The research question is whether teachers can develop English instructional assessments in lesson plan development. These are the findings of the teacher's ability to build English instructional reviews in the lesson plan. Teachers' ability levels are divided into low, medium, and high. Teachers' low ability levels have five (5), middle: seven (7), and high: three (3). So, research question findings show that a teacher's low ability level is a teacher who can develop English instructional assessments with one criterion (linguistic features). A medium ability level is when the teacher can build English instructional reviews with two standards (linguistic features and generic structure). A high ability level is a teacher can comprehensively create English instructional assessments with three criteria levels (linguistic features, generic form, and social function or content of text).

It discusses the development of English instructional assessment in the lesson plan. Based on Indonesian Government Regulation – The Minister of Education and Culture No. 81 A, 2013, it is stated that there are at least five elements in developing a lesson plan. It consists of learning indicators, materials, methods, sources, and assessments. Among the five elements, each piece has a close relationship. This study focuses on learning assessment, which should be appropriate. The development of English instructional assessment should align with learning indicators covering social function, generic structure, and linguistic features. Teaching-learning indicators need three criteria: action verbs, not abstract verbs, measurable, and gradation of cognition.

Learning indicators should have a close relationship with English instructional assessments. Learning indicators are identified with specific learning purposes. To determine whether the learning purposes can be reached, English teachers should do learning reviews in teaching-learning activities. English teachers can develop accurate learning assessments by considering three criteria: action verbs, measurable, and gradation of cognition (Anderson & Krathwohl, 2001). Three bars of developing learning indicators are beneficial for English teachers to ensure that five elements in a lesson plan have a close relationship. This study focuses on the close relationship between learning indicators and assessments.

Measurable is the following criteria in developing teaching-learning indicators. Besides action verbs, measurable plays an essential role in building learning indicators and assessments. Measurable criterion is a necessity either in developing learning indicators or assessments. English teachers can develop English instructional evaluations if they have developed teaching-learning indicators by considering two criteria: action verbs and measurable. Developing learning indicators with two criteria can be used as learning assessment grids for English teachers, and they can establish teaching-learning assessment items based on them (learning assessment grids).

Cognition has six stages: remembering, understanding, applying, analyzing, evaluating, and creating (Anderson & Krathwohl, 2001). Six steps or gradations show the levels of difficulty in teaching-learning activities. When developing a lesson plan, English teachers should identify and understand the cognition level. English teachers should have three skills in literacy: reading, writing, and critical thinking in developing English instructional assessments in a lesson plan. Literacy is essential for English teachers to build an appropriate English instructional assessment in the lesson plan. English teachers should read basic competence comprehensively and carefully. When they read basic competence, English teachers should also read it critically. Basic competence is identical to a general learning purpose; if they fail to understand it automatically, they fail to develop learning indicators appropriately. Essential competence states complex and complicated general learning purposes; however, English teachers should have appropriate literacy.

Appropriate literacy is insufficient for English teachers to develop a proper English instructional assessment in lesson plans. English teachers should have additional knowledge and understanding of

integrating their knowledge of basic competence and cognition gradation. Integrating basic competence and cognition gradation is beneficial if English teachers can identify and understand four language skills: listening, speaking, reading, and writing. English four language skills can be classified as becoming said form consisting of listening and speaking; written form consisting of reading and writing. They can also be classified as receptive skills comprising listening and reading and productive skills comprising speaking and writing. The additional knowledge and understanding are beneficial for English teachers to develop English instructional assessment in the lesson plan. English teachers can find out a complete sense of basic competence. English teachers can find out the general learning purpose of basic competence. In basic competence, English teachers can find out English language skills should be taught, the kind of text as learning material, three elements of text: social function, generic structure, and linguistics features; and learning assessment should be developed. So English teachers can develop English instructional assessments in lesson plans comprehensively and appropriately.

Demonstrating English Assessment in Teaching Practices

The findings of research question two are that teachers can integrate English instructional assessment and technological pedagogical content knowledge in teaching practices. These findings show that teachers can integrate English instructional assessment and specialized pedagogical content knowledge in teaching practices. Teachers' ability levels are divided into low, medium, and high. Teachers' low ability levels have five (5), middle: six (6), and high: four (4). So, research question findings show that a teacher's low ability level is a teacher who can implement the integration between English instructional assessments and technological pedagogical content knowledge in one stage (pre-activity learning). A medium ability level is when the teacher can integrate English instructional reviews and specialized pedagogical content knowledge in two steps (pre-activity and post-activity learning). Finally, a teacher can comprehensively integrate English instructional assessments and technological pedagogical content knowledge at a high ability level with three stages (pre, core, and post-activity learning).

It discusses integrating English instructional assessments and technological pedagogical content knowledge in teaching practices. Integrating English instructional assessments and specialized pedagogical content knowledge, English teacher covers pre-activity of teaching, core activity, and post-activity. English teachers should distribute English instructional assessment in teaching practices in three stages of teaching activity. In general, assessment consists of two: assessment process and product. The assessment process consists of assessment formal and informal. This study focuses on the assessment process consisting of formal and informal. English teachers should integrate English instructional assessment with technological pedagogical content knowledge in teaching practices.

In pre-activity learning, English teachers begin the teaching-learning activity with a learning materials review and preview. After delivering greetings, teachers can provide some questions to their learners related to last previous learning materials. Teachers can identify learners' responses as teaching-learning feedback to identify learners' comprehension of previous learning materials. This activity is used to become an entry of teaching-learning activity for teachers. After finding positive responses from learners, teachers can continue the following teaching-learning activity by delivering a teaching-learning preview. On this occasion, teachers can provide teaching-learning media to attract learners' attention. By using teaching-learning media, teachers can provide some questions relate to them (teaching-learning media). After finding out various responses from the learners, the teacher finally delivers questions to the learners to guess the next topic in this meeting. The learners make various guessing; teachers finally provide information on what issue will be addressed in spoken or written form.

The following activity is the core activity of teaching. In this stage, teachers deliver learning materials and ask learners to read and understand them. When the learners read learning materials, teachers turn around to check the learners' activity and provide some questions related to the learning materials. Teachers ask learners if they have teaching-learning materials problems. Teachers try to integrate teaching-learning activity and formal-informal assessment (deliver some teaching-learning material problems).

Still, in the core teaching activity, teachers begin to guide the learners to discuss the teaching-learning materials. To all learners, the teacher said that learners, let us discuss the teaching-learning materials. Well, pay attention to the title of the text. Learners, is the title a sentence, clause, phrase, or word? Some learners try to answer the teacher's question. The teacher actively gives a short response, such as ok, "Are you sure, and all right." The teacher repeats once more related to the text's title; learners, please pay attention to the text's title. Teachers ask learners to identify the text's title, with delivery guiding how many words are the text's title. Well, learners, the title is more than one word. The teacher asks for learner once again, is it a sentence, clause, phrase, or word? The majority of learners answer a term. "You are right, learners," the teacher responded by showing his thumb is up. The teacher delivers guidance to the learners as elaboration, exploration, and confirmation of teaching-learning activity.

The following teaching-learning materials are the body of text. It consists of some paragraphs, each of which has its role and function. This study focuses on descriptive text (short text) among five (5) texts consisting of interpersonal, transactional, functional, quick, and long; this study focuses on descriptive text (short text). The descriptive text consists of two main elements in the body of the text, identification and description. Teachers can guide the learners to pay attention to the first main element in descriptive text. To begin a discussion, the teacher can deliver simple questions to the learners, which continue his feedback using the question "Are you sure, students?" Learners' responses are "Yes, sir, we are." A teacher said the class identify the first paragraph and then find the identification characteristic in the first paragraph. Well, sir, one of the learners is raising his hand.

Moreover, he said it consisted of general information about the specific object. They are who or what, where, when, and how the particular thing is. All right, student, "You are right."

The following discussion is the description of the specific object. Well, student, it is time to discuss the teacher's next paragraph. The teacher delivers a question, "What does this paragraph tell the reader about?" Moreover, the teacher continues with a question, "Any ideas, students?" Yes, sir, responds one of the learners; it tells the readers about the physical appearance of the specific object (a male artist), such as the color of skin, face, the form of the body, and tall of the thing. So, it relates to a physical object. Well done, student, said the teacher. "You are right, the teacher said with his body language." The teacher continues the subsequent discussion by delivering a question: What about the next paragraph? What does it tell the readers about students? Students respond that they pay attention to the next section. "Idea, please?" said the teacher. "Is it difficult, students?" Again, the teacher's question is. One of the learners says, "I try to answer it, sir" Yes, you are. This paragraph tells the readers about the characteristics of the specific object (a specific artist), such as humility, intelligence, politeness, and generosity. "You are right," said the teacher. The teacher told the students that they could find the answer from this paragraph.

Students, the teacher said that the class pays attention to the following paragraph. "What does the paragraph tell the readers, students?" Students keep silent. The teacher continues with a question, "Does anybody know?" One of the students in the middle row raises his hand; " I try to answer, sir." It tells us about the quality of the object (a male artist). This paragraph tells us about an artist's qualities, such as being educated, having high social status, and having an elevated taste. "Perfect answer," the

teacher said. So, it comes from the first paragraph; the teacher makes a review, and it tells us general information about the artist, such as who, when, where, and how he is. The second paragraph tells the readers about the description's physical appearance, such as skin color, age, face, tall, and body form. The third paragraph describes the male artist's characteristics, such as humility, intelligence, politeness, and generosity. The fourth paragraph tells the readers about the quality of male artists, such as an educated person, high social status, and high taste. So, the teacher integrated teaching-learning activity and assessment process—the teacher guided the learners by using questions and answers to understand the content of the text. Elaboration, exploration, and confirmation are used to discuss the content of the text.

CONCLUSIONS

Based on the results and discussions, two conclusions are developing English instructional assessments in lesson plans with low, medium, and high levels. Implementing English instructional evaluations has three abilities low, medium, and high. With English instructional low-quality assessments, English teachers can develop English instructional reviews with one criterium (linguistic features). English teachers can develop English instructional assessments with two criteria (linguistic features and generic structure) at a medium level. The English teacher can comprehensively develop an English instructional assessment with three criteria (linguistic features, generic form, and social function or text content) by having a high level. The implementation of the integration between English instructional assessments and technological pedagogical content knowledge has the low ability; English teachers can implement them in one stage (pre-activity learning). In a medium capacity, English teachers can integrate English instructional assessments and technological pedagogical content knowledge in two steps (pre-activity and post-activity learning). English teachers can comprehensively integrate English instructional reviews and specialized pedagogical content knowledge in three stages (pre, core, and post-activity learning) by having the high ability.

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