



# Designing pedagogical narrative stories: Delving deeper into problem-solving skills of pre-service English teachers

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Educating Pre-Service English Teachers (PSETs) to be ready to face challenges is a response to the fast-changing globalized world. Hence, preparing future teachers to apply problem-solving skills in dealing with teachers' challenges in the classroom is necessary. This study was intended to design a set of pedagogical narrative stories which enquire problem-solving skills of PSETs. The pedagogical narrative stories were designed as a supplementary material in micro teaching class to help PSETs understand the complex issues of teaching and learning process. This study was based on ADDIE model, comprising five phases, namely Analysis, Design, Development, Implementation, and Evaluation. The designed material product consists of six units of teachers' real life in adapted stories. Each unit contains critical discussion and reflective activities, namely: Story, Individual Reflection, Group Sharing, Class Discussion and Resolution. The product trial was field-tested in the micro teaching class by nineteen senior PSETs. The final product was validated by subject matter expert who has credibility in writing English learning books. The validated outcome showed that the supplementary materials are appropriate for PSETs in micro teaching class. The finding is projected to construct positive awareness on the importance of problem-solving skills to enhance PSETs' competence in dealing with classroom problems by answering questions more critically and reflectively. Next, problem-solving skills are also expected to optimize PSETs higher order thinking skills by being a decision maker in multifaceted challenges in the classroom.

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## INTRODUCTION

Problem-solving has unquestionably become a fundamental skill in the 21<sup>st</sup> century learning. This statement is particularly most relevant for teachers and Pre-Service English Teachers (PSETs) as it is fundamental for them to acquire problem-solving skills in dealing with classroom challenges. Several studies corroborate that teachers' ability in solving problem is an essential component in facing the 21<sup>st</sup> century teaching and learning challenges [Zahrani and Elyas \(2017\)](#). Meanwhile, [Yen and Halili \(2015\)](#) are right in saying that problem-solving skill is used in knowing how far the teacher is able to respond the existing challenges in teaching and learning process. Thus, since this skill is required by PSETs in coping with the imminent problems they will encounter, PSETs need to be equipped with supplementary materials with real classroom problems before they are placed in teaching practice to advance their problem-

solving skills. In fact, there are only a few research studies on problem-solving materials provided to PSETs. S [Setiawan et al. \(2018\)](#) argue on their research that most pre-service teachers, especially in Indonesia are still unfamiliar with a problem-solving technique in the classroom learning process. This situation is crucial to discuss since it is closely related to how PSETs develop their teacher professionalism. Likewise, [Aimah et al. \(2017\)](#) state that improving teacher professionalism is one of the major endeavours to develop the learning quality since teachers are the fundamental aspect to determine the quality of education system. Therefore, appropriate supplementary materials combined with PSETs' needs are imperative to gain knowledge of certain competencies.

Other studies took more focus on pedagogical competencies that should be mastered by teachers. For example, [Hakim \(2015\)](#) specifies his study on defining pedagogical competencies as the teachers' ability to conduct educational learning, facilitate the development of learners' potential, communicate with students effectively and take action to improve the quality of reflective learning. In Indonesia, it is an essential factor for teachers to have the expertise, especially in managing students' learning process and contributing the students' development because of the ever increasing technology and communication advancement these days [Ramlawati et al. \(2018\)](#). By realizing the importance of pedagogical competencies, teacher competency test is carried out to see the extent of teacher performance.

Based on Indonesia Ministry of Education, the result of the teachers' pedagogical competency test in 2019 is at the value of 50.4. Derived from the data, the teachers' pedagogical performance was not yet maximum since the average score of teacher competency test is 54.1 out of 100. Hence, the development of pedagogical competencies should be improved by giving various approaches for pre-service teachers, for example by becoming more actively engaged in micro teaching class process ([Rahman, 2014](#)). One of the approaches which are related to the future needs is developing teachers' higher order thinking skill, which includes teaching problem-solving skills to sharpen up teachers' capability to solve problems in a form of reflective activities ([Kemdikbud, 2020](#)). Therefore, PSETs who join micro-teaching class are prepared to become professional teachers who can deal with the full twist and turn situations by equipping the problem-solving supplementary materials.

In this study, the stories are formed in narrative stories that portray unresolved and thought-provoking situations and actively engage PSETs to build up a solution to the problems. [Jonassen and Hernandez-Serrano \(2014\)](#) affirm that stories are the most powerful feature for describing essential knowledge that is related to the problem-solving skills. In delivering the value of problem-solving skill through narrative stories, the researchers used the concept of Problem Based Learning (PBL) by ([Barrows, 1985](#); [Kauchak and Eggen, 1998](#)) and summarized PBL lesson planning into two steps. The first step was identifying the learning objectives, topic, and problem of the stories. The story was based on the accounts of teachers'

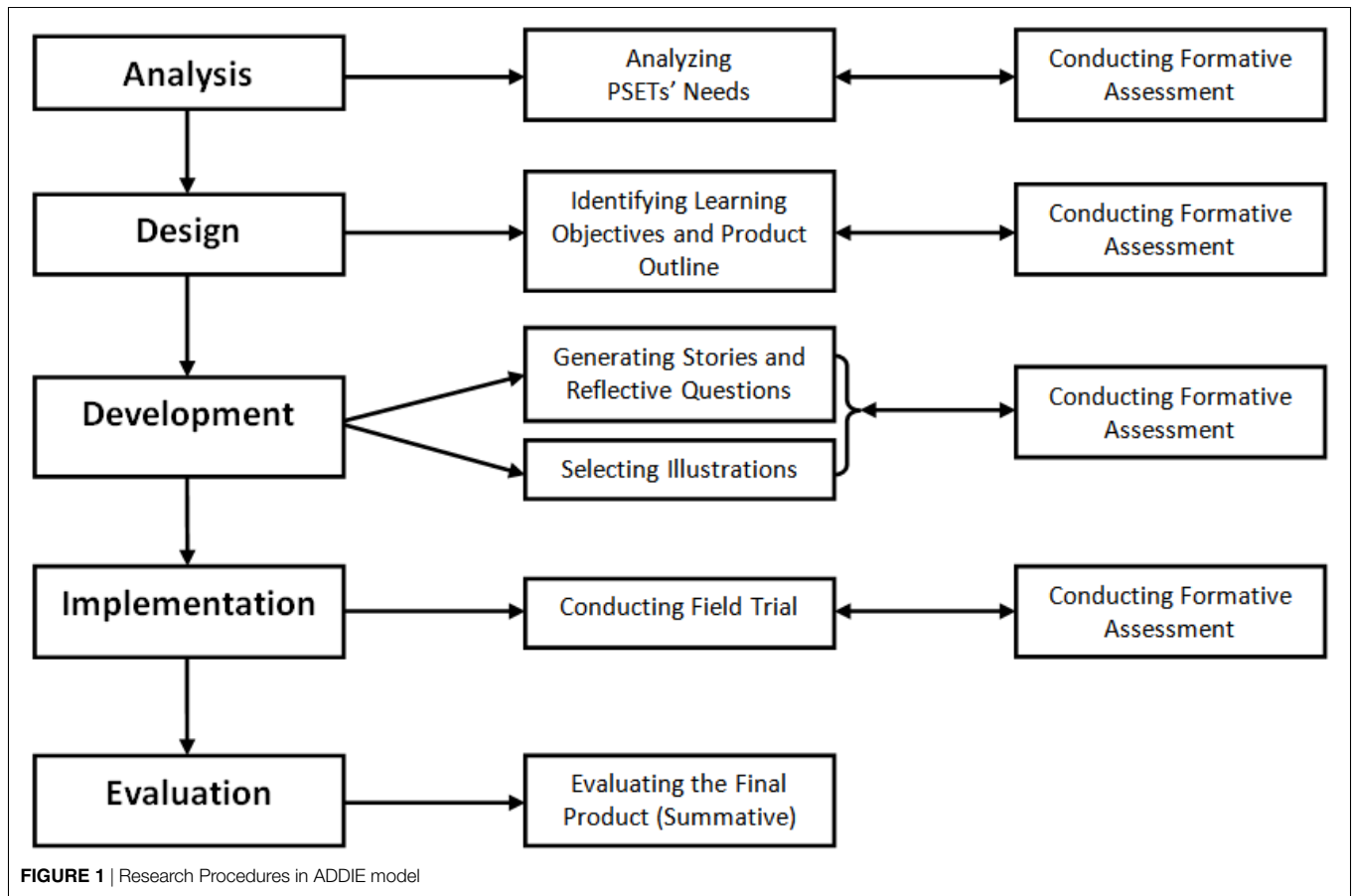
voices from their authentic experiences that are expected to inspire the reader. The researchers constructed the pedagogical narrative stories based on the situations experienced by other teachers to examine how PSETs think through specific situation. Then, the second step was assessing the follow up activity by considering what types of activities to be used in class. Those steps were then employed in developing the narrative stories by making the preliminary product.

The previous studies show that the role of narrative stories is broad. Yet none of the references discusses the research on designing pedagogical narrative stories for PSETs in developing problem-solving skills. This is another reason why the researchers intended to design these materials. The intention of this study is in line with the research of [Lozano and Lozano \(2017\)](#) who argued that the sustainability of higher education development should focus on the appropriate design materials for the optimal benefits of the students. There are at least three benefits of this study. First, this design can help PSETs understand the complex issues of teaching and learning process. Second, the pedagogical narrative stories can guide PSETs to develop their problem-solving skills by answering questions more reflectively and critically. Third, PSETs can also indirectly learn to be a decision maker in complex situations that are likely to occur in the classroom by optimizing their higher-order thinking skills. By taking these benefits into account, the researchers' main goal is to design a set of supplementary materials packaged with pedagogical narrative stories. The research question is formulated as follows: How is a set of pedagogical narrative stories designed to hone problem-solving skills of PSETs?

## METHOD

This study employed ADDIE model facilitating a practical framework for designing pedagogical narrative stories to hone problem-solving skills of PSETs. The research question was answered through the selected steps of ADDIE instructional design as it provides a critical component in each phase ([Branch, 2009](#); [Cheung, 2016](#)). To know the credibility of the design materials, the researchers used formative assessment to evaluate data from each phase for continuous design improvement. In the last phase, a summative assessment was conducted to check the whole practicability of the last edited version. Both assessments were incorporated into the research procedures through instructional design development. The procedure of this study was illustrated in [Figure 1](#).

In designing pedagogical narrative stories, this study used five phases of ADDIE model along with selected steps: 1) Analysis, the phase for examining the PSETs' needs; 2) Design, the phase for creating the product framework by identifying the learning objectives and product online through narrative stories for more effective delivery; 3) Development, the phase for presenting the factual stories along with reflective questions and selecting illustration as the supporting media of the prod-



uct; 4) Implementation, the phase for applying the instructional design through field trial; 5) Evaluation, the phase for evaluating and measuring the final product design.

This study was conducted in English Language Education Study Program (ELESP) Sanata Dharma University. The subjects of this study were put into a different phase of ADDIE instructional design as each phase required data. The subjects and the data gathering technique instruments were described in **Table 1**.

The English Lecturers, English Teachers, PSETs, Head of Teaching Practicum Program, Teacher Professional Development Expert and Subject Matter Expert were invited with purposive sampling based on their expertise to obtain valid data, whereas the nineteen PSETs were recruited for implementation phase with cluster sampling by considering the time and schedule. The PSETs voluntarily participated with no power relation was exerted to recruit them in this research.

The data from interview and questionnaire were used to give the interpretation of each phase and to show whether the design was acceptable or not. The questionnaire was adopted from (Delisle, 1997) to assess whether the pedagogical narrative story can facilitate PSETs in civilizing their problem-solving skills by linking the PSETs' needs and learning goal. The Likert scale technique was used to collect the data as this instrument

can accommodate various participants' responses towards the statement. Additionally, the participants were invited to give comments and suggestions.

This research utilized qualitative analysis techniques. The data was collected from the interview and questionnaire then analyzed by using a qualitative way in descriptive analysis (Lichtman, 2012). The descriptive analysis consisted of data transcribing, coding, categorizing, and conceptualizing. To find out validation from the data, the researchers used the member checking proposed by Shenton (2004) to ensure the trustworthiness of the data whether the interview transcript was in accordance with what was conveyed by the participants. The strategy was carried out to maintain the authenticity of the data and to anticipate misinterpretation from the writers to the participant's data.

## RESULTS AND DISCUSSION

This part deals with the steps of designing pedagogical narrative story in delving deeper PSETs' problem-solving skills. The discussion presents the elaboration of five phases of ADDIE model: Analysis, Design, Development, Implementation, and Evaluation.

**TABLE 1** | Subjects of the Study with Instruments

Phase	Subjects	Instruments
Analysis	English Teachers, English Lecturers	Interview
	PSETs	Interview
	The head of Teaching Practicum Program (as evaluator)	Interview
Design	Five English Lecturers and five English Teachers (as evaluators)	Questionnaire
Develop	Teacher Professional Development Expert (as evaluator)	Interview
Implementation	Nineteen PSETs (micro teaching students)	Questionnaire
Evaluation	Subject Matter Expert as evaluator	Questionnaire

## ANALYSIS PHASE

Interviews were conducted as a part of information collection to obtain accurate data and to identify the urgency of this study. English Teachers, English Lecturers, and PSETs were recruited to answer open-ended interview with two initial questions to discuss, namely: (1) What do PSETs need to do to improve their quality/skills as teacher candidates? (2) What kind of inputs or feedbacks should PSETs learn during the teaching practicum?

Through these questions, the researchers analysed the PSETs' needs based on the interview result. The outcomes were (1) the majority of PSETs experienced difficulties in pedagogical competencies, especially in material and classroom mastery; (2) there were some moments where the school complained about the readiness of practicing teacher during the teaching practicum; (3) PSETs needed to learn how to deal with an unexpected incident beyond teaching materials in class; (4) teacher candidates from English Language Study Program (PSETs) currently had to compete with teachers from English Literature. Therefore, PSETs must be equipped with soft skills which later became their foundation as teachers. One of the skills that could be given is problem-solving skills; (5) PSETs were trained to master knowledge, but their self-mastery of the situation in the classroom was still low. PSETs were easily discouraged in facing problems, this situation made them confused about what they had to do in dealing with their issues. From the points obtained during the interview, the supplementary material was required to support the potential teachers in addressing problems they faced in the classroom. Thus, it is necessary to prepare future teachers who could apply their problem-solving skills in handling obstacles in a school context.

The researchers also discovered deeper questions to the participants related to the PSETs' problems faced in teaching process and the ways of responding the problems. After their stories were collected, the researchers listed the possible topics by identifying the problem faced by PSETs. The researchers found twelve stories' topics which were categorized into four problem themes proposed by (Soleimani and Razmjoo, 2016). Those themes were instructional problems, behavioural prob-

lems, ethical problems, and psychological problems. The problems raised from the participants were based on the factual and real stories, which had a strong correlation with PSETs' pedagogical challenges.

The interview result was checked and evaluated to see whether it met the PSET needs by the Head of Teaching Practicum as a formative evaluation. The Head of Teaching Practicum argued that problems faced by the teacher candidates mostly came from their unawareness in solving problems. The problems appeared from several causes. One of them was about teachers' pedagogical challenges, which often render them to feel unprepared for being teachers at school. Hence, they needed to be equipped with skills that had not been taught in micro teaching class through problem-solving supplementary materials.

## DESIGN PHASE

In the second phase, the researchers used the concept of Problem-Based Learning (PBL) (Barrows, 1985; Kauchak and Eggen, 1998) to identify the learning objectives and the product outline by integrating the analysis result. First, the researchers identified the learning objectives, which in line with PBL principles by Savin-Baden (2003, p.18). These are (1) to identify the problem in the story, (2) to explain the first impression about the problem, (3) to generate ideas in solving problem, (4) to discuss the problem in groups and underline the main points of solution from other group members, (5) to justify the underlying beliefs to cope with such problems in the future. Second, the researchers identified the product outline by listing the possible topics along with the problem themes presented and wrapping up in a form of questionnaire. The questionnaire was developed with a Likert scale ranged 1-5 which illustrated (1) not feasible, (2) not necessary, (3) neutral, (4) necessary, (5) feasible.

To clarify the direction of the designing process, the researchers comprised the learning objectives in the first sheet of the questionnaire. Five Micro Teaching Lecturers and five English Teachers were invited to fill the questionnaire and give suggestion as a formative evaluation to see the urgency of

the topics, especially for teachers' pedagogical improvement. The researchers used the two points of views from the micro teaching lecturers and the English teachers to look at the topic urgency from two sides. Micro teaching lecturers distinguished the topics in terms of materials compatibility for micro teaching class. Meanwhile, English teachers distinguished the topics in terms of teachers' teaching obstacles in class.

From the twelve topics and problems provided in the questionnaire, the respondents were inquired to identify the topics which were suitable for PSETs in dealing with future problems in the school context. The following Table 2 below is the list of top six topics chosen by the respondents.

The average score of the feasibility degree of the six chosen topics above was 4.2, indicating the topics were appropriate to be developed in the next phase. Based on the data obtained, the ethical problem that talked about breaking the rules was the foremost topic chosen by respondents. Ethical problems related to the student discipline and the inner relationship between teacher and student are cases that often occur, especially for teachers who have an intersection between school regulation and their conscience as a teacher.

The problems given here were arranged in the form of ill structured way which is categorized as problems that have more than one solution (Kauchak and Eggen, 1998). By doing so, students were required to be more active in developing their critical thinking to provide solutions to existing problems effectively. Hence, these six topics chosen became the blueprint for the researchers to develop the preliminary product.

## DEVELOPMENT PHASE

After composing the product framework, the researchers organized the set of real learning materials by generating stories, generating reflective activities, and selecting illustration. The stories were taken from the chosen topics and developed into narrative stories as a reflective activity to explore diverse viewpoints by creating a non-judgmental environment for the topic raised in a story. The following was a description of how the researchers developed the product.

First, the researchers generated the stories by sorting the topics chosen into four themes, namely: instructional problem, behavioural problem, ethical problem, and psychological problem (Soleimani and Razmjoo, 2016). By categorizing these themes, it is aimed to help PSETs understand the problems and topics effectively. Then, these topics were developed into an appropriate title to open PSETs' imagination before starting reading the story. The researchers selected the title that was not straight forward leading into the content so that the story was not easy to guess Juzwik and Ives (2010). So, this preliminary product has six units which consist of six real story titles as described in Table 3.

After getting the appropriate title in each unit, Figure 2 presented the explanation on how the researchers generated the pedagogical narrative story by starting to give clear instruction

in code [a]. This instruction taught the readers how to be in others' position then took steps if they were in that position. Code [b] described the character and the situation of the story (b). Then, code [c] explained the problems or obstacles faced by the character.

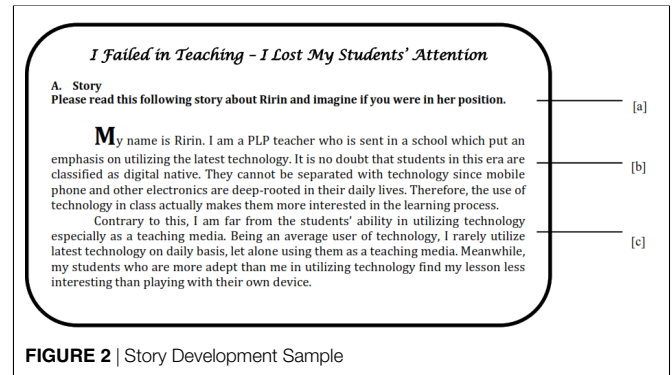


FIGURE 2 | Story Development Sample

Figure 7 illustrated the story complication and resolution. The story complication is in the code [d] where the researchers started using dictions in order to make the readers feel the tension. Code [d] presented where the problem and obstacles experienced by the character began to be elaborated. To end the story, the researchers drew on resolution in code [e] by using ill structured way which allows the problem to have more than one solution. PSETs are required to be more active in developing their critical thinking to provide effective solutions which required trust, inspiration, and empathy on the existing problems. The story was then continued to the next reflective questions to apply problem-solving skills through the concept of collaborative way.

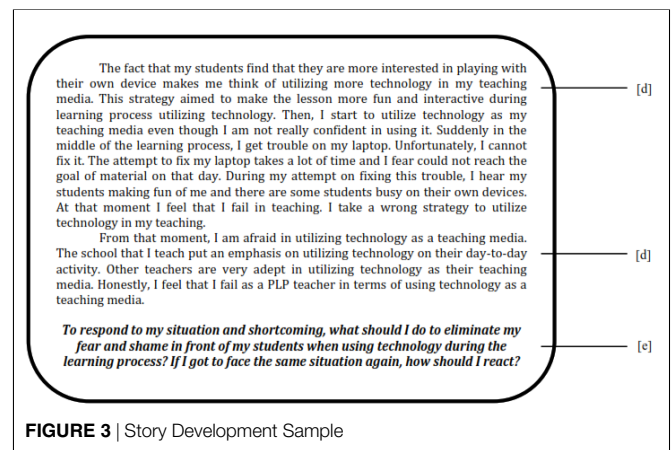


FIGURE 3 | Story Development Sample

Second, the researchers generated the reflective questions into learning activities by adjusting the learning objectives. The learning objectives were accomplished into three cycles of reflection consisting of (1) self-reflection or individual reflection that ask PSETs to take notes of some points of the story that was valuable for them. At this stage, PSETs are also asked to identify the problem of the story; (2) Group Sharing requires

**TABLE 2 | TABLE 2** |Topic Validity

No	Topic (s)	Five Micro-teaching Lecturers Average Score	Five English Teachers Average Score	Total %
1	<b>Ethical Problem:</b> Breaking the rule	4.2	5	92%
2	<b>Psychological Problem:</b> Teachers' mental block	4.4	4.4	88%
3	<b>Instructional Problem:</b> Wide Learning Gap	3.8	4.4	82%
4	<b>Behavioural Problem:</b> Avoidance	4.4	4	84%
5	<b>Instructional Problem:</b> Learning Distraction	4.4	3.8	82%
6	<b>Behavioural Problem:</b> Troubled Student	3.8	4	78%

**TABLE 3 |** Developed Story Titles

No	Topic (s)	Story Title	Unit
1	<b>Instructional Problem:</b> Wide Learning Gap	My Students Have Different Needs	Unit 1
2	<b>Instructional Problem:</b> Learning Distraction	I Failed in Teaching – I Lost My Students' Attention	Unit 2
3	<b>Behavioural Problem:</b> Avoidance	My Student says "I don't want to be here!"	Unit 3
4	<b>Behavioural Problem:</b> Troubled Student	Sitting on the Dilemma	Unit 4
5	<b>Ethical Problem:</b> Breaking the rule	When School Policies Meet Conscience	Unit 5
6	<b>Psychological Problem:</b> Teachers' mental block	Test, Test, and Test	Unit 6

the PSETs to make a group of three or four, then each member shares what they have got from the self-reflection. Each member of the group listens to the others' response and takes notes of every member's response. The PSETs may jot down some interesting notions or sentences from each of the group member; (3) Class discussion is an activity where PSETs shares any lesson they have got from the group sharing. These three reflection cycles are then closed with their own Resolution. This resolution aims to familiarize them with rethinking what they have learned and navigate what they will do in the future. To sum up the learning objectives, the researchers developed the design materials into six units consisting of five learning activities, namely: Story, Individual Reflection, Group Sharing, Class Discussion, and Resolution.

Third, the researchers selected the illustration as the supporting media. To support the story and to make it more alive, some pictures were added to visually contextualize the situation (Lee et al., 2015). The pictures used in this design were illustrated in [Figure 4](#).

Visualization could bring the soul of the story (Fariyatul and Bandonu, 2017; Hsiu-Chih, 2008) and help the readers to predict the story before reading it. From those pictures, PSETs were expected to imagine the stories' plot more precisely (Jonassen and Hernandez-Serrano, 2014). The pictures were presented in the pre-activity of the lesson plan along with the preliminary product which was used in the implementation phase process.

For continuous design improvement, the researchers sent

the preliminary product to the Teacher Professional Expert as a formative assessment. The expert suggested that the stories were still lacking in the emotional sense. Therefore, improving the selection of the diction in the stories could provide more senses of engagement to the target readers. The reflective questions and the illustrations should provide the critical instruction so the PSETs can hone their skills in solving problems.

## IMPLEMENTATION PHASE

After the preliminary product was revised based on the expert suggestions, the product was field tested in the real micro teaching class consisted of nineteen PSETs. The field trial was conducted six times for all of six units in one class. By conducting field trial, the learning product was assessed in terms of the product practicability. The researchers used questionnaire with range 1 to 5 of the Likert scale, which illustrated 5 (Very Good), 4 (Good), 3 (Fair), 2 (Poor), 1 (Very Poor). The specification of the questionnaire for PSETs was described in [Table 4](#).

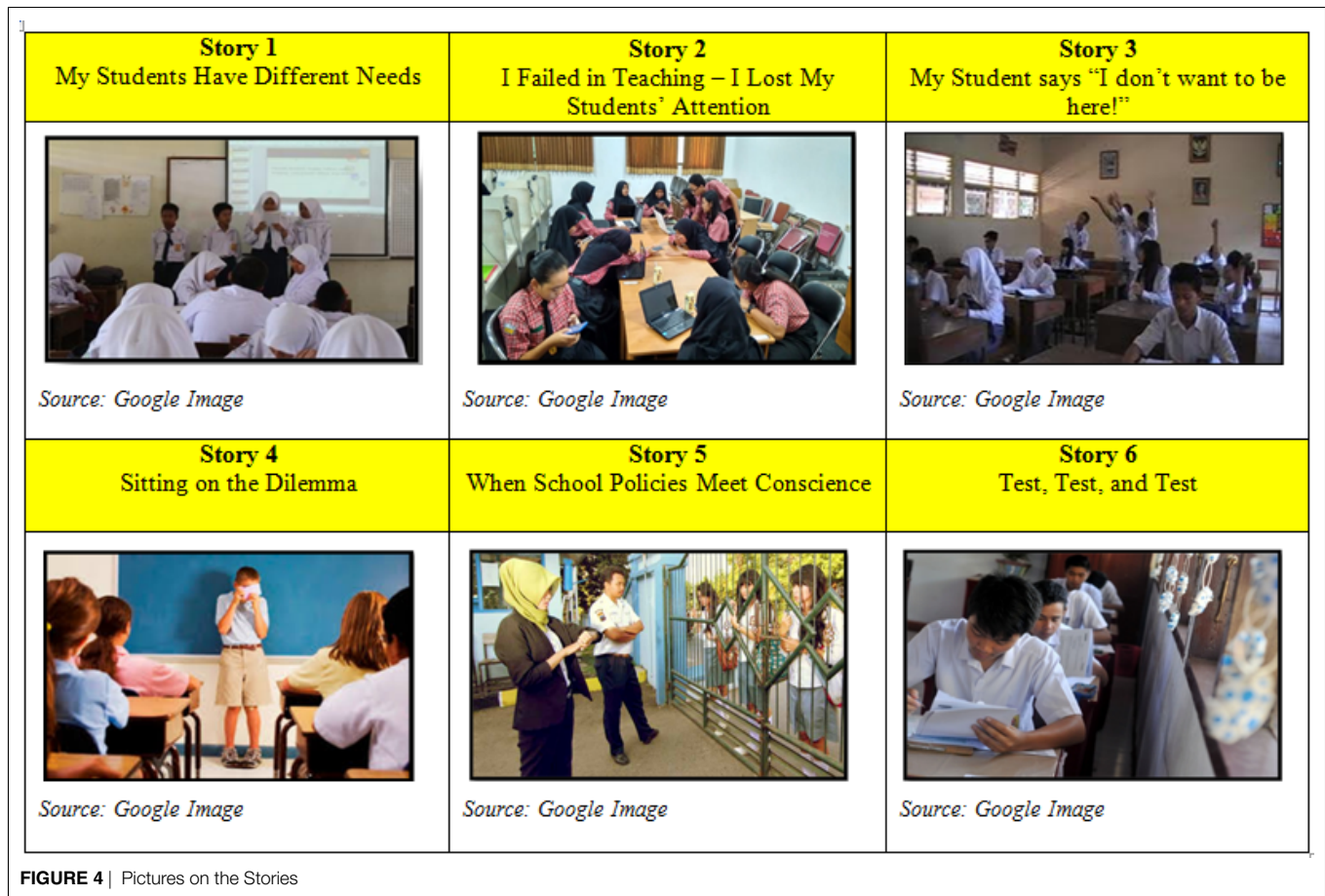


FIGURE 4 | Pictures on the Stories

TABLE 4 | Specifications of Design Validation Sheets by PSETs

Aspect (s)	Number(s) of Statement
Story Plot Clarity	Q1
Story Engagement	Q2, Q3
The appropriateness between story and PSETs’ needs	Q4
The appropriateness between reflective activities and PSETs’ needs	Q5

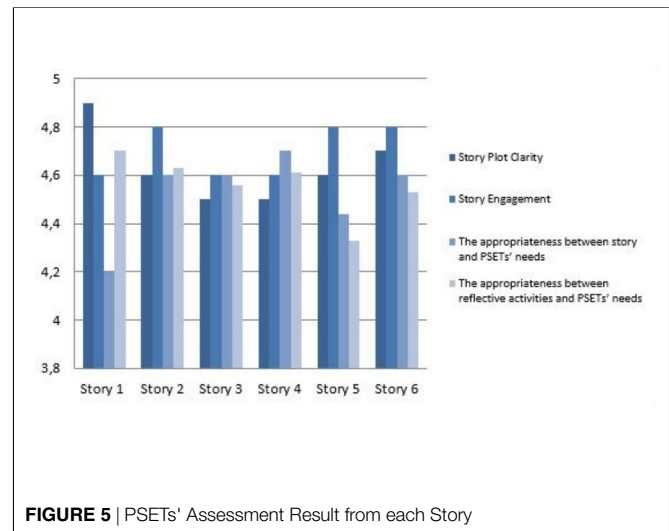


FIGURE 5 | PSETs' Assessment Result from each Story

Nineteen PSETs participated in the micro teaching class and filled the questionnaire as a formative assessment along with their opinions and suggestions. The results of the four aspects in the product assessment in Figure 5 indicate that the average score of story plot clarity was 4.63, story engagement was 4.70, the appropriateness between story and PSETs’ needs was 4.52, and the appropriateness between reflective activities and PSETs’ needs was 4.56. The general average for all stories was 4.60. From these results, the story engagement was considered as the best aspect for the participants.

The PSETs gave positive feedback about the product design. The stories were packaged in the relevant problems, so they could feel the main character’s feelings. The story entitled “I Failed in Teaching: I Lost My Students’ Attention” was the most relevant story that they might have.

**The story is so me.** I am so nervous when

I deal with technology. Moreover, I will be more nervous when I meet my students later. By doing this activity, I know what I should do.

*P1, the questionnaire*

The story presented was short and understandable, which did not make them bored in reading it. The problem raised in each story encouraged the PSETs to think more critically and reflectively, which was enjoyable for them.

.... this material should be provided in another class too I guess...

*P2, the questionnaire*

The story positioned me not only as a teacher but also as a student. I have been in a student's position. Both had difficult choices.

*P3, the questionnaire*

The story engagement was deeply felt by PSETs. On the other hand, some suggestions were also given by PSETs related to the content of the stories. The story entitled "Sitting on the Dilemma" was suggested to add more explanation about dysarthria (speech disorder) so the readers can feel the dilemma faced by the main character. There were some vocabularies that they have not heard before, preventing them from understanding the story plot more comprehensively. The researchers then undertook the last minor revisions based on PSETs feedback in adding some sentences and modifying some words to secure more lively senses of the stories for the readers. Next, for the last ADDIE phase, the researchers went through the summative assessment to validate the final product.

**EVALUATION PHASE**

The final evaluation assessment was conducted by a Subject Matter Expert (SME) who has credibility in validating English learning materials. Both evaluators validated the final product by scoring the product through a questionnaire as a summative assessment. The researchers performed the revisions through formative assessment in the previous phases to generate the design improvement. There was no revision process in the summative assessment since it was the final product (Branch, 2009; Cheung, 2016). The researchers used questionnaire with range 1 to 5 of the Likert scale, which illustrated 5 (Very Good), 4 (Good), 3 (Fair), 2 (Poor), 1 (Very Poor). The questionnaire contained ten statements to assess each unit of the product. Some spaces were also provided for SMEs to give comments and suggestions. The specification of the questionnaire for SMEs was described in Table 5.

The result of six aspects in the final product assessment showed that the average of the content linguistics was 4.70, the story engagement was 4.78, the correlation with the problem

in the school context was 4.72, the appropriateness between reflective activities and problem-solving skills enhancement was 4.90, the problem clarity was 4.64, the appropriateness between story and learning goals was 4.70. From the score presented, the final product was categorized as a very good level and was classified as feasible and practical. Figure 6 and Figure 7 presented the sample of final product display after going through several stages of revision.

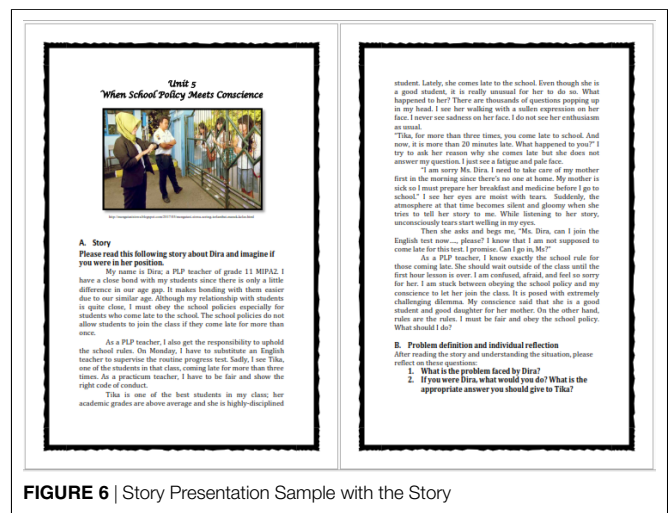


FIGURE 6 | Story Presentation Sample with the Story

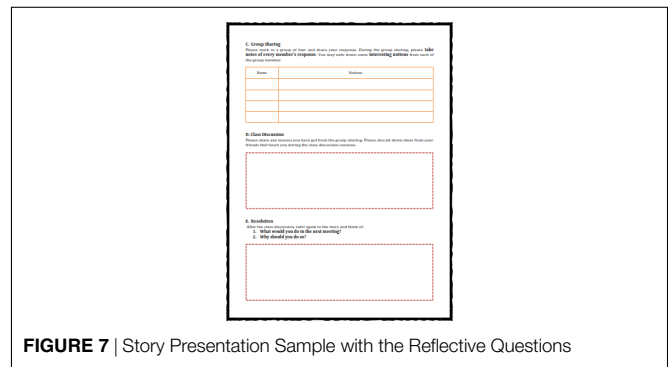


FIGURE 7 | Story Presentation Sample with the Reflective Questions

In line with the Subject Matter Expert's feedback, the diction, the emotion in words, the visualization through pictures, and follow up activities were very influential for PSETs in interpreting stories into their problem-solving skills. The expert stated that PSETs are expected to know themselves as a teacher and learn how to maintain themselves in a certain situation by having the ability to interpret the stories and solve the problem presented in this product. From the average score and the comments from the SME, the pedagogical narrative stories were considered practical since it is able to develop PSETs' problem-solving skills in facing the twist and turns of future situations when they encounter a real teaching context.



**TABLE 5** | Specifications of Design Validation Sheets by SMEs

Aspect (s)	Number(s) of Statement
Linguistics aspect of the content	Q1
The story engagement	Q2, Q3
The correlation with real problem in the school context	Q4
The appropriateness between reflective activities and problem-solving enhancement	Q5, Q8
The problem clarity	Q6
The appropriateness between story and learning goals	Q7, Q9, Q10

## CONCLUSION

This study aimed to design a set of pedagogical narrative stories as supplementary materials in micro teaching class by considering the roadmap of Indonesia Ministry of Education and Culture to facilitate PSETs develop problem-solving skills.

There were some conclusions written as follows: First, the product was designed using ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model. The formative assessment was done at the end of analysis, design, development, and implementation phase. Meanwhile, summative assessment was done at the evaluation phase. The product of pedagogical narrative stories concerning with instructional problem, behavioural problem, psychological problem and ethical problem were packaged into six real stories along with critical discussion and reflective questions.

Second, the preliminary product was field tested in the real micro teaching class with the average score of 4.60. Based on the feedback, there was a minor revision on the story content. The final product was validated by an SME, resulting the average score of 4.70 and was classified as a very good

level for supplementary materials in micro teaching class. This study is expected to contribute to at least three parties, namely the English Education Study Program, PSETs, and future researchers. The study program can apply this product as a supplementary material for micro teaching class. PSETs can also be facilitated with factual classroom problems to develop their problem-solving skills. As for future researchers, it is vital to continue exploring the area of designing more varieties of reflective narrative stories to develop PSETs' problem solving skill. The meaningful narrative varieties as such have potentials to genuinely challenge PSETs' knowledge and imagination and elicit their maximum creativity and critical thinking in coping with the ever-changing classroom dynamics.

## ACKNOWLEDGMENTS

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