CHAPTER 3

METHOD

In this chapter, the research design of this present study is discussed through explaining the research procedure of developing AA model using design-based research embracing the justification of using this kind of research design. This research design guided how data were collected through the entire research process. Then, understanding the research context and negotiating the access is described in the section of site and participants in which the researcher describes the process of gaining and negotiating access to the field and the profiles of research participants and context of the research. Besides, this chapter details the research procedures and data collection methods along with the instrumentation as well as qualitative data analysis. In other words, this chapter provides contextual and methodological accounts of the present study.

3.1 Research Design and Procedures

The research questions of the study examined the current situation of the implementation of AA (context analysis), model development, and teachers’ perspective on the effectiveness of the developed model in a particular context. The first research question focuses on the current situation of the AA implemented by the teachers. Then, the second research question focuses on the process of design and development. Meanwhile, the third research question focuses on the effectiveness of the developed model viewed from the teacher’s perspectives. These questions can be answered through research and development activities as suggested by Gall, Gall, and Borg (2003) as the study developed a model of implementation of AA drafted in a guideline. However, the questions also open up the qualitative inquiry in the form of a case study (Yin, 2003) as the study examined the non-hypothetical question and naturally occurring phenomena as well as attempted to understand various constructions of meaning and knowledge situated in a school setting (Stake, 2010).
For those reasons, the study employed a Design-Based Research (DBR) method (see Baumgartner, et al., 2003; Bell, Hoadley, & Linn, 2004). This is based on several criteria applied in the process of this study: this study went beyond merely designing and testing particular intervention; this study responded to an emergent feature of appropriate setting captured from context analysis; and this study involved the collaboration of several parties to produce meaningful changes in the context of assessment practice. The activities of design-based research in this study adapted the design-based research framework, namely the Integrative Learning Design Framework (ILDF) model proposed by Bannan (2009). This included informed exploration, enactment, and evaluation in which the cycles were not always in a linear fashion, but rather a particular phase of one cycle which would intersect with a different phase of the subsequent cycle. The following figure is the process of developing the model of AA used in this study.

![Figure 3.1 DBR Phases: Informed Exploration, Enactment, and Evaluation](image)

The procedures conducted in each phase of DBR, namely informed exploration, enactment, and evaluation are outlined in Table 3.1. The table contains the descriptions of timelines, main activities, data and participants, and outcomes of the present study.
### Table 3.1 DBR Phases: Timelines, Main Activities, Data and Participants, and Outcomes

<table>
<thead>
<tr>
<th>DBR Phases</th>
<th>Date</th>
<th>Main DBR Activities</th>
<th>Data and Participants</th>
<th>Key Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informed Exploration</td>
<td>May – Aug 2018</td>
<td>• Problem formulation and analysis                                                   • Pilot study data                                                                  • Preliminary design guidelines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Context Analysis)</td>
<td></td>
<td>• Context and audience characterization                                              • Teachers (n=6) and students (n=216)                                                • Theoretical construct</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MILESTONE 1</td>
<td>• Literature review                                                                  • Interviews                                                                        • Theoretical framework</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aug 2018 – all data and feedback were gathered and analyzed resulting in theoretical construct and preliminary design guidelines</td>
<td>• Existing solutions and comparable design investigation                             • Classroom observations                                                         • Research project plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Needs analysis                                                                      • Teaching and assessment documents (syllabi, lesson plans, worksheet, etc.)         •</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Preliminary design principle                                                        • Curricular documents                                                                •</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data analysis                                                                       • Literature review                                                                   •</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Research project plan fine-tuning                                                  • Researcher reflections                                                              •</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enactment</td>
<td>Jul – Dec 2018</td>
<td>• Preliminary conceptual model creation                                              • Teachers (n=6) validation                                                           • Preliminary AA model (guideline)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Design &amp; Development and Implementation)</td>
<td></td>
<td>• Design revision/validation (negotiation) and refinement                             • Researcher observation and reflection                                                • Detailed prototype</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Participants interviews, focus groups, meetings, communications, and dissemination (collegial training &amp; mentorship)</td>
<td>• Functional prototype                                                        •</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Model implementation                                                                • Refined design principles                                                             •</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Data analysis                                                                       • Updated research project plan                                                        •</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Research project plan adjustment                                                   •                                                                                     •</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation: Local Context</td>
<td>Sep 2018 – Feb 2019</td>
<td>• Summative evaluation of designed model                                              • Teachers (n=6) and students (n=216)                                                • Refined design/model principles, framework drafted in a guideline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Evaluation)</td>
<td></td>
<td>• Summative evaluation of functional model guideline                                  • Summative evaluation of functional model guideline                                   •</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MILESTONE 2</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sep 2018 – all data and</td>
<td></td>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>

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Erwin Rahayu Saputra, 2019

*THE DEVELOPMENT OF AN AUTHENTIC ASSESSMENT MODEL FOR EFL TEACHERS IN INDONESIA*

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<table>
<thead>
<tr>
<th>DBR Phases</th>
<th>Date</th>
<th>Main DBR Activities</th>
<th>Data and Participants</th>
<th>Key Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>feedback were gathered and analyzed; findings incorporated into functional prototype 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MILESTONE 3</strong></td>
<td>Oct 2018</td>
<td>all data and feedback were gathered and analyzed; findings incorporated into functional prototype 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MILESTONE 4</strong></td>
<td>Dec 2018</td>
<td>all data and feedback were gathered, analyzed and written in a research report</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MILESTONE 5</strong></td>
<td>Feb 2019</td>
<td>all phases of the research project were accomplished</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The detail of the activities of DBR applying ILDF in this study can be seen in the following description.

### 3.1.1 Informed Exploration

Informed exploration stage in this research procedure aims at gaining understanding about the problems and needs of the target situation or context of research to better develop the AA implementation model through the collaboration with teachers. The process captures the current status of the implementation of authentic assessment.
covering the teachers’ and students’ perspective, practice, curricular guideline, and assessment guideline. The outcomes of this phase include preliminary design guidelines, theoretical construct, theoretical framework, a research project plan. The main activities of in this phase include problem formulation and analysis, context and audience characterization, literature review, existing solutions, and comparable design investigation, needs analysis, preliminary design principle, data analysis, and research project fine-tuning.

First, problem formulation analysis as the starting point of the study was conducted to identify the issue of AA implementation. Based on the notion that AA provided a number of benefits for teachers and students, the researcher conducted a preliminary study with twenty English teachers in six different schools in West Java, Indonesia. This activity resulted in the main problem that is similar to other contexts in Indonesia, referring to the relevant research reviewed.

Second, context and audience characterization aim at narrowing the focus of the study in terms of site and participants. The site and participants were based on the preliminary study conducted in the previous activity. The decision of selecting site and participants in this phase was based on several criteria which will be discussed further in Section 3.2 of Research Context. Understanding the context and audience provided insights into the real problem that happened in the field.

Third, literature review activity was then conducted as source identification of literature relevant to the purposes of the study. This activity provided the information and related theories of the AA and the current curriculum, namely the 2013 Curriculum. Therefore, the result of this activity provided an insight into the theory that supported the design of the model developed through this study. The concepts and theories used were summarized in the literature review of the dissertation.

Fourth, the existing solution and comparable design investigation as a comparison study were conducted to identify the available model of AA implementation employed by the teachers and the 2013 Curriculum. The investigation towards regulation and other relevant documents revealed some
interesting fact about what had been implemented by the teachers based on the mandate of the 2013 Curriculum. This information was beneficial for further investigation in needs analysis.

Fifth, the activity of needs analysis was conducted to gain information about the current situation of the implementation of AA. The teachers’ problems and needs dealing with the implementation of AA were considered in this needs analysis activity. This need analysis procedure was conducted using several instruments from several data collection techniques covering observation, interview, and documents analysis.

Sixth, the preliminary design principle was developed as the reference of developing AA model in this study. The design principle contained captures the essential characteristics of the AA model and strategies required to operationalize them (procedural emphasis)

Seventh, data analysis in this phase was conducted to look for the pattern of data in this phase of informed exploration. The activity was conducted using thematic analysis in which the activity will be further explored in Section 3.6.

Eighth, research project plan fine-tuning was the last activity conducted in the phase of informed exploration. This activity aims at refining the project plan by reflecting on what outcomes had been obtained from the first phase. This was very important to prepare for the next phase of the study.

3.1.2 Enactment

This is the core step of design and development activity of this study, which aims at developing a model of AA implementation in the context of EFL 2013 Curriculum of senior or vocational high school collaboratively with teachers. The outcomes of this phase include Preliminary AA model (guideline), detailed prototype, functional prototype, refined design principles, and updated research project plan. Then, the main activities in this phase cover preliminary conceptual model creation, design revision/validation (negotiation), design refinement, participants’ interviews, focus groups, meetings, communications, and
dissemination (collegial training & mentorship), model implementation, data analysis, and research project plan adjustment.

First, the activity of the preliminary conceptual model creation was conducted to prepare the design model of AA in this study. The model was drafted in an implementation guideline which consisted of the theories and concepts of AA such as definition, basic principles, types, benefits, and challenges of AA, and model implementation of AA. The designed was then discussed and validated with teachers as the users of the model.

Second, design revision/validation and refinement (negotiation) was conducted in the form of user validation in a negotiated manner. This activity aims at gaining input from the teachers as the users dealing with the initial model of AA developed. This validation involved all English teachers in the study who experienced the process of development of the model. This activity was conducted in the process of enactment before evaluation of the model. Therefore, the input and advice from them will be beneficial to refine the model of AA.

Third, participants’ interviews, focus groups, meetings, communications, and dissemination (collegial training & mentorship) were conducted collectively. Since the focus of the study is the model implemented by the teacher, they should be involved in understanding the model. Therefore, after the refinement of the design from the previous activity, the next activity dealt with the dissemination of the procedure of the model of assessment. This activity was conducted in the forms of collegial training and mentoring program. The teachers were trained and mentored in several sessions so that they got an understanding of the procedure of the model.

Fifth, model implementation was conducted in the form of field trials. The activities were expected to give the participants covering teachers and students experienced the model developed in this study. The trial was conducted limitedly for the context of the study from September to November 2018. The limited scope of teaching context, which consists of six English teachers and students in the school was involved to determine the feasibility and the effectiveness of the model.
Sixth, data analysis in this phase was similar to what had been conducted in the first phase. This activity was conducted to look for the pattern of data in this phase of enactment. The activity was conducted using thematic analysis in which the activity will be further explored in Section 3.6.

Seventh, research project plan adjustment was the last activity conducted in the phase of enactment. This activity aimed at adjusting the project plan by reflecting on what outcomes had been obtained from the second phase. This was very important to prepare for the next phase of the study.

3.1.3 Evaluation

In this phase, an evaluation of the effectiveness of the model was conducted to gain a proper model that meets the criteria of good assessment procedure and the needs of the target users. Besides, this phase also marked the end process of the study. Hence, the outcomes of this phase include refined design/model principles, framework drafted in a guideline, research questions answered, summative research report, research findings disseminated, and finalized research project plan. Meanwhile, the main activities conducted in this phase covered the summative evaluation of the designed model, summative evaluation of the functional model, participants’ interviews, focus groups, observation, and surveys, data analysis, research project plan adjustment, and report writing and finding dissemination.

The first and second activities, summative evaluation of the designed model and functional model, were conducted simultaneously using evaluation guideline conducted by the researcher and English teachers. The analyses covered the activity of comparing the developed model into evaluation guideline in the form of questionnaire dealing with the effectiveness of the developed model based on several criteria adapted from the Joint Committee on Standards for Educational Evaluation (1994); defining the level of utility, feasibility, propriety, and accuracy based on the evaluation guideline; interpreting the result of analysis. These analyses aim at understanding the lack of the model to better refine it in the guideline. All
data were analyzed using thematic analysis to understand the area that needs improvement.

Meanwhile, the third activity in this phase, data analysis, was conducted similar to what had been conducted in the first and second phase. This activity was conducted to look for the pattern of data in this phase of evaluation. The activity was conducted using thematic analysis in which the activity will be further explored in Section 3.6.

Fourth, research project plan adjustment was the penultimate activity conducted in the phase of evaluation. This activity aimed at adjusting the project plan by reflecting on what outcomes had been obtained from the last phase. Since this was conducted in the last phase, the activity mostly dealt with the review of the whole phase of the study.

Fifth, report writing and finding dissemination was the last activity in this phase and the whole study project. The report was in the form of a dissertation, journal article, international conference presentation, and proceeding article. This activity was essential to provide contribution dealing with the AA implementation conceptually, empirically, and practically.

3.2 Research Context

Understanding a research context is very important for the success of the project. Self-immersion in the field as a site of engagement helped the writer as the outsider and researcher understand the nature of a community of practice and the ways actors in the community interacted with each other. This contextual information could provide the researcher with an understanding of the dynamics of the situation before the research began (Oliver, 2010).

This study was conducted in a vocational high school in Cimahi, West Java, Indonesia. The reason of involving only one school as the setting of this study is because a successful design-based research project is often conducted within a single setting over a long time (e.g., Linn & Hsi, 2000). The school was purposively selected for several reasons. Firstly, the school offers specialization that strikes a balance between vocational competency and English competency. Secondly, the
school was positive about this research project believing that the English teachers could learn from it, particularly the process of implementing the assessment. Therefore, it could be part of teacher professional development. Thirdly, the school has an international standard school and an International Vocational Education Strengthening (INVEST) accreditation. It has institutional collaboration with companies or industries where English is used at work.

The school was established in 1977 and offered the following main areas of vocation. These specializations include; Industrial automatization engineering; Industrial electronic engineering; Air and cooling system engineering; Telecommunication transmission engineering; Process control engineering; Mechanical control engineering; Computer network engineering; Software engineering; and TV program and broadcasting engineering. Each program was equipped with laboratories and workshops. Like other vocational secondary schools in Indonesia, the school emphasized the use of a competency framework, in which students were expected to have both vocational competencies and additional or supporting competencies, including ICT and English. To achieve this goal, the school offered three categories of the subject: normative focusing on building students’ good personality/characters, attitude, and motivation; adaptive preparing students for being able to adapt to any changing social environment; and productive equipping students with sufficient vocational competencies.

In particular, English plays an important role in preparing students for an increasingly globalized environment or becoming global citizens (Lim, 2008), where the language serves as a tool for human social and knowledge mobility or as lingua franca in social, academic and professional encounters (Mackenzie, 2014). This is relevant to the vision and mission of the school.

In terms of human resources, the school employed 89 vocational subject teacher, 48 general subject teachers, 6 English teachers, and 29 administrative staffs. Both the general subject teachers and vocational subject teachers had subject-based teacher professional group. English teachers, in particular, worked jointly on lesson preparation, delivery, and evaluation. They were also members of a local
professional development group or *Musyawarah Guru Mata Pelajaran (MGMP)* *Bahasa Inggris*. This group met at least on a monthly basis in order to share curriculum materials, teaching experience, and pedagogical and assessment issue.

With regards to instructional facilities, the school had a Wi-Fi connection so that the school community members could access the internet. Each of the classrooms was equipped with LCD Projector. This was used for presenting teacher materials and students work. The school library provided sufficient learning materials in which the students could enrich their vocational and general knowledge.

For school admission, prospective students were annually recruited based on a school entrance examination consisting of several series. The students were grouped into offered specialization, for which they opted in the first year. Each of the classes consisted of between 34-36 students. The school provided a 4-year program for most of the specialization except TV program production and broadcasting engineering program.

Concerning the official status of English, this subject is a compulsory school subject, and it is a foreign language that students have to learn as one of the curriculum requirements. Besides, English is a subject included in a high-stakes examination called *Ujian Nasional* (the National Examination).

### 3.3 Gaining and Negotiation Access to the Field

Conducting a research project in the school requires access negotiation with school administrator and colleague teacher as gatekeepers who control access to the site, and who are social actors participating in, affecting relations of powers, and have the authority to decide if a researcher is permitted to carry out the project (Crowhurst, 2013). Therefore, it is required a gatekeeper to mediate access between the participants and the researcher. In this study, the gate keeper was one of the English teachers who helped the researcher to build a closer relationship, trust, and rapport to the school administrators and the other English teachers. This study involved multi-layered processes covering informed exploration, enactment, and
evaluation, so it was based on complex interaction in which approaches to ethical
guideline become fluid and variable (Levinson, 2010). Thus gaining access in this
study was an ongoing process, negotiated at each level or tier of contact throughout
the fieldwork with several parties at school.

3.4 Participants Recruitment and Participants Profiles

The participants involved in this study were six English teachers and six classes of
students from where the teachers taught. All of the teachers involved have joined
the training of 2013 Curriculum. They showed great interest in this kind of
assessment, represented by their active participation, due to the benefits promised
by the assessment. However, the same as other teachers approached in the
preliminary study, these teachers still have confusion in implementing the
assessment because of the lack of sufficient information of the assessment. They
tend to use their previous practice of implementing the assessment due to the
unspecific guideline.

With the help of the gatekeeper and the school administrator, the researcher
conducted a meeting with the teachers the participants of the study to detail the
research project ethically while discussing and distributing the consent form
(Appendix 7). The document was written in Bahasa Indonesia to ensure full
understanding of the research project regarding benefits, risk, and feasibilities. The
participants were informed that their participation was entirely voluntary. Research
information sheets and consent form served as legal and written documents to
ensure that the research participants were given access to sufficient and appropriate
information about the investigation and its aims and purposes. This pre-study
briefing meeting informed prospective participants of the research project,
including the research focus, goals and objectives, the benefits or expected
contribution to prospective participants, the level of engagement, and the fieldwork
timelines. Besides, the research participants were also involved in the discussion of
the storage and use of research data during and after the fieldwork. Those activities
were supported by the Consent Form documented in Appendix 8 and Information
Sheet in Appendix 9. This negotiation and discussion were conducted to ensure the
data were representative and accessed all relevant group of participants (Tyldum, 2012).

Central to the study were engagement and collaboration to build a stronger relationship between the participants and the researcher. Purposive sampling was therefore used to recruit the participants (Creswell, 2012). There are three groups of participants involved in this study as categorized below.

**Table 3.2 List of Participants**

<table>
<thead>
<tr>
<th>No</th>
<th>Participants</th>
<th>Ages</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>School administrator</td>
<td>52</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>English teachers</td>
<td>36-57</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Students:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Industrial automatization</td>
<td>15-17</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>• Process control</td>
<td>15-17</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>• Industrial electronic engineering</td>
<td>15-16</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>• Telecommunication transmission engineering</td>
<td>15-16</td>
<td>38</td>
</tr>
</tbody>
</table>

The school administrator, as a vice school principal for curriculum affairs, was recruited to provide policy-level information to allow the researcher to understand better school programs that supported the design and implementation of English language curriculum. He held a Master in education and was a senior teacher who had been teaching at the school for more than 25 years.

Meanwhile, the profile of English teachers participated in this study is presented below.

**Table 3.3 List of English Teacher Participants**

<table>
<thead>
<tr>
<th>Participants (Pseudonyms)</th>
<th>Age</th>
<th>Years of Teaching</th>
<th>Level of Education</th>
<th>Language spoken</th>
<th>TOEFL/TOEIC Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>YUL</td>
<td>36</td>
<td>13</td>
<td>Master in Education</td>
<td>Bahasa Indonesia and Sundanese</td>
<td>577 (TOEFL) 700 (TOEIC)</td>
</tr>
<tr>
<td>Participants (Pseudonyms)</td>
<td>Age</td>
<td>Years of Teaching</td>
<td>Level of Education</td>
<td>Language spoken</td>
<td>TOEFL/TOEIC Score</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----</td>
<td>------------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>MUL</td>
<td>57</td>
<td>31</td>
<td>Bachelor in Education</td>
<td>Bahasa Indonesia and Sundanese</td>
<td>530 (TOEFL) 820 (TOEIC)</td>
</tr>
<tr>
<td>NUR</td>
<td>55</td>
<td>31</td>
<td>Bachelor in Education</td>
<td>Bahasa Indonesia, Sundanese, and Batakese</td>
<td>520 (TOEFL)</td>
</tr>
<tr>
<td>AHM</td>
<td>53</td>
<td>25</td>
<td>Bachelor in Education</td>
<td>Bahasa Indonesia and Sundanese</td>
<td>600 (TOEIC)</td>
</tr>
<tr>
<td>NAN</td>
<td>45</td>
<td>18</td>
<td>Bachelor in Education</td>
<td>Bahasa Indonesia and Sundanese</td>
<td>500 (TOEFL)</td>
</tr>
<tr>
<td>YAN</td>
<td>43</td>
<td>14</td>
<td>Bachelor in Education</td>
<td>Bahasa Indonesia and Sundanese</td>
<td>700 (TOEIC)</td>
</tr>
</tbody>
</table>

All English teachers received formal and informal training in English language curriculum. All of them were government full-timers and had become certified teachers. The teacher participants engaged in a local teacher professional group called Musyawarah Guru Mata Pelajaran (MGMP), and they attended relevant professional training held by the local government such as 2013 Curriculum implementation training. However, none of the teachers attended training, particularly in AA. They only joined the 2013 Curriculum in general, which had a session for AA. For this reason, the project assisted them with the design of AA in their context. The project was also a part of teacher professional development at a school level.

Then, the student participants were in the first and third year (Grade X and XII). They were brought up in social environments where society members have diverse linguistic and cultural backgrounds such as government employees,
merchants, farmers, teachers, entrepreneurs, and casual works. They came from families with different socio-economic backgrounds. All of them were competent in two languages; Bahasa Indonesia and Sundanese.

Over a period of a semester in the field, the researcher interacted with all group of participants daily of school curriculum activities. Thus, the recruited administrator, the teachers, and the students were the most appropriate participants who have knowledge of the research topic and who represent the characteristics of the interest of the study (Williamson, 2006).

3.5 Data Collection and Instrumentation

In this study, the nature of design-based research as mentioned by Baumgartner, et al., (2003) employed a qualitative data collection technique, meaning that the data collection mainly obtain qualitative data. Those data were collected through several data collection techniques. These covered 1) observation, 2) interview, 3) document analysis, and 4) questionnaire.

1) Observation

The non-participant observation was employed to examine classroom life in terms of teachers’ implementation and student-teacher interaction related to the AA. Being an outsider in this observation, the researcher could build trust and relationship with the teachers and students so that the real data from the observation could be obtained. However, the presence of the researcher and recording device would sometime create so-called observer’s paradox (see Labov, 1972). To avoid this issue, the researcher acted passively and took a position which did not disturb the activity in the classroom, so that the participants’ natural behavior was well obtained through observation sheet (see Appendix 1) and video recorder.

The observation in this study was conducted in two series. Firstly, it was conducted in the process of context analysis to gain a better understanding of the current condition and problem faced by the teacher in implementing AA. Therefore, this provided data to answer the first research question of this study. Secondly, the observation was conducted during the evaluation phase to gain insight into the
implementation of the developed model of AA. This provided the answer to the third research question of the study.

2) Interview

To explore the teachers’ and students stories as lived experience in the implementation of AA, the interview was conducted. The nature of the interview was conversational and informal so that the teachers and students would feel free to express their beliefs, values, opinion, and experiences in relation to the AA they experienced. Semi-structured interview as discussed by Kvale (1996) assisted with an audio recorder and prepared list of questions in the form of interview guideline for teachers (see Appendix 2 and Appendix 3), and students (see Appendix 4) was utilized to gain the data. In addition, this interview followed the participants’ agenda, with room to obtain unexpected information reported by the participants.

Similar to observation, this data collection technique was conducted in two series. Firstly, in the activity of context analysis, this interview was conducted to gain the teachers’ beliefs, values, opinions, experiences in terms of the problems, and needs of the teachers dealing with AA. This again refers to the first research question of the study. Besides, this activity of data collection was conducted in the process of evaluation phase to know teachers’ and students’ beliefs, values, opinions, and experience during the implementation of AA using the developed model. This provided the data to answer the third research question of the study.

3) Document analysis

The documents in the form of government regulation, curriculum, syllabus, lesson plan, and students’ work known as document artifacts were analyzed using document analysis as discussed by Creswell (2007, 2009, & 2012). Document analysis template (see Appendix 5) was utilized in this activity of data collection. This technique was valuable in supporting the understanding of the focus of the study in terms of the implementation of AA.

This data collection technique would be beneficial to provide the data for answering all the research questions of the study. Context analysis as the focus of
the first research question was supported by the data collected through this data collection. The current situation reflected in the documents was beneficial to gain insight into the problems and needs of the teachers of the implementation of AA. Meanwhile, the process of model development was supported by the data obtained from this data collection technique by providing the standard of developing AA relevant to the curriculum goal. Then, the documents collated after the model development was essential to gain insight into the effectiveness of the developed model of AA.

4) Questionnaire
A questionnaire in the form of evaluation checklist and commentary (see Appendix 6) was distributed to the 6 English teachers as the participants experiencing the implementation of the developed model of AA drafted in the guideline. The questionnaire was distributed after the process of development in the school. This questionnaire was directed to gain the data dealing with the effectiveness of the developed model based on several criteria adapted from the Joint Committee on Standards for Educational Evaluation (1994). They covered the standards of utility, feasibility, propriety, and accuracy. The data from this technique, therefore, were beneficial to provide the answer to the third research question of the study related to the effectiveness of the developed model.

3.6 Data Analysis
The data analysis process covers all stages of data analysis in the present study. All data obtained from 1) observation, 2) interview, 3) document analysis, and 4) questionnaire were integrated to answer the three research questions raised in this study. Those data provided beliefs, values, opinions, and experiences, and interaction of the participants of this study. The obtained data had similar characteristics in which they were interdiscursive meaning that they could not be created, analyzed, and presented in isolation to gain the whole picture of the activity of AA implementation.
Thematic analysis to follow Braun and Clarke (2006), Clark and Braun (2013a), and Clark and Braun (2013b) was conducted to analyze the data. The activities of thematic analysis in this research consist of six steps which had the goal to identify patterns and develop themes. The steps moved back and forth among these phases.

1) Familiarization with the data

In this step, the researcher read and re-read the data twice to familiarize himself with the data of the current situation of implementation, the process of model development, and the evaluation of a model of AA. The familiarity of the data was supported by the researcher prior knowledge of the focus of the study and the participants involved in the study.

2) Initial coding

In this step, the researcher highlighted the data to analyze. This helped to find out the emergent themes and patterns of the data in relation to the current situation of AA, the process of model development, and evaluation of the developed model of AA. All relevant data in the form of excerpt, illustration, and narratives were coded for further data analysis. The initial codes were constructed based on the names of data in the initial stage.

3) Searching for themes

In this step, the researcher listed and sorted the highlighted data to identify the broader patterns of the data. The searching of the themes will ease the analysis of the coded data.

4) Reviewing themes

In this step, the researcher re-read and rechecked the coded themes against the data set to determine the importance and relevance of the data towards the research questions of this study. In this way, the researcher compared the coded themes against the data set and found out the very relevant data needed to answer the research questions of the study. This will enable the researcher to further conduct a careful and detailed thematic analysis.
5) Defining and naming themes

In this step, the researcher defined and named the finding themes related to the focus of the study. The themes were relevant to the research questions of the study. This process will ease the process of categorization of the data.

6) Writing up

In this step, the researcher weaved together and analyzed the data using the theories of authentic assessment from several scholars (i.e., Frey, 2014; Lund, 2012; Linn & Baker, 1996; Majid & Firdaus, 2014; Mehrens, 1992; Mueller, 2014; Newmann, Secada & Wehalse, 1995; O’Malley & Pierce. 1996; Shavelson, Baxter, & Pine, 1992; Shermis & Di Vesta, 2011; Walvoord, 2010; William, 2001); needs analysis (i.e., McDonough, 1984; Nunan, 1988; Dudley-Evans and John, 1998; Basturkmen, 2008; Harding, 2007); professional learning community (i.e., Andrews & Lewis, 2002; McLaughlin & Talbert, 2006; Sigurdardottir, 2010); and design-based research (i.e., Bannan, 2009; Baumgartner, et al., 2003; Bell, Hoadley, & Linn, 2004). The process of this activity was conducted by writing up the findings and discussing it with the relevant theories.