Self-Assessment of Secondary School Islamic Education Teachers: Analysis Process of Qualitative Data

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Abstract

This study was conducted to explore the concept of self-assessment (reflection) that must be practiced by Islamic education teachers towards the continuous professionalism development. This study using qualitative approach with case study design. Six participants were selected using purposive sampling technique based on their experience in the field of Islamic Education which providing them with versatility and knowledge about the practice. Data was collected using a semi-structured interview technique. Interviews are conducted face-to-face and online. Findings show six themes discussed by study participants, namely; 1) the meaning of self-evaluation, 2) the purpose of self-assessment, 3) aspects of self-assessment and when to do it, 4) when to do self-assessment, 5) the attitude of teachers who carry out self-evaluation, and 6) challenges and obstacles in doing self-evaluation. The study participants are seen trying their best to provide the best understanding of self-assessment practices by providing examples in various situations and roles of teachers. The study will specifically describe the analysis process of the qualitative data obtained including the process of coding and categorization from the data that has been collected.

Keywords: Self-Assessment, Islamic Education Teacher, Analysis Process, Qualitative Study, Coding, Categorization

Introduction

Qualitative data is a source of actual data that is rich in description and interpretation of human processes. Miles et al (2011) stated that qualitative data can provide a chronological sequence, the effects of an action by bringing meaningful explanations. It can help the researcher to connect the findings of qualitative data with the initial concept which then builds or modifies a conceptual framework (Miles et al., 2011). For this study, the researcher highlighted the concept of self-assessment. Based on Bandura's social cognitive theory (1997), it can be identified that the experience of teacher self-assessment is able to create teacher changes which self-efficacy becomes an intermediary in teacher practice. Ross (2007)

also brings a model of self-assessment as professional self-regulation which involve self-observation, self-judgment and self-reaction.

Al-Ghazali (2004) stated that self-assessment is an effort to awaken believers to achieve the nature and will of Islam which aims to form self-discipline (Lutfi, 2000). It is a necessity towards increasing competence (Salleh, 2018) and to improve all existing deficiencies (Makhsin, 2012). Based on this concept, the researcher will explore the meaning of self-assessment from the point of view of those in the field. For that reason, the chronological sequence of the focused study can be clearly understood. This concept is related to the meaning of self-assessment, the purpose of self-assessment, the aspects that need to be observed and what is the best time to practice. The researcher also examines the character of the teacher who practicing self-assessment and identify what are the obstacles that occur in the process. Thus, the qualitative study taken by the researcher is able to provide a meaningful explanation about the concept of the study that being carried out.

Methodology

This study was conducted using a qualitative approach involving six participants. The selection of six participants for one case study is sufficient based on Creswell (2013) and Konting (1998). The six participants were selected with purposive sampling technique which is a sampling technique that tends for a qualitative study (Miles et al., 2014; Rudestam & Newton, 2001). The criteria are set for the selection of participants in this technique (Merriam, 2009) and for this study, four criteria are set namely: (1) experienced in the field of Islamic Education; (2) experienced in the field for more than 15 years; (3) teaching subjects related to Islamic Education; and (4) approachable and cooperative.

The determination of these criteria is included in homogeneous sampling which focuses on groups of individuals who have similar demographics or social characteristics (Miles et al., 2014). Data was collected using a semi-structured interview technique. Interviews were conducted face-to-face and online according to the request and suitability of the participants. In this study, the researcher will specifically describe how the analysis process of the qualitative data obtained one by one includes the process of coding and categorization with some examples from the data that has been collected.

The Coding Cycles

According to Saldana (2013), the coding method are divided into two main sections which are First Cycle and Second Cycle coding methods. Those process that happened during the initial coding of data are included in the First Cycle. It can be divided into seven subcategories and mostly are fairly simple and direct. Table 1 shows the First Cycle coding methods.

Table 1
First Cycle Coding Methods

No	Subcategories	Type of Coding
First Cycle Coding Methods		
1	Grammatical Methods	Attribute Coding Magnitude Coding Subcoding Simultaneous Coding
2	Elemental Methods	Structural Coding Descriptive Coding In Vivo Coding Process Coding Initial Coding
3	Affective Methods	Emotion Coding Values Coding Versus Coding Evaluation Coding
4	Literary and Language Methods	Dramaturgical Coding Motif Coding Narrative Coding Verbal Exchange Coding
5	Exploratory Methods	Holistic Coding Provisional Coding Hypothesis Coding
6	Procedural Methods	Protocol Coding Outline of Cultural Materials Coding Domain and Taxonomic Coding Causation Coding

Source: Saldana (2013)

Table 2
Second Cycle Coding Methods

First to Second Cycle Coding Methods
Eclectic Coding
Second Cycle Coding Methods
Pattern Coding Focused Coding Axial Coding Theoretical Coding Elaborative Coding Longitudinal Coding

Source: Saldana (2013)

In selecting the appropriate coding methods is depending on the nature and goals of the study (Saldana, 2013). Saldana also stressed that the coding decision were based on the methodological needs of the study. As this study used mixed methods approach with exploratory sequential design, the exploration of the concept of self-assessment was done by

interview with the experts in the field of Islamic education. The qualitative data collected will be analysed to help researcher for survey instrument development for the quantitative data.

The coding methods selected in this study which involved Grammatical Methods (simultaneous coding), Elemental Methods (descriptive coding, In Vivo coding, process coding) and Affective Methods (values coding). Meanwhile, for Second Cycle coding methods, Pattern Coding was used for the development of major themes from the data.

1. Coding

Code as defined by Saldana (2013) is a qualitative requirement that is always used in the form of short words that represent summative, important, main ideas and/or common characteristics for a basic part of language or visual data. These data can be obtained through interview transcripts, study participant observation field notes, journals, documents, drawings, artifacts, photos, videos, websites, email replies, writings and others. For this study, the coding that will be done is based on the transcripts of interviews conducted on six Islamic Education experts regarding the practice of self-assessment of Islamic Education Teachers (IET).

This coding process goes through several rounds to see the critical relationship between the data collected and the description of its meaning (Charmaz 2001). Saldana (2013) suggests for the first round of coding process is to look at the magnitude of a single word to the entire paragraph, to the entire page of text, and to the entire moving images. In the second round, coding can be done for the same unit, long passages in the text, analytical memos about the data and reconfiguration of the code can also be built in this round.

Descriptive Coding and In Vivo Coding

The types of codes that can be applied are descriptive coding and In Vivo coding and. The coding process in this study can be seen based on the example in Table 3 concerning the coding of the meaning of self-assessment.

Table 3: Example of Descriptive Coding and In Vivo Coding
(Meaning of Self-Assessment)

Verbatim	Main Idea	Type of Coding
In my point of view, self-assessment is to make an evaluation about what we have done and what we have produced *…whether it's achieved the objective or not. We check ourselves…to reach the level that we want.* (R1TB1Line46-48)	Self-evaluation	In Vivo Coding
We evaluate ourselves after we do something. For ourselves… we have to muhasabah (reflect) on it. (R1TB1Line83-84)	*Muhasabah (Reflect)*	Descriptive Coding

Table 3 shows the coding process that has been done. This process gives a conclusion to the researcher to name the main ideas with one main code. From the types of coding stated, the conclusion that can be made about the meaning of self-assessment is *muhasabah* (reflection). *Muhasabah* as defined by the Fourth Edition of Kamus Dewan is the act of self-evaluation (thoughts, stances) for self-improvement, introspection - reflecting to make an assessment of ourselves, we must reflect to build stronger confidence. Makhsin (2012) also

defines *muhasabah* as the computation of practices derived from self-reflection (*muhasabat al-nafs*) which means internal supervision. Every practice or behavior is recalculated to ensure that it always be given the grace (*redha*) of Allah S.W.T.

3.2   Process Coding

Coding can also be done to indicate a patent. In a large data set, we will usually find a repetition patent in the actions and consistency of human relations as documented in the data. Next example showed the process code that repeats the behavior of a teacher who practice a self-assessment. It shown in Table 4.

Table 4: Example of Process Coding
(Characteristics of Teachers Self-Assessment Practitioner)

Verbatim	Main Idea	Interpretation
He is always motivated to be a better person and invite others together with him. This kind of person, always looks energetic and proactive. They will try to be different every day and will always make a change for better. (R3TB1Line135-142)	To be a better person. Invite others together with him. Always make a change for better	Changed in the direction of goodness (Fostering determination)

The examples of data sets in Table 4 shows that there is repetition in the examples of acts that are stated, namely "To be a better person", "Invite others together with him" and "Always make a change for better". The researcher has interpreted this act as "Changed in the direction of goodness" which is coded under "Fostering determination" for the characteristics of teachers who carry out self-assessment.

3.3   Simultaneous Coding

Simultaneous coding can also be done for a single data by creating two or more codes. As the examples shown in the table below, various techniques and various methods chosen as the main idea are interpreted by the researcher as "creative". From the interpretation, creative is placed under the code of "Setting goals" for the characteristics of teachers who carry out self-assessment.

Besides "creative" interpretation, "systematic" interpretation also emerges from the data set, which is through the main idea of providing stamps, things that make work easier and systematic working. Therefore, this "systematic" interpretation has been coded under "Planning the will" for the characteristics of teachers who carry out self-assessment as in the following example.

Table 5: Examples of Simultaneous Coding
(Characteristics of Teachers Self-Assessment Practitioner)

Verbatim	Main Idea	Interpretation
They hold various techniques and various methods (in teaching).	Various technique Various methods	Creative (Setting goals)
The way they check the books. As an example by providing stamps or somethings (colourful pen) which make their work easier.	Providing stamps	Systematic (Planning the will)
The systematic way of working shows that he is dedicated and conducting a self-assessment. (R1TB1Line163-168)	Things which make their work easier Systematic working	

3.4 Values Coding

In coding process, it depends on the researcher's lens which related with what is the type of screening used (Saldana, 2013). In the example of the data set below, the researcher wants to determine what are the characteristics of teacher behaviour while conducting a self-assessment. The filter used by the researcher is value coding by identifying the label of subjective perspective for the data set. "Always ask", "Make preparations" and "Give interesting suggestions" is a subjective perspective that shows a value. These values on the data have been coded as "Planning the will" for the characteristics of teachers who practicing self-assessment as shown in Table 6.

Table 6: Examples of Value Coding
(Characteristics of Teachers Self-Assessment Practitioner)

Verbatim	Idea Utama	Code
He will always ask to upgrade himself,	Always ask	
he will always make a preparation early	Make preparation	Planning the will
and if we do mentor session with them, they will give interesting suggestions	Give interesting suggestions	
(R1TB1Line163-168)		

Other example of value coding is the data set in Table 7. Accepting other people's views and having an open mind were coded under "prioritizing self-confidence" for the characteristics of teachers who practicing self-assessment

Table 7: Examples of Value Coding
(Characteristics of Teachers Self-Assessment Practitioner)

Verbatim	Main Idea	Code
Easily accepting other people's opinion, *have an open mind.* (R3TB1Line135-142)	Accepting other people's opinion Have an open mind	Prioritizing self-confidence

Pattern Coding
For Second Cycle coding methods, Pattern Coding was used for the development of major themes from the data. Saldana (2013) describes that the pattern coding started with collecting similarly coded passages from the data corpus, reviewing the First Cycle codes to assess their commonality and assigning various Pattern Codes. The Patten Codes then used as a stimulus to develop a statement that describe a major theme.

Categorization
Categorization is the systematic arrangement of somethings. It is done to ensure a certain part of the system or classification to be categorized. The coding process is a method used to enable the researcher to organize and group the same data code into several categories or families (Saldana, 2013). As in the example in Table 8, from some of the codes that emerged from the data set of the self-assessment elements, namely the codes of teaching aids, teaching techniques (pedagogy), student activities and additional activities, they have been grouped under one theme, which is "Teaching Reflection".

Table 8
Examples of Self-Assessment Element Categorization
(Teacher Teaching)

Codes	Theme
Teaching aids	Teaching Reflection
Teaching techniques (Pedagogy)	
Student activities	
Additional activities	

Other examples are codes of interaction, cultivation to students, relationships with students and teacher morals have been grouped under one category called "Human Introspection" for elements of self-assessment (teacher teaching) as shown in Table 9. Examples of "Motivation" categories summarized from the codes of getting better, self-achievement, improvement of performance, learning, self-development, professional development and self-advancement shown in Table 10.

Table 9
Examples of Self-Assessment Element Categorization
(Teacher Teaching)

Codes	Theme
Interaction	Human Introspection
Cultivation to students	
Relationships with students	
Teacher morals	

Table 10
Examples of Self-Assessment Purposes Categorization

Codes	Theme
Getting better	Motivation
Self-achievement	
Improvement of performance	
Learning	
Self-development	
Professional development	
Self-advancement	

Categorization to Statement
Some categories are likely to contain clusters from the data coding done where they can be refined to the existence of other subcategories (Saldana, 2013). The available categories if compared between them will lead to thematic, conceptual and theoretical construction (Saldana, 2013). It can be presented to show a general picture of a concept being studied. The researcher's ability to present these themes and concepts in a systematic manner leads to the construction of a theory (Corbin & Staruss, 2008, p. 55). Figure 1 shows that the codes that arise from the data set create categories. From the categories that exist, a theme/concept has been created which finally creates a statement as the examples shown in Figure 2.
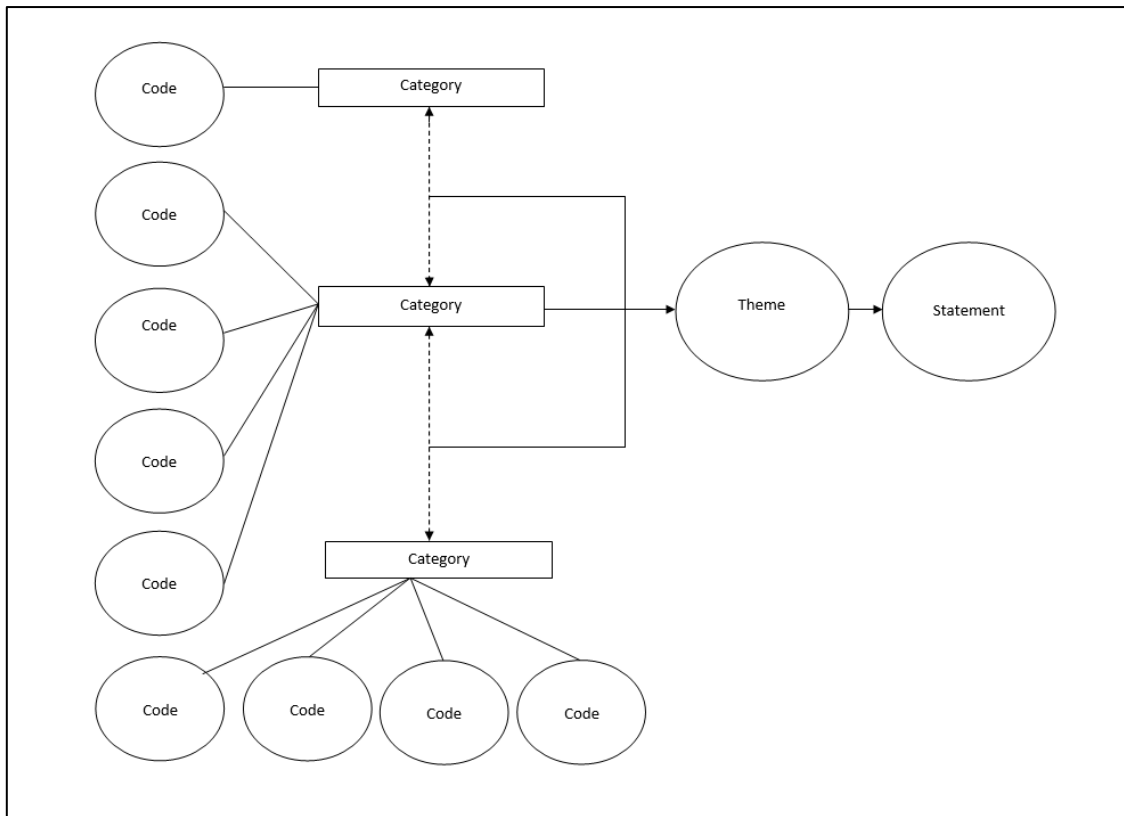
Figure 1: Overview of Coding to a Theoretical Model for Qualitative Research
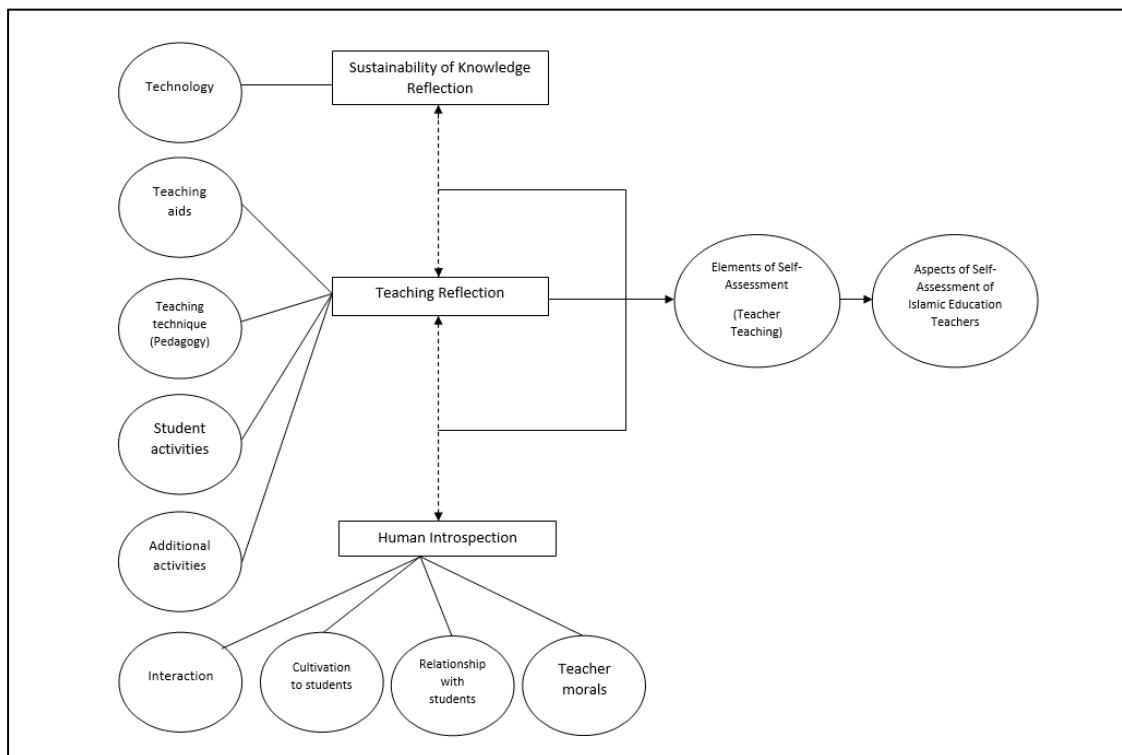

Figure 2: Overview of Coding to a Model of Self-Assessment of Islamic Education Teacher (Aspect of Self-Assessment)

Discussion

What needs to be emphasized is that there is a difference between code and theme. At the beginning, there are many findings from the data set available to undergo a certain coding method to explore the phenomenon that occurs from the statements of the participants. Inevitably, throughout the reading and research process, the researcher has identified several themes, patents or concepts that will emerge from it. Notes are required at this stage called analytical memos (analytic memos) which sometimes help the coding process later. A set of themes will emerge from the analysis performed (Saldana, 2013).

As the analysis process of qualitative data is a long process that involves human science which need to be present with the meaning of the data that rich with the descriptions and explanations of human process. As mentioned by Miles et al. (2014), from well analysed qualitative study in can produced quality findings that undeniability.

Conclusion

This study is specifically to the data analysis process of a qualitative study that focuses on the process of coding and categorizing the data obtained regarding the self-assessment concept. The collected data is the result of interviews conducted on six participants who were selected based on several criteria using purposive sampling techniques. From this data, several main themes were successfully released as a result of the coding and categorization process carried out. The types of coding involved in this process are descriptive coding, In Vivo coding, simultaneous coding and value coding. As of this process, it leads to a categorization process and finally leads to a statement. This statement covers the meaning of self-assessment, the purpose of self-assessment, aspects of self-assessment, the time to conduct self-assessment, the characteristic of teachers who carry out self-assessment and the challenges and obstacles in practicing self-assessment.

This study is important to understand the analysis process of qualitative data with the method of analysis selected that suit with the nature and the focus of the study. For future research, all themes and statements resulted will use for quantitative instrument development which included the development of constructs and items of the instruments.

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