Using repertory grid interview to investigate teachers’ beliefs about feedback on writing

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Abstract
Since there is the assumption that belief can influence teachers’ practices, a number of research have been done to investigate teachers’ belief. However, it is quite challenging to elicit beliefs due to their cognitive and subconscious nature. This paper discusses the use of an alternative method in eliciting teachers’ beliefs called, ‘Repertory Grid Interview’, which builds on Personal Construct Theory as proposed by George Kelly (1950). In this paper, the focus is on the comparison of data obtained from two different types of data collection methods, free interview and repertory grid interview. The participants were interviewed about corrective feedback given to students’ writing. The results revealed that the participants think more deeply during the repertory grid interview. The paper also highlights the benefits of this type of interview, which are the reduction of researcher’s bias in collecting data and the overcoming of problems from obtaining reported beliefs from a normal interview. Other issues and considerations for conducting repertory grid interview are also discussed.

1. Introduction
Research investigating teacher’s beliefs can contribute to the understanding of teachers’ behaviors and decisions as there are evidences showing that beliefs can influence teachers’ practice (Basturkmen, Loewen & Ellis, 2004; Borg, 1999; Richards & Lockhart, 1996; Williams & Burden, 1997). For this reason, studies into teacher cognition, beliefs and knowledge have become a mainstream trend from the late 1980s to the early 1990s (Burns, 2003). Up to the present time, researchers still investigate teachers’ beliefs in order to be able to account for different teachers’ classroom practices.

This study aims at investigating the beliefs in assessment by focusing on corrective feedback on students’ writing. Uncovering the beliefs underlying teachers’ feedback practice may allow us to understand factors contributing to effective feedback (Lee, 2009). Teachers’ feedback practices or their responses towards students’ written work are considered a reflection of their beliefs (Hyland & Hyland, 2006). Furthermore, beliefs about the appropriacy of a type of feedback for a piece of writing may differ. This begs the assumption that teachers operate under different belief systems which influence their practices in giving feedback. Furthermore, belief is difficult to assess accurately (Basturken et al., 2004). Two factors contributing to the difficulties are the nature of beliefs, and methodologies used to elicit belief. In spite of its importance, the construct of belief, which in itself is complex, leads to challenges for research within this field. Since beliefs are implicit (Van der Schaaf, Stokking & Verloop, 2008) and may be subconscious (Donaghue, 2003), it may be difficult for teachers to tell others what their beliefs are. Previous studies have employed at least two instruments in studying teachers’ beliefs, which are questionnaire, (Brown et al., 2011), and interview (Jones and Fong, 2007; Li & Barnard, 2011; Mori, 2011; Remesal, 2011; Shi & Cumming, 1995). The use of questionnaire is common in research into teachers’ belief because it is a quick and economical method in collecting a large
amount of data. However, data collected by questionnaire is considered reported beliefs, or just a record of what teachers say they do, know, or believe rather than what they really believe (Borg, 2006; Phipps & Borg, 2009). Because of this limitation, some researchers have turned to the use of interview as their main instrument. Nevertheless, the use of interview has been questioned as well, as there are concerns for researchers’ bias in developing interview questions, which in turn might end up reflecting the researcher’s belief instead (Hawley, 2012; Munby, 1984 as cited in Basturkmen et. al, 2004). In addition, even though interviews allow the participants to freely state their beliefs, it may be difficult for them to verbalize them because their beliefs may be subconscious (Donaghue, 2003). Having considered these limitations, this paper would like to propose and discuss the use of an alternative data collection method called ‘Repertory Grid Interview’ to investigate teachers’ beliefs about feedback on writing.

2. Repertory Grid Interview and Personal Construct Theory

The Repertory grid interview is based on the Personal Construct Theory, proposed by George Kelly (1955). This theory views humans as scientists who invent their own constructs of the world by making and testing hypotheses. As a result, theories and beliefs are constructed from the constant testing of hypotheses about the world (Donaghue, 2003). These hypotheses subsequently become constructs that individuals assign to certain elements in the world. Kelly terms these tested hypotheses as ‘constructive alternativism,’ further stating that each person would have different constructs for certain things; even the same person could have different constructs for the same thing at different times (Jankowicz, 2003). Kelly sees the constructs as bi-polar (Donaghue, 2003). He makes the assumption that a person gives meaning to something based on contrasts. If we do not see the contrast of certain elements, we cannot be sure of its meaning (Jankowicz, 2003; Donaghue, 2003). For example, people understand that ‘slow’ is the opposite of ‘fast’. But different people may have different ideas for this contrast. If a woman was asked about colleague A and she thinks of A as being ‘slow’, other people may have different interpretations of her answer. However, if she is asked again by contrasting two entities – why colleague B is different from A, and she stated that B is smarter, quicker in thinking. Then, her answer ‘slow’ can be interpreted as ‘not so clever’ or ‘slow thinking.’

The concept of understanding meaning through contrast is one aspect that makes up the repertory grid interview. Specifically, a repertory grid interview is a type of structured interview used for eliciting verbal commentaries in the field of studying teacher’s beliefs (Borg, 2006). It is different from other interviews in that the items used as the topic and questions for the interview are from the participants themselves, not from the researcher. The aim of this type of interview is to elicit personal constructs on specific topics by using a combination of two components; elements and constructs. The participants will be asked to verbalize the similarities and differences between three elements. Then, how the elements are similar and different from the participant’s answers will become the constructs they give to certain elements.

2.1 Basic components of Repertory Grid Interview

Elements are the stimuli that a person evaluates in terms of his or her world (Cohen, Manion, & Morrison, 2000). They are the terms that represent the topics, as well as an example of a particular topic (Jankowicz, 2003). Elements can be anything depending on the context of the research (Fransella, Bell, & Bannister, 2004). In this study, elements are related to corrective feedback approaches the teachers give to students’ writing; namely locating the errors, giving
error codes, giving explicit correction, and giving explicit correction with explanations. These elements will be used as cues to elicit the participants’ constructs in the interview.

Construct is another major component in the repertory grid interview. It is derived from the meaning a person gives to each particular element. Constructs are the dimensions used by a person in conceptualizing aspects of his or her world (Cohen et al., 2000). Construct is seen as “bipolar” since “we never affirm anything without denying something else” (Donaghue, 2003, p. 346). It is “a way in which two or more things are alike and thereby different from a third or more things” (Fransella et al., 2004, p.7). Since Personal Construct Theory states that a person gives meaning to something from the contrasts, the constructs elicited from the interview must also be given in terms of contrast or bi-polar. Good constructs must present a clear contrast, give appropriate detail, and have a clear relationship to the topic being investigated (Jankowicz, 2003). Examples of the constructs from writing feedback could be: demand more effort from teacher; demand less effort from teacher, encourage autonomous learning; not encourage autonomous learning.

2.2 Procedures in doing repertory grid interview

2.2.1 Obtaining elements and constructs

To select the elements, the researcher needs to make a decision between different methods of obtaining them; chosen by the researcher, by the participants, or by the negotiation between the researcher and participants, and from elicitation through the interview (Jankowicz, 2003). In some repertory grid interviews, the elements are provided by the researcher, thus they are called ‘provided elements’ (Goffin, 2002). The researcher is the person who decides what elements will be used in the interview based on their background knowledge about the topic; however, there are risks that the researcher might not cover all the elements that are useful or relevant to the topic and the participants (Jankowicz, 2003). Elements can also come from the participants’ words during the interview. These are called ‘elicited elements’. This is the focus of Personal Construct Theory where the elements are from the participants themselves (Borg, 2006; Cohen et al., 2000). From doing this, the researcher can be certain that the elements are relevant to the participants.

Similarly, constructs can also be elicited or provided. Provided constructs may be useful for comparison between grids because it is easier for the researcher to control the number and content of compared constructs. Nevertheless, if the constructs are provided, then the limitation in terms of teachers’ bias in selection of interview items will not be avoided. Therefore, eliciting the constructs can be another alternative. It is also the most common method which conforms to the concept of Personal Construct Theory (Goffin, 2002).

Eliciting constructs can be done by using a repertory grid interview where the participants are given three elements at a time, which is called a triad. The participants are required to provide answers for questions such as, ‘How the two of these three are similar to and at the same time different from the other one?’ However, some of the participants might be confused with the question and give inappropriate answers. For example, in the triad where the three elements are apple, watermelon, and pineapple, the participants might say that the apple and the watermelon are similar because they are sweet. Pineapple is different from the two because it is yellow. From the example, it can be seen that the answers for this question are from different attributes. Thus, to solve this problem, a qualifying phrase, ‘in terms of…’ will be used to help the participants focus on the same aspects (Goffin, 2002). For example, the question
asked when presenting elements in triad can be, ‘How are the two of these three similar to and at the same time different from the other one in terms of learning effects?’

2.2.2 Forming a Repertory Grid

There are several stages in administering the repertory grid interview. First, the set of elements are elicited through the interview. After the elements are obtained, they are arranged into groups of three (i.e. triads) and the participants are asked to comment on the ways in which two elements in each group are both similar as well as different from the third (Borg, 2006). The answers for the comparison become the constructs (i.e. meanings giving to the elements).

Once the elements and constructs are elicited, the next step is to put both the elements and constructs into a grid. The grid will help the researcher see what the participants mean when they specify each construct (Jankowicz, 2003). There are also three alternatives for the researcher to choose to manage the data; grouping the elements, ranking the elements, and rating the elements (Jankowicz, 2003).

Grouping elements, also called dichotomizing (Tan & Hunter, 2002) is when the participant is asked to decide which elements are closest to the left pole or the right pole of the constructs. They can be asked to put a tick on the elements that should go in the left pole, and put the cross on the element that should go in the right pole (Tan & Hunter, 2002). If the researchers choose this method, the elements will fall into left or right poles; they are not able to see the different levels of elements that go toward the left and right pole.

The second choice is to ask the participant to rank the elements. The participant is asked to rank the elements in order. For example, if there are 7 elements, the participant will have to decide and give a number from 1 to 7 to the elements. This method allows the researchers to see the different levels that each element falls into different poles of the construct. However, it does not allow the researcher to compare between grids if the comparing grids contain different number of elements (Goffin, 2002). It might be problematic when comparing the ranking between the grids that have the rank of 5 elements and the grid with the rank of 7 elements.

The last method is to ask the participant to rate the elements according to the constructs. Rating is regularly used because it can be analyzed easily (Goffin, 2002). Rating scale of 5, 7, or 9 can be used depending on the researchers. If the scales are wider, the time required for rating the elements would be longer, and the task may be boring for the participants to complete (Goffin, 2002). Thus, this study uses a 5-point scale because it require less cognitive demand of the participants who have to undergo the interview as well as rating the elements within one interview. Moreover, a scale where there is middle position should be used because it can convey the neutrality when the interviewee is asked to rate the elements (Jankowicz, 2003).

2.3 Advantage and disadvantage of Repertory Grid Interview

The repertory grid interview is widely used because it offers several advantages. It is a tool that can obtain the results without influences from the interviewer’s viewpoint, allows the researcher to use both quantitative and qualitative techniques, and can be a useful pilot study for further development of surveys (Jankowicz, 2003). In addition, it can help obtain detailed explanation from the interviewee while direct questioning cannot do so for some complicated topics (Goffin, 2002). Moreover, the repertory grid interview is developed in order to avoid bias from the researchers in collecting data (Hawley, 2012).

However, Borg (2006) suggests several problems in using repertory grid interview to study teacher’s cognition. First, it requires certain amount of practice, technical skills, and pilot
studies. Second, the participants for the interview may feel tired if they are asked to analyze the repeated set of elements. Third, there may be the danger of researcher imposing the constructs on the participants.

3. Context
Data for this paper comes from a larger study which aims to investigate native and non-native teachers’ beliefs about teachers’ feedback to writing. The participants were English teachers who have been teaching at the university level in Thailand for more than one year. The participants were interviewed using authentic teachers’ responses from an argumentative essay. In this study, they were referred to as T1 to T10; T1 to T5 were Thai teachers while T6 to T10 were native English speaking teachers. The data were collected from two stages; eliciting elements which is similar to conducting a free interview, and eliciting constructs, which uses the repertory grid interview. The interviews focused on the topic of corrective feedback which is one of the four topics from the main study. Data collected from two types of interview will be compared to illustrate the depth of data provided by the repertory grid interview.

4. Data Collection
4.1 Element elicitation
The elements were elicited through free interview in order to avoid the researcher from imposing personal beliefs on the interview items. To obtain the elements, the teacher participants were first asked to assess an argumentative writing. Then, they were interviewed about each point of feedback they gave to a specific point in the essay. The interviews were conducted in Thai or English, depending whether the participants are Thai or Native English speakers. It is considered a free interview because there were no fixed questions to ask during the interview. The questions were from the responses that the teacher gave in the assessment. The aim of the interview is to clarify the criteria the teachers used in giving feedback to student’s essay. The participants were allowed to speak as much as possible, but generally they spent about 10 to 20 minutes.

From the free interview, the transcripts were analyzed and four elements emerged from the data. The four elements were only locating errors, giving error codes, giving explicit corrections, and giving explicit corrections with explanations.

4.2 Construct elicitation
Construct elicitation was conducted through repertory grid interview which lasted between 45 minutes to one hour. It took longer than element elicitation interview because there were pauses when participants tried to think when comparing elements from the triad. Languages used during the interview were either Thai or English, depending on the participants’ preferences. After the elements were obtained, they were presented in groups of threes (i.e. triads). When the triads were presented, the participant was asked these questions; 1) how are the two of these three similar to and at the same time different from the other one in terms of learning effects? 2) how are the two of these three similar to and at the same time different from the other one in terms of teacher’s practice? From doing this, bipolar constructs were established.

When asked to compare three elements, the participants might encounter some difficulty due to abstract ideas (Donaghe, 2003). Thus, this study attempted to mitigate this difficulty by using cues. The cues used for the repertory grid interview come in the form of flash cards. Flash cards were in the size of A4 paper, developed from the essay that the participants were asked to
assess. The cues were developed from authentic feedback points that were collected from ten participants, which contained what they have marked on the essay. There were a total of four flash cards according to four elements, namely locating errors, giving error codes, giving explicit corrections, and giving explicit corrections with explanations. The essay for each flash card is the same, but it included different approaches for corrective feedback. For example, if the element is ‘indicating errors’, the flash card for this element will include the essay with the errors underlined or circled. From doing this, the participants could visualize each element better in order to respond to the interview questions better.

5. Results and discussions

Previous studies in the field of investigating teacher’s believe about feedback on writing has adopted self-report instruments such as questionnaire and semi-structured interview (see Bailey & Garner, 2010; Lee, 2003; Lee, 2009). Data from these studies revealed teachers’ beliefs about corrective feedback, namely, that indirect feedback is helpful for learning even though students may not be able to do locate the errors by themselves. In addition previous studies also found that teachers believe that using marking codes could lead to some problems such as difficulty in categorizing codes and the students’ ability to understand and to correct their mistakes from the codes. When asked about problems concerning corrective feedback, teachers believed that it is time consuming and there were also problems including students’ low proficiency level and ineffectiveness of corrective feedback practices, and repetition of students’ errors.

One example of studies into teachers’ belief about corrective feedback was from Lee (2003). She aimed to investigate perspectives, practices and problems relating to corrective feedback of L2 writing teachers, by using questionnaire with both open and close ended questions as well as the follow up interviews. The findings from the interview revealed that the majority of the teachers (more than 90%) believe that they should provide feedback selectively, students should learned to locate and correct their own errors. Moreover, the follow up semi-structured interview clarified reasons that supported their beliefs as seen in the following excerpt.

Actually if the students can really locate errors, they can learn a lot from it. However, usually it’s the teachers who do the error correction. If teachers do most of the things, students have less work to do, then they can learn more. I tried to ask them to locate errors themselves, but the result was not good. (Lee, 2003:226-227)

The instrument seemed to suggest that teachers’ beliefs in self-correction could lead to better learning. Students learn more if they are able to identify the errors themselves. However, it may not reflect any real belief since the participant only described what should be done and the reason behind this type of feedback. The belief about the usefulness of students locating errors themselves was mentioned only in a general situation without taking any other factors into account. It is worth mentioning that self-report instruments may not reflect what a teacher really does in the classroom as it does not probe deep enough to gain plausible teachers’ beliefs (Lee, 2003).

The participants’ answers which do not reflect deep thinking also occurred in this study about teacher’s belief regarding corrective feedback. This happened during the free interview sessions, when the participants were asked to answer the questions relating to the feedback points they gave to the students. Some questions at these instances were, “what does this feedback mean?” or “What does this symbol mean?”
One example was from the feedback point where the teachers located the errors for the students, and whether they give explicit correction. The following extracts were example answers obtained from the first stage of the study, element elicitation.

“บางทีก็ขีดแค่ตรงนีแล้วให้เค้าไปหาว่าเค้าผิดอะไร แต่บางทีก็จะบอก มันแล้วแต่ระดับของเด็ก” [Sometimes I just underline the errors and let the students figure out by themselves. Sometimes I made the corrections. It depends on the level of the students.] (T1)

“แก้ (จุดที่ผิด) ให้เลยนะคะ ยกเว้นในส่วนที่เป็นของ content ถ้าไม่แน่ใจก็จะขีดไว้ให้ดูเฉยๆ” [I corrected the error for the students. Except for the content part where I just underline the points where I was not sure what the student was trying to say] (T5)

“But for the prepositions, stuff that is very idiomatic, I just usually change it.” (T6)

“I might then just to cross out the word ‘are,’ and then the students have to just learn that ‘starve’ is a verb.” (T7)

“I wanted to indicate that the word ‘disrupt’ needs a verb to be and I’m hoping to see that when the students see this symbol (^) (which was put in front of the word, ‘disrupt’), they’ll go, ‘what’s wrong here?’ and they might come to ask me or ask somebody else.” (T7)

The answers from the participants in this study were similar to what was found in the study by Lee (2003) in that the answers only reflected belief at the surface level. This means the participant teachers only reported what they did or think, and sometimes provide reasons for their opinion without considerations for other possibilities. Moreover, if Bloom’s taxonomy is considered, the level of thinking found in the use of semi-structured interview by Lee and the free interview in this study are similar. That is, the thought they put into their replies were at the analyzing level, which, according to Bloom’s taxonomy, is where they simply analyze their practices in giving feedback and providing some reasons. For example, the response from T1 clearly indicated the belief that the level of students was a major influence for teacher’s selection of the approach to give feedback. Without further explanation of how each level of students’ proficiency affect the way teacher choose to give feedback, the belief elicited was considered to be at a descriptive level. Similarly, the response from T6 also presented a similar issue. The participant only described the explicit correction by changing idiomatic expressions for the student without showing concerns in any other cases.

On the contrary, using repertory grid interview offers the context for the participants to compare between the choices of feedback. The participants were required to think more deeply when they need to answer the questions, “How are the two of these three similar to and at the same time different from the other one in terms of learning effects?”, and “How are the two of these three similar to and at the same time different from the other one in terms of teacher’s practice?” When the participants were asked these questions, they had to go through some considerations to evaluate each of the three elements in each triad, compare the similarities and differentiate them into bipolar constructs, and also give justifications for their comparison. The following excerpts were from the one participant, when he was asked to compare between four
elements relating to approaches in giving corrective feedback, which are: only indicating errors, giving error codes, giving explicit corrections, and giving explicit corrections with explanations.

In the first triad, when the participant was asked to compare between three elements; only indicating errors, giving explicit corrections, and giving explicit corrections with explanations, the answer was

*I think giving explicit corrections would go together, and separate this one (only indicating errors) from those two. This (only indicating errors) requires the student to think. They actually look what the error was. And probably ask friends perhaps even the more diligent ones might look it up. Or looked in an old hand out, or go ask the instructor. These ones (giving explicit corrections, and giving explicit corrections with explanations), students look at it but they don't need to think about it, quite honestly, they'll look for the score and that'll be about it. But here (only indicating errors), it usually generates curiousness, “Ajarn why did you mark this wrong?”.... (T10)*

Form this excerpt, it can be clearly seen that the respondent’s answer revealed a deeply-held belief and a deeper level of thinking compared to previous excerpts elicited through free interview. The deeper thinking in this case refers to the ability of the participants to compare between possible situations in giving correction. The excerpt presents the ability to analyze students’ learning behaviors before giving certain types of feedback. He explicitly pointed out that giving explicit corrections and giving explicit corrections with explanations may not lead to students’ thinking, while the other approach of feedback in the triad might lead to students’ curiosity to correct the work themselves. The consideration of various possibilities in learning situation leads us to see that using repertory grid interview could be considered more beneficial in eliciting deeply-held beliefs. That means the participants took options of learning into account, rather than purely describing or explaining the practice that they have done.

In the next triad, the same participant was given three elements including three approaches, only indicating errors, giving error codes, and giving explicit correction.

*Again, it comes down to, this is much more active (only indicating errors and giving error codes), and this (giving explicit corrections) is much more passive. They’re actually, probably some stage of introducing the error code. There have been some sorts of preparation regarding that. And more diligent students will actually look at the error code and try to figure it out. And you can actually do the follow up saying, “giving the correcting version next week”. So it requires much more cognitive action on their part. Whereas here, again when you make corrections, it’s very passive on their point; they don’t have to think about it. And this works quite well if you have a group of students who are low intermediate or higher you can explain. And I think it's a little...it gives a little more guidance than it simply is. (T10)*

This triad provides chances for the participant to compare similarities and differences among another three approaches of corrective feedback. By comparing among three approaches, the participant analyzed the usefulness of indirect feedback which includes indicating errors or providing error codes. The participant consistently mentioned that the students should be encouraged to think. He also extended his belief to the cognitive activity while doing self-correction, stating that the more students’ cognitive activity was involved, the more learning they would have. According to Bloom’s taxonomy, this participant provided an answer which was at the evaluation level of thinking, in his evaluation of the indirect approach to corrective feedback, stating that only indicating errors and providing error codes were effective approaches especially
when used with certain groups of students. From his answer, he did not only judge the approach, but also made a judgment that students who may be at a lower or intermediate level of writing proficiency would benefit from this type of corrective feedback. Through comparison and evaluation among the choices of feedback, the participant reflected his real belief though his positively evaluation that indirect feedback could encourage students to become active learners, and thus contribute to better learning.

6. Conclusion

This study showed that the method to elicit belief from the participants should not solely be restricted to traditional instruments such as questionnaire or interview as they only yield the result of reported beliefs. It can be seen from the discussions that the repertory grid interview can be an alternative method for a researcher to elicit real beliefs from teachers. Using the repertory grid interview requires the participants to compare among the elements in the triads, resulting in the need to analyze both similarities and differences of a particular context and evaluate the context they encountered. Furthermore, answering questions with the use of repertory grid interview also enhances the participants’ chances to take different situations into account rather than simply describe one situation. This opportunity to provoke interviewees’ evaluation of wider perspective seems to be beneficial in research aiming at eliciting beliefs.

References


