

# Effects of the Competency-based Integrated Training (CBIT) on the Secondary School English Teachers' Self-efficacy Beliefs

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## Abstract

This paper discusses findings of a survey about the effect of Competency-based Integrated training (CBIT) initiated by the Indonesian MoNE on the secondary school English teachers' self efficacy beliefs for curriculum implementation in Yogyakarta Province, Indonesia. The findings are based on two types of data collected in January – February 2007. The first type of data was collected from 152 English teachers in the province using a five subscale questionnaire in a two-time frame and was analysed using the Repeated Measures MANOVA. The second type of data was collected using an interview protocol and was analysed using the QSR NVivo 7 packages. Although findings from quantitative data suggest that there are significant differences in the teachers' efficacy beliefs before and after the CBIT, interviews with some of the teacher sample, however, reveal different aspirations when asked about the contribution of such trainings on their confidence in implementing teaching in the classroom. The findings provide an important implication on the efforts of improving the teaching quality in Indonesian context.

**Key words:** *Competency-based integrated training, teachers' self-efficacy beliefs*

## **A. Introduction**

### Teaching English in Indonesia

English has become an important foreign language in Indonesia. This perceived importance is recognized by the Indonesian government in the Law No. 20, 2003 concerning the National Education System. Item 36.1.3 of Chapter Explanation of the law, states that foreign languages, in this case English, is an important international language in establishing global relationships. Another part of the law emphasizes the government's awareness of the need of good education system in global life (Department of Justice, 2003). The importance of the teaching of English is also signalled by the government program that includes English language teaching in the elementary school curriculum. Furthermore, since 2004 the government has established a pilot program to include English in grades four, five and six of elementary school curriculum, especially for schools in cities.

In addition, issues in English teaching in Indonesia have been interesting, especially when concerned with the teaching philosophy, methods, curriculum, assessment and more importantly the students' achievement. In terms of the philosophy of learning English, Dardjowidjojo (2000 in Lee, 2004) has stated that there have been changes in the philosophy of teaching English in Indonesia. These changes have affected the approaches and methods in the English teaching. Lee (2004) has noted several approaches of English teaching implemented in Indonesia, such as the Grammar Translation Methods (GTM) in 1940s to the beginning of 1960s, the Oral-Aural Methods from 1968 to early 1970s, the Audio-lingual in 1975, the Communicative approach in 1984, the Meaningfulness approach in 1994, and the Literacy approach, which is the latest approach recommended in the teaching of English in Indonesia (Lee, 2004). These changes in the approaches do not end the long debate among experts in English teaching in Indonesia concerning the best suited teaching methods for the subjects.

Debates are also common in terms of the curriculum and the assessment implemented in the teaching of English in the country. Curriculum which normally changes every ten years in the Indonesian context seems to stimulate a never ending discussion among experts. Among the issues, one concerned with students' achievement seems to be very crucial. This is perhaps because students' achievement is not only the concern of schools, but also the parents, and even the society and the government. The issue of students' achievement seems to be ever present whenever forums of English teachers are held. Although English has been a compulsory subject at junior secondary school early from the first year or Year Seven, it does not bring about satisfactory result in both their communication skills and their English

National Exam score at the end of the Junior secondary school period. As reported by the Ministry of National education, the National Examination national average score of English is 6.61 for Junior high school students, which was only 0.60 above the national passing grade standard for year 2005-2006. Abas Ali even says that the teaching of English in Indonesia is of total failure because the ability of the students in all four language skills is not operational (Media Indonesia, 2000). The issue of low achievement is very often said as due to the changing of curriculum, low relevance in education program and low quality of teachers.

### **Increased perceived importance of teachers' roles**

The significant roles of teachers have also been increasing since the implementation of the competency-based education, which was marked by the launch of the draft of the *Kurikulum Tingkat Satuan Pendidikan* (KTSP) which was initially called the Competency-based Curriculum (MoNE, 2003). Since the preparation of this curriculum, the roles of teachers have been considered vital not only in conducting teaching in the classroom but also in preparing the lessons. Teachers are considered know best about the appropriate classroom activities and interaction for the students, more specifically concerning the levels and the needs of the students. This is because teachers are assumed to better understand the special characteristics of their students, the availability of the teaching equipment in the school, and even the support of the society around the school. Therefore, based on this assumption teachers have been assigned new tasks related to the development of materials to be presented in the classroom. This is new because they used to implement materials prescribed by the curriculum (MoNE, 2003)

Through the assignment of these new tasks, teachers are expected to be ready not only to decide whatever materials to bring into the classroom but also to take the responsibility for what they have chosen. In doing so, teachers are expected to have access to the power of decision making. More importantly, teachers are supposedly ready to act autonomously given access is available for them.

The significant increase in the perceived importance of teachers' roles and function in education was further emphasized through the issue of Law No. 14, 2005 concerning the work of teachers and lecturers. In this regulation, the government acknowledges the importance of teachers in shaping and supporting the development of future generations. With this law the government emphasizes the importance of both empowering teachers and at the same time improving the quality of teachers. This law is designed to support the improvement of access to education, educational quality,

relevance and accountability in the face of local, national and global demand (MoNE, 2006).

## **B. Review of the Literatures**

### Teacher self-efficacy beliefs

Teacher self-efficacy beliefs have received significant and increasing attention over the last three decades. At an early stage, Bandura (1977) defined perceived self-efficacy as people's beliefs about their capabilities to produce designated levels of performance that exercises influence over events that affect their lives (Friedman, 1998). In its development, however, the concept was extended to embrace people's beliefs about their ability to exercise control over events that affect their lives (Bandura, 1989), and extended even further to encompass beliefs in peoples' capabilities to mobilize the motivation, cognitive resources and course of action needed to exercise control over task demands (Bandura, 1990).

Based on this general definition of efficacy beliefs, teacher self-efficacy has been defined as teachers' judgment about their capability to bring about desired outcome of students' engagement and learning, even among those students who may be difficult and unmotivated (Bandura, 1977b; Tschannen-Moran & Hoy, 2001). In terms of teachers' efficacy beliefs, researchers have come to suggest that teachers' self-efficacy beliefs are held to be instrumental in affecting the effort teachers put into teaching, in setting goals, and in the aspiration teachers have for themselves and their students.

However, over the course of the development of research in the field of efficacy beliefs, researchers have arrived at somewhat different constructs of these beliefs. Although there are definitional differences, researchers insist that teacher efficacy is an important dimension of teachers. For example, a high sense of efficacy is considered influential in the teachers' level of enthusiasm for teaching (Alinder, 1994; Guskey, 1984), commitment to teaching (Coladarci, 1992), with highly efficacious teachers tending to exercising higher levels of planning and organization (Alinder, 1994). As well as being willing to persist in dealing with problems and being more resilient in the face of setbacks (Ashton & Webb, 1986), highly efficacious teachers are more open to new ideas and are willing to experiment with new methods (Guskey, 1988; Stein & Wang, 1988). Even though teacher efficacy remains an elusive constructs (Tschannen-Moran & Hoy, 2002), it nonetheless appears to be important in the working life of teachers suggesting that it needs to be explored and examined in varying social and cultural contexts.

### Sources of teacher self-efficacy beliefs

Although there are differences in the terms for the concept of teacher self-efficacy beliefs used by researchers, there seems to be a shared idea concerning the source of the beliefs. A common understanding comes to suggest that self-efficacy beliefs develop from four principal sources of information: enactive mastery of experiences that serve as indicators of capability; vicarious experiences that alter efficacy beliefs through transmission of competencies and comparison with attainments of others, verbal persuasion and allied types of social influences that one possesses certain capabilities; and physiological and affective states from which people partly judge their capableness, strength and vulnerability to dysfunctions (Bandura, 1997).

Enactive mastery experience according to Bandura (1997) derives from experiences of success, while failures, on the other hand, undermine sense of efficacy beliefs. Experience of success does not necessarily mean without difficulties. Bandura further states that when people experience easy successes all the time, they will be easily discouraged when facing problems because they expect quick results. Strong resilient efficacy beliefs require the ability to solve problems through perseverant efforts. That is why easy successes do not support the development of one's efficacy beliefs. Difficulties, on the other hand, do. This is because difficulties provide people with experiences to learn how to turn failure into success by exercising better control over the events.

The second source of efficacy beliefs is vicarious experience which is mediated by modeled attainment (Bandura, 1997). Individual beliefs in his or her ability can be promoted by an existing successful model. The more aspects individual have in common with the referral model, the more vicarious effect the model has on the individual. Although vicarious experiences are said to be not as strong as mastery information, it indeed contributes to boost one's confidence in the ability of doing something, more particularly when there is a doubt with respect to the amount of success one might get. When one doubts his ability of achieving success in a certain activity, successes of a referral model will lessen the doubt, thus increase the efficacy beliefs. That is to say that vicarious experience will have its highest effect when the amount of uncertainty of the individual is most. When an individual has no prior success on certain ability, s/he will tend to look at relevant model to base on his/her efficacy judgment. Mixed experiences of success and failure are also conditions of vicarious experience effects. In this case continuous appraisals from the environment might be needed to boost the efficacy beliefs.

The third source of self-efficacy beliefs is verbal or social persuasion (Bandura, 1997). Although the power to strengthen efficacy sense is not as

strong as enactive experiences or the vicarious experience, one's sense of efficacy is indeed strengthened when there are others who persuade verbally that one has the ability to do a certain task. Verbal persuasion usually takes the form of evaluation feedback. When people are told that they have the capability of doing some task regardless of the problems, they usually build the sense that they are capable of doing it based on the feedback. Feedback is usually given in indirect and subtle ways so that it lifts the sense of confidence.

The last source of efficacy according to Bandura (1997) is the physiological and emotional states which convey the somatic information. In terms of physiological states, people tend to consider their fatigue, windedness, aches and pains as indicators of inefficacy, especially in health functioning and activities involving strength and stamina. Furthermore, people often perceive low sense of efficacy when they have to do physiological activities in stressful and taxing situation. And they, therefore, consider the stressful and taxing situation as signs of vulnerability or dysfunctions (Bandura, 1997) p.106).

#### Teacher professional development

Gordon (Gordon, 2004) has proposed three elements to be covered in a successful professional development program. Those aspects include the capacity building, the core element and the purpose of professional development. Those three aspects can further be explained into seven elements that should be combined to optimize the effect of a professional development. He further said that,

“... a successful professional development includes a combination of experiences that empower 1) individual educators, 2) educational teams, and 3) the educational organization to improve 4) curriculum, 5) instruction, and 6) student assessment in order to 7) facilitate student growth and development” (Gordon, 2004: p. 5).

According to Gordon, the first three elements belong to the capacity building, which have no direct effect on student learning but increase the ability of individuals, groups, and schools to affect student learning. The next three elements belong to the core element of a professional development program and have direct effect on student learning. The last element, to facilitate student growth and development, is the ultimate purpose of professional development (Gordon, 2004).

In terms of the models of teacher professional development, many have often proposed categories like (skill) trainings, workshops, seminars, action

research, and some other models. Recently, however, there seem to be more simple classification of professional development. Little (Little, 1993), for example, uses the term alternative models of professional development to refer to what she assumes to be 'more reformed' models that trainings. Although she seems to be unsupportive to teacher training as a model of professional development, she suggests that the present practices of teacher trainings have demonstrated greater sophistication.

Although training has been one of the most widely used models of professional development research has suggested that it is the least favor professional empowerment and often been discussed with a negative connotation and portrayed as antithetical to authentic professional development (Gordon, 2004: p. 33). Such negative responses are mainly based on the common practices conducted in the training in which there are no adequate opportunities for the participants to implement the newly trained skills with good supervision. This is also caused by the lack of consultation participants might have when they try to implement the new skills. This is in line with what Little's idea about what an effective training should provide (Little, 1993; p. 132) In discussion the professional development that supports education reform, she has recommended that the level of effectiveness of training is related to the ability of the training to provide teachers with opportunity for practice, consultation, and coaching (Little, 1993).

In terms of the effects of trainings on teachers' sense of efficacy beliefs, a number of research has suggested that there is effect of training as professional development on teachers' sense of efficacy. Ross and Bruce (2007) for example stipulate the possibility of professional development on the level of efficacy beliefs. They theorize that professional development contributes in multiple ways to the four sources of efficacy information (Ross & Bruce, 2007). By attending a training, there is a possibility for teacher to feel that there is an increase in their level of mastery on the field transferred through the training. The increase of perceived mastery will potentially elevate the level of efficacy. Communicating with colleagues and seeing other teachers' success while in the training can also provide vicarious experience, which in turn will also increase the teachers' sense of efficacy.

Further, using the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001), Ross and Bruce find that there is positive contribution of professional development in all three dimensions measured, especially on teachers' expectation about their ability to manage students in the classroom.

“Although there were slight increases in the other dimensions of teacher efficacy measured by the Teachers' Sense of Efficacy Scale,

only changes in classroom management were statistically significant. We suspect that teachers' confidence in their ability to engage student interest and to use new instructional strategies follow confidence in classroom management" (Ross & Bruce, 2007)

## C. Methods

### Participants

Data were collected during the period of December 2006 – February 2007 in four districts and one municipality of the province with the target population of Junior Secondary School English teachers in the province. Criteria of sampling picked only teachers that had already attended the Competency-based Integrated Trainings (CBIT) conducted by the Ministry of National Education (MONE) as the appropriate sample of the research. Data collection was done while teachers were attending the teacher forum meetings in their respective districts and municipality.

There were two groups of participants in this research. The first group was one hundred and fifty two English teachers and the second group was four teachers who were members of the first group. Teachers in the first group were those who had been selected on the basis that they had attended the CBIT in 2004 to 2006 and had agreed to participate in this research by returning the questionnaire. Teachers in the second group were selected based on the teacher instructors' nomination. This nomination was based on the grouping of high, medium and low performance teachers. The decision of asking the nomination from the teacher instructors was based on the assumption that they knew the teacher participants better due to their duties, especially because they were the people who had access to the performance records of the teachers.

### Criteria and the recruitment of research sample

The sample of the survey in the present study was determined using two main criteria for selection. First, they were junior secondary school English teachers who taught in the four districts and one municipality in Yogyakarta province. Second, those English teachers had to have attended the *Pelatihan Terpadu Berbasis Kompetensi* (PTBK) or the Competency-based Integrated Training (CBIT). It was a training designed by the Indonesia Ministry of National Education (MoNE) to prepare the teachers to implement the newly issued curriculum, *Kurikulum Berbasis Kompetensi* (KBK) or Competency-based Curriculum (CBC).



The second criterion of the selection of the sample was accessed directly when the survey was conducted in the district teaching forum meetings. By only asking participation from those teachers who had attended the CBIT, it was expected that the survey data collection would disqualify those who had not. The recruitment, therefore, was done with no special invitation. Instead, the researcher went to the monthly English Teacher Forum meetings in all the districts and municipality. To maximize the number of responses, the researcher came to all teacher forums within the periods of December 2006 to February 2007. This was done in case there were teachers that could not attend the meeting in one of the meetings.

The second group of sample was selected based on the nomination of teacher instructors in the province. There were four teachers resulted from the second recruitment process. These four teachers were nominated by the teacher instructors from the members of the first group. The nomination was based on the participants' English proficiency. The participants, therefore, represented teachers from high, middle and low English proficiency.

At the nomination stage, there were actually nine nominated teachers representing high, middle, and low proficiency respectively. Upon responding to the further research invitation, however, only four of the nominated teachers expressed their participation. Among these four teachers, one teacher was identified as having low English proficiency, two teachers were in the middle, and the other one was the high English proficiency. These four teachers participated in the follow-up study focusing on their teaching practices in the classroom. Participants were asked to complete a consent form and their participation was also voluntary. Data collected from this group of participants were gained through semi-structured interview and classroom observations.

## **D. Measures**

There were two types of instrument used to collect the data. The first instrument, the teacher efficacy scale, was used to collect the quantitative. The second was in the form of interview protocol.

### **Teachers' self-efficacy scale**

The teachers' self-efficacy scale used in this study consisted of two parts. The first part was a three-subscale questionnaire drawn from the long version of the Ohio State Teacher Self-efficacy scales (OS-TES) developed by Tschannen-Moran and Hoy (Tschannen-Moran & Hoy, 2001). They consisted of eight items in every subscale. The first eight-item sub-scale, the efficacy for instructional strategy scale, tried to measure the beliefs of the teachers in

their ability in planning, executing and evaluating their classroom English instruction. The second sub-scale, the efficacy for classroom management scale, dealt with measuring teachers' efficacy beliefs in managing the classroom. The third sub-scale, the efficacy for student engagement scale, was aimed to measure teachers' efficacy beliefs in engaging students in the classroom activities.

There were some considerations of using the survey. The first reason was related to the fact it was developed through a thorough review and analysis on the existing teacher self-efficacy measures. It was, therefore, reasonably valid, given the positive correlation with the existing measures (Tschannen-Moran & Hoy, 2001). The second reason was related to the evidence that the survey had high reliability coefficient when used in different context of participant. For example, when applied in the United States context, it had the overall alpha coefficients of .94 and the sub-scale alphas of .91, .90 and .87 for the efficacy for instructional strategy, classroom management and student engagement subscales (Tschannen-Moran & Hoy, 2002). Similarly in the Malaysian context, Murshidi et.al, (2006) found that the overall alpha coefficient were .80 with alphas of .77, .93 and .94 for the three subscales (Murshidi, Konting, Elias, & Fooi, 2006). Although the OS-TES had proven to be highly reliable for both the USA and Malaysia participants, there was no guarantee that the same findings would be found when it was applied to an even more specific context of Indonesia with teachers teaching English as a foreign language. Cultural and social aspects of Indonesian teachers might give a rise to issues related to the findings. This research, therefore, was expected to provide cross-cultural validation on the existing teacher efficacy scales.

The second part of the teachers' efficacy survey consisted of two subscales developed by the researcher. They were designed to address the specific context of this study, the junior secondary English as Foreign Language (EFL) teachers in the context of curriculum changes in Indonesia. The first subscale, the teachers' efficacy for English, consisted of seven items addressing the English-related skills needed by teachers in doing their daily teaching duties. The items covered both productive and perceptive skills as well as both English for communication and instruction purposes. The second subscale, the efficacy for curriculum implementation sub-scale, was developed to investigate teachers' self- efficacy beliefs in the implementation of Curriculum 2004 in Indonesian Secondary School English teaching. This eight-item sub-scale was designed to address the contextual issues regarding the teaching of English in Indonesian secondary schools as a result of the changing in curriculum from the Curriculum 1994 to the Curriculum 2004 and then to the School Level Curriculum 2006. Aspects measured in this sub-scale concerned mostly with the concepts and practices in the competency-

based language teaching and the contextual teaching and learning. These two aspects of the measure were relevant with the materials given to teachers through the CBIT.

## **E. Procedure of data collection and analyses**

Collection of quantitative data was done in four districts and one municipality in Yogyakarta province and was facilitated by the teacher forums in each area for the survey. All participants were directly contacted by the researcher at the teacher forum meetings in every district and municipality between January – February 2007. In the meetings, teachers who fit the sample criteria were invited to participate in the research and were asked to fill in the teacher efficacy questionnaire. Participation of the teachers was voluntarily.

Prior to the data collection, the researcher explained the research project and asked the teachers to participate in the research by completing a survey. Upon requesting the participation, the researcher explained the purposes of the research, the information required in the research, and the significance of their participation. Issues on confidentiality were also discussed in the preliminary explanation. Participation, however, was voluntary, which was signaled with the voluntarily returning the completed questionnaire by the participants together with the participants' consent forms. This first group was required to complete a questionnaire consisting of seven sub-scales that took approximately 30 minutes of their time. The questionnaire focused on the teachers' self efficacy beliefs in English and English teaching in general and in relation to the implementation of the new curriculum in particular. It was also aimed to investigate whether there were changes with respect to the teachers' self efficacy beliefs before and after teachers' attendance in the CBIT.

Data were in the form of teachers' self-report concerning their level of efficacy before and after attending the CBIT. In collecting the data, the researcher asked teachers to respond to the efficacy questionnaire twice. In the first session teachers were asked to report their level of efficacy at the time the data were collected. These data showed the level of teachers' self-efficacy after they attended the CBIT. In the second session, on the other hand, teachers were asked to reflect their level of efficacy before they attended the CBIT. All responses were anchored on a seven-point Likert-type scale ranging from *Not at all* to *Great deal*. The recorded data were then coded into the Efficacy\_NOW and Efficacy\_THEN formats. Efficacy\_NOW referred to the level of the teachers' efficacy at the time the data were collected or after attending the trainings, while Efficacy\_THEN referred to the level of teachers' efficacy beliefs before they attended the trainings.

Qualitative data were collected using an interview protocol. The collection of the data about contribution of CBIT on teachers' self-efficacy was a part of a wider construct of teacher efficacy in general. There were only two items in the interview protocol that were used to assess the level of efficacy in relation to the training they had attended.

Quantitative data were analysed in two steps. First data were analysed descriptively to identify the groups created by the categorical independent variables. Second, the data were then analysed using the repeated measures MANOVA of the SPSS package. The Multivariate value of the analysis provides the basis to determine whether the effect of the training was significant. Qualitative data from the interview were analysed following the qualitative data analyses. First, the data were transcribed from the recorded interviews before they were coded. The coding process in the present study was conducted in two steps using the NVivo 7. First data were coded into themes. Then the connection among themes was used to formulate categories, and from these meaningful categories was an interpretation and explanations on the findings were built.

## **F. Findings**

Descriptive analyses on the data resulted in the description and distribution of the sample. There were seven independent variables involved in the data collection. Such variables included the gender, age, educational background that covered whether the participants had English teaching background in their college or university, teaching experience, teacher status, schools, and the districts where the teachers taught. Table 1 showed the description and distribution of the sample based on the independent variables.

From the descriptive analysis, it was found that there were more female teachers in the sample, with most participants were between 31 to 50 years of age, and had more than five years of teaching experience. Very few teachers in the sample did not have English teaching background. Participants were from four districts and one municipality in Yogyakarta province teaching mostly in public schools.

Repeated measures MANOVA was used in this study to investigate the differences of the Secondary school English teachers' efficacy beliefs in Yogyakarta province as a result of the teachers' attendance in the Competency-based Integrated trainings (CBIT). In general, Multivariate tests in the Repeated Measures MANOVA suggested that there were significant differences between the level of teachers' efficacy beliefs before and after their attendance in the Competency-based Integrated trainings,  $F(38, 114) = 3.511, p < .05$ . Differences in the means of the teachers' self-efficacy beliefs

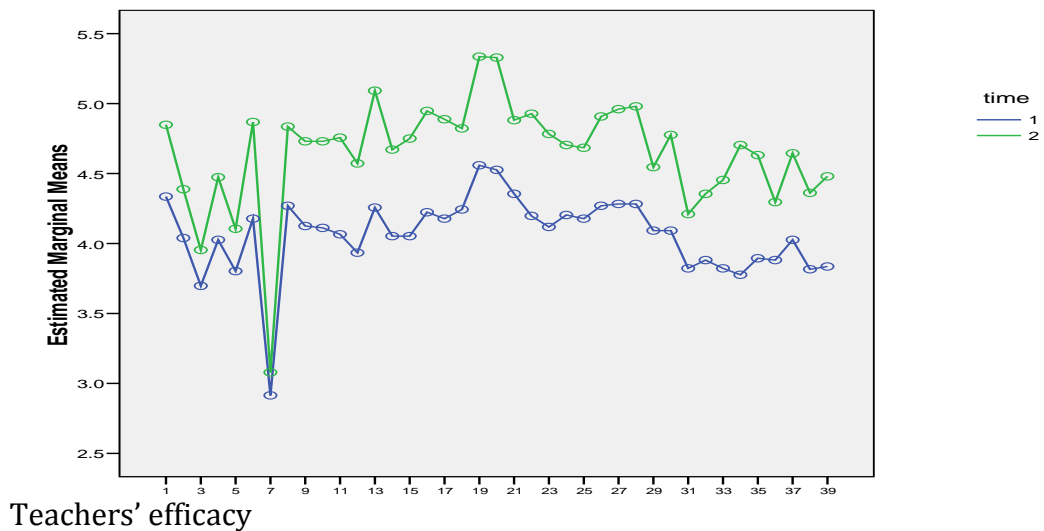
can be seen in Figure 1, with *time\_1* (the lower line in the figure) representing the level of teachers' efficacy before attending the CBIT and *time\_2* representing the levels of teachers' efficacy after the trainings.

Table 5.1

Description and Distribution of Teacher Sample

Independent Variables	Value labels	N	%
Gender	Male	52	34
	Female	100	66
Ages	<30	14	9
	31-40	84	55
	41-50	42	28
	>50	12	8
English teaching Background	Yes	144	95
	No	5	3
	No report	3	2
Teaching Experiences	Less than 5 years	21	14
	5 - 15 years	70	46
	More than 15 years	61	40
Teacher status	Part time teachers	20	13
	Civil servant	122	80
	Full time private teachers	10	7
Schools	Public	119	78.
	Private	33	22
Districts	Yogyakarta City	22	14
	Sleman	27	18
	Kulonprogo	33	23
	Bantul	25	16
	Gunungkidul	45	29

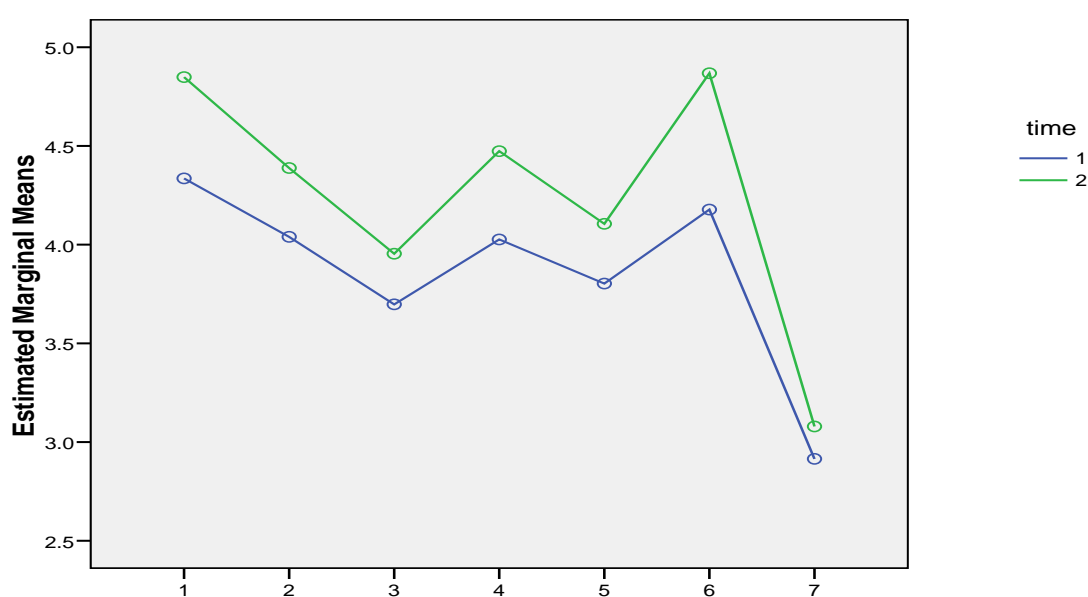
Figure 1. Difference in means of teachers' efficacy before and after CBIT



### The effects of Competency-based Integrated Trainings on the teachers' efficacy for English

Multivariate tests in the Repeated Measures MANOVA on the teachers' efficacy for English subscale revealed that there were statistically significant differences in the levels of teachers' efficacy before and after they attended the CBIT,  $F(6, 146) = 7.9, p < .05$  (Figure 2). As in the general trend, the mean scores of the after-training items in the efficacy for English subscale were higher than the before-training ones.

**Figure 2. Difference in means of teachers efficacy for English before and after CBIT**



Teachers' Efficacy for English

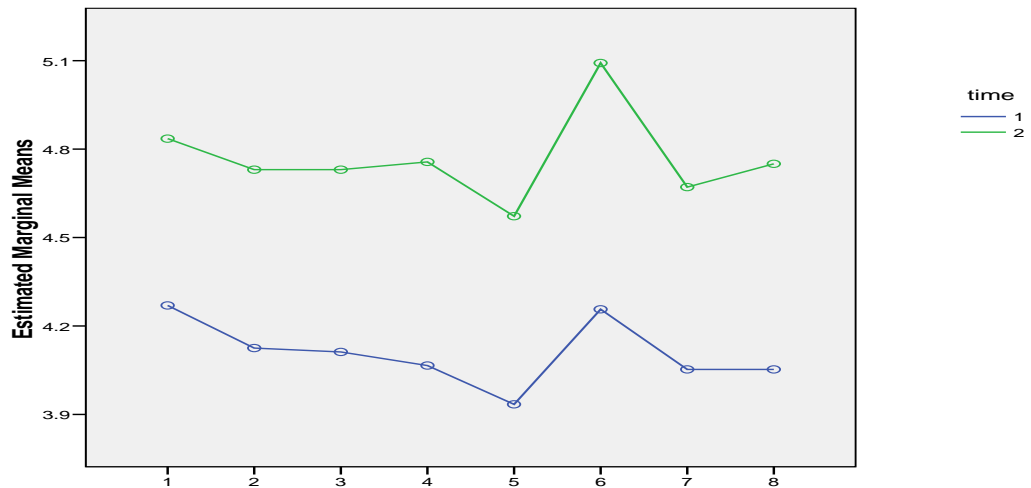
### The effects of Competency-based Integrated Trainings on the teachers' efficacy for Instructional Strategies

Results of Multivariate tests in Repeated Measures MANOVA suggested that there were significant differences in the mean scores of teachers' efficacy for instructional strategies before and after the CBIT,  $F(7, 145) = 2.745, p < .05$ . In this subscale, it was found that the trainings contributed positively towards the level of teachers' efficacy for instructional strategies where after-training mean scores dominated the before-training ones (Figure 3)

### The effects of Competency-based Integrated Trainings on the teachers' efficacy for Classroom Management

Multivariate tests in the Repeated Measures MANOVA suggested that there were positive contribution of CBIT on the levels of teachers' efficacy for classroom management. This in turn brought about differences in the mean scores of the teachers' efficacy where after-training mean scores were higher than the before-training ones (Figure 4). The tests also suggested that the differences in the levels of teachers' efficacy were statistically significant,  $F(7, 145) = 2.9, p < .05$ .

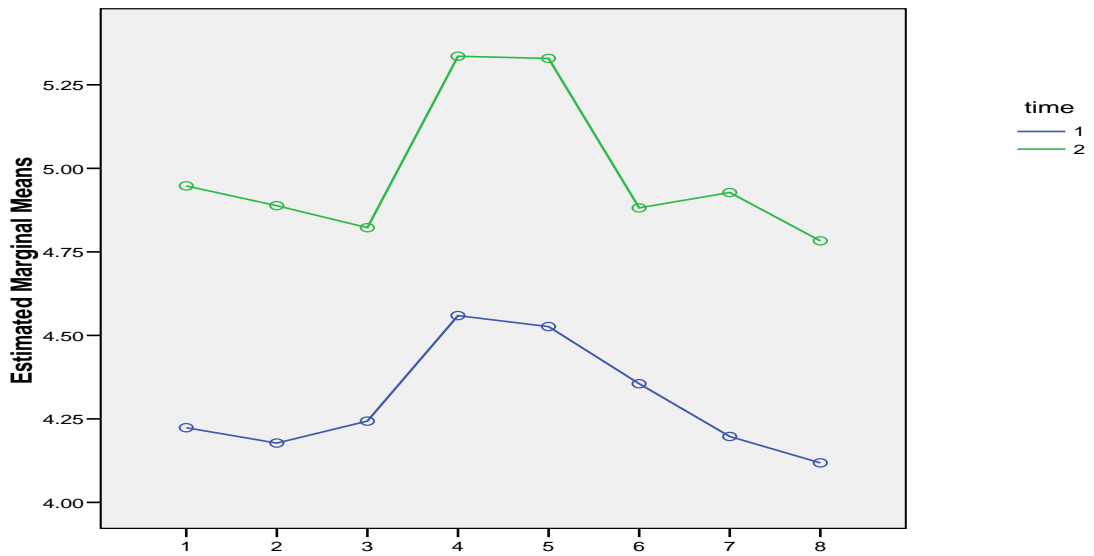
**Figure 3. Difference in means of teachers' efficacy for instructional strategy before and after CBIT**



Teachers' Efficacy for Instructional Strategies

**Figure 4. Difference in means of teachers' efficacy for classroom management before and after CBIT**



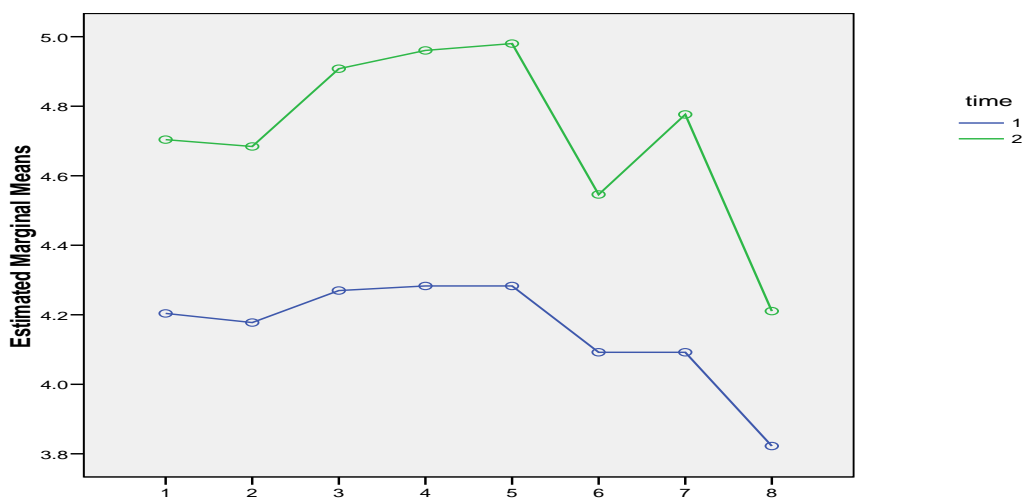


### Teachers' Efficacy for Classroom Management

#### The effects of Competency-based Integrated Trainings on the teachers' efficacy for Student Engagement

Multivariate tests of Repeated Measures MANOVA suggested that there were significant positive contribution of CBIT on the levels of teachers' efficacy for student engagement. After-training mean scores were higher than the before trainings in all eight items in this subscale (Figure 5). Furthermore, the Multivariate tests also revealed that these differences in the means were statistically significant,  $F(7, 145) = 3.86, p < .05$ .

**Figure 5. Difference in means of teachers' efficacy for student engagement before and after CBIT**

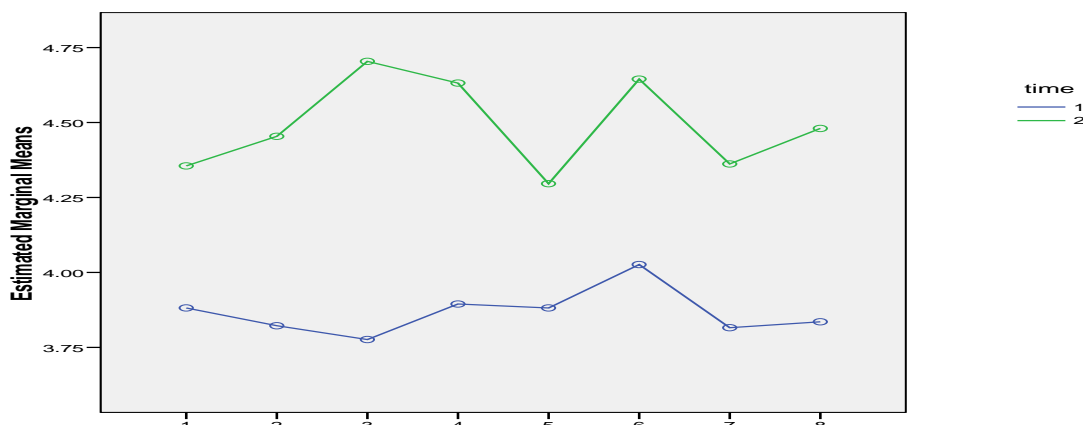


Efficacy for Student Engagement

**The effects of Competency-based Integrated Trainings on the teachers' efficacy for Curriculum Implementation**

There were significant differences in the means of the teachers' efficacy for curriculum implementation before and after CBIT,  $F(7, 145) = 4.44, p < .05$ . The differences were resulted from the positive contribution of the trainings so that after-training means were higher than the before-trainings (Figure 6).

Figure 6. Difference in means of teachers' efficacy for curriculum implementation before and after CBIT



### Teachers Efficacy for Curriculum Implementation

#### Results from the interview

Though data from the survey convincingly suggested significant differences in the teachers' efficacy beliefs before and after attending the training, the interview data revealed somewhat different findings, especially concerning the effects of the training alone. For example, one of the participants in the interviews rated the effects of CBIT very low as between two and three on a ten-point scale. Only one participant rated moderate effects as between six and seven while the other two participants rated it as between five and six. One participant was not very happy with training, particularly with the trainers. This participant said that:

“... Because the trainers do not really understand the psychology... no, no I mean the philosophy of the curriculum. Only some of them master the content but not the philosophy. The trainers do not have competence to train actually” (Interview with teacher B).

Despite the low perceived contribution of the training, the participants found that meeting with teacher colleagues in the training was very inspiring. All participants seemed to agree that sharing experiences with other teachers contributed to their increasing confidence in teaching. This seemed to support the idea of teacher professional community learning as one mode of teacher professional development programs.

## **G. Discussion**

Findings of the repeated measures MANOVA in the present study revealed that there were significant effects of CBIT as a professional development program on the level of teachers' efficacy beliefs. The participants reported higher efficacy beliefs after attending the training. This indicated that they were more confident after attending the training program.

Although the participants reported significant differences in their efficacy before and after their attendance in the CBIT, data from the interview revealed that the differences was not due to the training alone. When the participants were asked about the contribution of the training alone they one of the teachers rated it at seven on a ten-point scale, while the other three teachers rated it even less.

There were several possible explanations for the significant effects of the CBIT on the teachers' self-efficacy beliefs. First, by attending the CBIT teachers were more prepared for their teaching-related duties. This was because CBIT provided the teachers not only with the philosophy of the new curriculum, but also with the implementation of the curriculum. This training was also designed to improve the teachers' English skills. Although most participants had not experienced successes, their expectation of success might increase their level of efficacy beliefs. Second, by attending the CBIT, the participants had the opportunity to share experience with their teacher colleagues. There was a strong indication that the teachers shared experiences of successes, as well as sharing the problems they face in implementing the new curriculum. This was supported by the data from the interviews where all participants mentioned sharing with colleagues as the most prominent factor influencing their level of confidence. From sharing these success experiences with their colleagues, the teachers to some extent modeled success behaviours as vicarious experiences (Bandura, 1977a, 1997), and perhaps helped to boost their own level of efficacy.

Findings suggesting that teachers perceive an increase in their efficacy due to their attendance in the CBIT provide evidence that training is still a good alternative for teacher professional development. However, there seems to be a need to reformulate the training in order that it serves optimally in improving the quality of teachers. Training in the future should facilitate more information sharing among teacher participants. It is worthy to consider reducing the dominant roles of non-teacher trainers. Besides, it is reasonable to argue that there is an urgent need to establish a strong learning community among teachers. Through this community teachers communicate not only their successes but also problems which in turn they strive to solve their problems themselves. This is believed to be able to increase not only

their confidence, but also their perceived autonomy and professional maturity.

## **H. Limitation and future research direction**

First, the fact that it was conducted when the new curriculum was at its draft stage seemed to be one limitation of the present study. Although there seemed to be no significant changes in terms of its conceptual foundation, there was still a great deal of work needed to be done by teachers to improve their understanding as well as practices. This raised a tendency that the teachers rated lower in their efficacy due to lack of mastery experience.

In addition, the limited number of participants with a specific socio-cultural background might be considered as another limitation of the study. While it enabled the researcher to look at the specific aspect of the sample, it obscures important possible variances resulted from groups with different socio-cultural backgrounds. Therefore, it would have been even more beneficial to explore the level of efficacy among teachers with different socio-cultural background, for example by extending the sample with different social and cultural background. Involving sample from different provinces or those having different ethnicity or religion would enrich the finding and thus improve the generalizability of the findings.

Future research with an extension of time of the data collection, for example a longitudinal study, is worth conducting. In addition, conducting research with a larger sample, especially in the qualitative follow up on the quantitative data, is expected to be able to improve the reliability of the findings as well as facilitates a thorough investigation on the efficacy beliefs, their changes in the teachers' efficacy beliefs over time and the durability of the changes.

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